Grammar and grammaticalization in Manda

An analysis of the wider TAM domain in a Tanzanian Bantu language

Department of Languages and Linguistics

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Kwa baba yangu, marehemu Lars Bernander

Doctoral dissertation in African Languages at the University of Gothenburg,
September 30, 2017
Dissertation edition

Cover-layout: Thomas Ekholm
Printed by Reprocentralen, Faculty of Arts, University of Gothenburg
Gothenburg, 2017
ISBN: 978-91-979921-9-0
Link to e-publication: http://hdl.handle.net/2077/52690
Distributed by
Department of Languages and Literatures
University of Gothenburg
PO Box 200
SE-405 30, Göteborg, Sweden

Abstract

Ph.D. dissertation at the University of Gothenburg, Sweden, 2017

Title: Grammar and grammaticalization in Manda: An analysis of the wider TAM domain in a Tanzanian Bantu language
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Language: English
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This dissertation offers a grammatical description and analysis of Manda (N.11), a Bantu language spoken along Lake Nyasa (Lake Malawi) in southern Tanzania. The study focuses on the "wider" TAM domain, i.e. on how tense, aspect, mood but also modality and negation are expressed in the language, offering a description of the form and function of the various markers employed. In addition, this work sets out to unravel the historical background of these markers and the diachronic processes of change - particularly grammaticalization - through which they have evolved. As Manda is a basically undescribed language, the thesis also includes a brief socio-historical account - focusing on the issues of contact - as well as a grammar sketch describing the fundamentals of the language.

This study draws on a combination of methods consisting of both more prototypical field work as well as methods facilitating grammatical reconstruction. The vast bulk of the Manda data have been collected in the field. Hypotheses of change – but also of retention – are based on the synchronic variation found in this data, in comparison to the data of existing older sources as well as from neighboring languages. Furthermore, the Manda data has been compared to Proto-Bantu reconstructions and cross-Bantu as well as cross-linguistic generalizations on functional and formal change.

The study shows that Manda in many ways adheres to the general traits of an (Eastern) Bantu language. Fundamentally, the language is highly agglutinative, with e.g. an elaborate noun class system and a rich set of both prefixes and affixes on the verbal word, marking nominal indexation, derivations as well as TAM. With regard to TAM, the study argues that much of the synthetic linguistic material found in Manda can be traced to Proto-Bantu and thus most likely is inherited. In contrast, many innovations and indications of ongoing change are displayed in the periphrastic constructions of the language. These include a set of auxiliary constructions used for expressing aspect, modality but also (non-standard) negation, a borrowed persistive marker and two particles being employed as standard negators.

Keywords: Manda, Bantu, southern Tanzania, grammaticalization, grammar, linguistic description, reconstruction, tense-aspect-mood, modality, negation, auxiliary

Acknowledgements

To begin with, I would like to thank all the speakers of Manda who have been prepared to sacrifice so much of their time and effort in sharing their vast knowledge of the wonders of their language and its history with me. *Muséngwíli nyamuhópi mwa vóha*! I am especially indebted to *ngóghólo* John Ngolibaha Haule, who, in spite of his honorable age, has been prepared to travel far to meet with me and who has never got tired of answering countless questions. I would also like to express my gratitude to Cecilia Haule, for explaining Manda to me in English and in "linguistic lingo" and also for answering many questions through mail and *WhatsApp*. Thanks to Tito Gowele for providing great stories in Manda but also for being a good friend, thanks James Ngululayi, who was my first Manda informant (and thanks to George Mangoma for putting us in contact) and thank you *mheshimiwa mbunge* Stanley Kolimba for enlightening me on the history of the Manda speakers. Other language consultants who have contributed and who are worthy of my praise are Lonika Suka, Lomwarda Nkwella, Sauda and Jeshua Masasi, John "Magazeti" Mahundi, Conas Mahundi, Rahela and Agnes Anetti Nyakomba, Victor Haule, Onesimo Ndunguru, *mshonaji* Lwena and Douglas Mapunda. I would also like to convey my sincerest gratitude to the Manda speakers for their welcoming behavior, hospitality and for taking care of me, giving me rides on motorbikes and in canoes, feeding me with local delicacies and lending me their hard-earned electricity. Thank you *mheshimiwa diwani* Kisota for pointing out good language consultants, always giving me good advice and for keeping me out of too much trouble. I am especially thankful to the Haule/Nyakomba-family who opened up their home for me, *dádi* John-John and *mbúya* Agnesi Anette, and particularly *máwu* Rahela Nyanduva. Thank you Hawasi Haule, who, despite never having met with me, helped me out tremendously. Many thanks, Lucca Haule, who welcomed me into his home in Dar-es-Salaam and who put me in contact with both *mama* Kisota and *mama* Rahela.

I wish to express my deepest appreciation to my supervisor Laura Downing. Thanks for always being there and making sure that things not only got done, but that they also get extensively improved. Countless are the times where I have entered your office in a state of hopelessness with regard to some issue, walking out knowing exactly how to tackle it. Many thanks to my co-supervisors Malin Petzell and Maud Devos. Thank you Malin for being an inspiration and for your great support on both a personal and professional level. Thanks Maud for you welcoming to Tervuren and for your inspiring articles. I thank all three of you for your meticulous reading and re-reading of earlier and newer drafts of this thesis and for the tons of valuable comments and suggestions for improvement you have provided. I am grateful for the careful reading and valuable comments on an earlier draft of this thesis given to me by Evie Coussé as well as by Christiane Andersen and Tove Rosendal. Thank you also Tove for always looking out for me. I would also like to thank my other fellow Africanists, Eva-Marie Bloom Ström, Ponsiano Kanijo and Morgan Nilsson for being such good colleagues. In general, I am very grateful to the staff at the Department of Language and Literatures, including the supportive management and the helpful and efficient administration. I would like to give an extra thank you to other colleagues and friends within the department, especially Fredrik, Sara, Rickard and Andreas. Outside of the department I would like to thank Hubert Cuyckens at the University of Leuven for a truly inspiring course on grammaticalization and Abdulaziz Lodhi (as well as Niklas Edenmyr) at Uppsala University for teaching me Swahili and for introducing me to the field of Bantuistics.

I would not have come in contact with the Manda speaking community in the first place if it had not have been for Ulf Nilsson. He put me in contact with Grace Luena and Carl-Åke Gerdén, who, in turn, put me in contact with George Haule, who, in turn, put me in contact with his father Lucca Haule. Thank you very much for this invaluable help. My sincerest gratitude also to Grace and Carl-Åke for opening up their home to me in both Fisksätra and Dar-es-Salaam.

I wish to thank the University of Dar-es-Salaam for helping me with the research clearance. And thanks also Josephine Sundqvist for all your help with this (and for your hospitality). Thanks to the colleagues at the Department of Linguistics and Foreign Languages, in particular Abel Mreta and Henry Muzale. I am also strongly indebted to Zilpah Saul and Lengson Ngwasi for all their care and help during my visits. In inland Tanzania, I would like to thank Rose and Iraeneus at the migration office in Njombe as well as Ambassador Lennart Hjelmåker (and thanks Sara and Torvald Åkesson for putting us in contact), who were really supportive at a difficult time. Thanks also to Godfrey Mafungu and the staff at DIRA in Iringa, the staff at Njombe FDC and especially Steven Ndiwu in Mbinga.

I am grateful to my consultants of neighboring languages to Manda, John Oswald Makwaya, Samuel Dennis Kayuni and Jeffy Mwakalinga. My deepest appreciations to Cyprian Mwasanga, who has not only been my Pangwa consultant but also a very helpful friend (who once even bought me a cake in the form of a bible to cheer me up!). *Tuhongiche dadi!* Furthermore, I am very thankful to other researchers who have shared their data and thoughts on neighboring languages with me. My sincerest appreciation for taking your time to answer sometimes long and complicated questions about your languages of expertise, Robert Botne, Nobuko Yoneda, Gastor Mapunda, Heidrun Kröger, Bastian Persohn and Amani Lusekelo. An extra thank you, Hazel Gray, for sharing Kisi data as well as thoughts and data on Manda. Many thanks to other fellow researchers, including my fellow doctoral students, both for valuable discussions on Bantuistics and for being good comrades. Thanks Sebastian Dom, Deo Kawalya and Vera Wilhelmsen. Thanks also to the Helsinki group - Axel Fleisch, Lotta Aunio and Thera Crane - and thanks Nico Nassenstein, Harald Hammarström, Hannah Gibson, Lutz Marten, Östen Dahl, Gérard Philippson and Tore Janson.

For contributions of funding for travelling both to Tanzania as well to various conferences and for visiting departments in other countries, I wish to thank (in alphabetical order) Adlerbertska forskningsstiftelsen, Donationsnämndens stipendier (at the faculty of humanities at GU), the Erasmus Staff training grant, Helge Ax:son Johnsons stiftelse, SIDA (as part of the LoT project) and Stiftelsen Paul och Marie Berghaus donationsfond. Thanks to Mary Chambers and Marjorie Raymond for proof-reading this thesis and to Ulf Sandberg for creating the maps.

Last but absolutely not least I would like to thank all of my family and my friends at home. Thanks Nelli for housing me and for being a good friend in Gothenburg. Ellinor, you are the love of my life. Thanks for all your love and support. This dissertation is dedicated to my belated father, Lars Bernander, *världens bästa pappa* and to whom I owe my interest in Tanzania.

Stockholm, August 2017

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SYMBOLS & ABBREVIATIONS

The glossing of examples is based on the Leipzig Glossing rules (http://www.eva.mpg.de/lingua/resources/glossing-rules.php), with some necessary modifications and additions.

Symbols

◦ Tentative reconstruction/morphological representation
* Reconstruction
< From source
** Ungrammatical
? Questionable grammaticality
~ Ambigous/polysemic meaning; phonetic variant
- Morpheme break
. Syllable break
= Clitic boundary
´ High tone
<> Grapheme
// Phonemic representation
[] Phonetic representation
{} Context
⊃ A implies B

Abbreviations

Ø	Zero morph
1, 2, 3…	Noun class
1,2,3 SG / PL	Person
ACP	Agreement Class Prefix
APPL	Applicative
ASS	Associative
CAUS	Causative
COM	Comitative
COMP	Complementizer
COMPL	Completive
COND	Conditional
CONC	Concessive
CONS	Consecutive
CONT	Continuative
DEM	Demonstrative
DEN	Denominative
DEP	Dependent pronoun
EMPH	Emphatic marker
EXIST	Existential
EXT	Extensive
F	Future
F.OBL	Future obligative
FOC	Focus
FV	Final vowel
IDPH	Ideophone
IMPOS	Impositive
INF	Infinitive
IPFV	Imperfective
Itr.	Intransitive
ITV	Itive
LOC	Locative
n/a	Not applicable
NCP	Nominal Class Prefix
NECC	Necessity
NEG	Negative
NEUT	Neuter
OBL	Obligative
OM	Object marker
P	Past tense
P.I	Past Imperfective
PASS	Passive
PB	Proto-Bantu
PRF	Perfect
PL	Plural
PERS	Personal (pronoun)
POSS	Possessive (pronoun)
PRS	Present
RED	Reduplication
REFL	Reflexive
REP	Repetitive
SBJ	Subjunctive
SEP	Separative
SIT	Situative
SM	Subject marker
POSIT	Positional
POT	Potential
PROSP	Prospective
PROX	Proximative
TAM	Tense, Aspect, Mood
TENT	Tentive
Tr.	Transitive

1 Introduction

This thesis is a grammatical study of the Bantu language Manda. The main objective of this study is to account for the origins and pathways of change of the grammatical markers found within the "wider" TAM domain, that is, the markers of tense, aspect, mood (TAM), modality and negation. Manda is a poorly documented language and its grammar is virtually undescribed. An additional objective of this thesis is thus to provide a description of a large part of its grammar.

This thesis fundamentally sets out to answer questions revolving around how the Manda language appears and behaves, while simultaneously acknowledging the fact that the linguistic expressions found are the result of historical and ongoing processes of change. That is, how can the linguistic system of Manda, in general, and the wider TAM domain, in particular, be understood? Which markers and constructions are employed and what are their origins? And, in connection, how can the origin further explain the form and function of a linguistic expression today? Furthermore, this study tries to account for how the findings in the Manda data can be related to other findings within Bantuistics and linguistics in general, with regard to functional and formal traits as well as with regard to pathways of change.

This study has been guided by the underlying understanding that Manda adheres to general traits of (Eastern) Bantu, including an agglutinative structure with a rich set of affixes and combination of affixes marking TAM, but also - albeit typically less discussed - an array of complex constructions employed for such expressions as well. Indeed, Dahl (1985:115) considers Bantu languages as consisting of the most complex TAM system "in general". This system of Manda consists of both retentions inherited from Proto-Bantu or other earlier proto-stages as well as innovations shared with neighboring languages. In addition, as agglutinative languages in general and Bantu languages in particular are renowned for rapid change and the constant recruiting of new markers expressing TAM, several instances of ongoing change within the wider TAM domain have been expected to be found. This has also served as the motivation for including modality and negation in the analysis, as these are interrelated grammatical notions, typically involved in similar grammaticalization pathways. The categories of modality and (especially non-standard) negation are also less well-described within Bantuistics which further motivates taking these categories into account in this study.

To achieve the goals described above, a combination of methods has been used. To begin, more "prototypical" fieldwork has been employed, consisting of a diversified set of elicitation of linguistic data and collection and analysis of various types of narratives and naturalistic speech of native speakers of Manda. These techniques have been combined with methods facilitating grammatical reconstruction. This latter approach chiefly consists of the comparison of variation found within the collection of field data with older sources on Manda and to a set of neighboring languages. Furthermore, the Manda data is set in relief to linguistic elements wide-spread through the Bantu speaking area and to Proto-Bantu reconstructions as well as cross-Bantu and cross-linguistically induced generalizations of conceptually and formally motivated patterns of grammatical change.

This thesis is divided into two main parts. Part I provides background information on the language, including a description of field work - the methodological foundation of this study - and a grammatical sketch, whereas Part II discusses the TAM system with specific reference to notions of grammatical reconstruction and grammaticalization.

Part I consists of 4 chapters. Chapter 2 gives a brief introduction to the language of Manda, presenting geographic and demographic information, the linguistic classification of the language and the existing previous research. Chapter 3 specifically addresses the question of contact with other languages which has and is affecting the Manda language and the consequences this fact has had for this study. Chapter 4 describes the field work methods employed to collect the Manda language data. Chapter 5 is a grammatical sketch of Manda and includes a description of its phonology and nominal morphology. It also introduces the verbal morphology, describing the structure of the verb as well as derivational tactics connected with it. The purpose of chapter 5 is twofold. Firstly, it is designed to function as a more general reference grammar for other scholars interested in the typology of Manda. Secondly, the chapter functions as a background chapter to facilitate the reading and comprehension of the following chapters.

The second part of this thesis illustrates the form and function of the grammatical markers found in the wider TAM domain in Manda, with a specific focus on the genesis of these markers. Chapter 6 serves as the introductory chapter to this part, and offers a presentation of the approach taken to analyzing the wider TAM domain in Manda. It concentrates on how the concept of grammaticalization can be used as a tool for the reconstruction of the origins and pathways of change of the grammatical markers found in this domain in Manda. The following chapters set out to apply the assumptions and methodological tools presented. Chapter 7 discusses the inflected TAM formatives found in simplex verb conjugations in Manda. The subsequent chapters of part II focus on complex conjugations. Chapter 8 describes a set of aspectual auxiliary verbs and offers a reconstruction of their semasiological development. Chapter 9 deals with the copula verb in Manda and its use in complex constructions. Chapter 10 depicts the constructions used to express modality in Manda. Chapter 11 accounts for the expression of negation.

Finally, chapter 12 is a concluding chapter, offering a summary of the results of the thesis and suggesting topics for further research.

PART I INTRODUCTION TO THE MANDA LANGUAGE

2 Introduction to the Manda language and its speakers

2.1 Introduction

This first part of the thesis gives an introduction to the Manda language, both with regard to extra-linguistic factors as well as its basic linguistic system. This part also presents and discusses the techniques employed for capturing the Manda data in field.

This chapter presents some introductory notes on the language of Manda and its speakers. Manda, autonym *Kimanda*,[1] is formally coded as ISO 639-3 mgs and as N.11 within the Guthrie reference system of Bantu languages. Manda is a member of the Bantu language family (and thus the Niger-Congo phylum; see more in e.g. Nurse & Philippson 2003). It is an Eastern Bantu language and constitutes one of the roughly 120 languages spoken in Tanzania (Muzale & Rugemalira 2008). Manda is spoken along the eastern shores of Lake Nyasa (Lake Malawi) and on the slopes of the Livingstone mountains of the Southern Highlands. Politically, the Manda speaking area stretches through both the Nyasa district of the Ruvuma region and the Ludewa district of the Njombe regions of Tanzania. The estimated numbers of speakers vary between 22 000 (Lewis et al 2013) and 43 115 (Muzale & Rugemalira 2008:80). The speakers are mostly engaged in activities relating to fishing and agriculture. The main staple crop is cassava, but rice, fruits, maize and sesame are also cultivated. Figure 2.1 is a map showing an approximation of the Manda speaking area.[2] (The villages of this map represent those villages from were my consultants originate from.)

[1] The origin of the name Manda is not clear. German colonizers had a *boma*, i.e. a fort and regional office in Nsungu which they referred to as "Manda" and which became the formal name of the village Nsungu and in extension Ilela. This formal name survived, as the regional administration was kept in Nsungu during the British colonial rule and later after independence until the 1970's when it was moved to Ludewa. The most common explanation as to where the Germans initially got the name "Manda" is that it stems from a very powerful witch doctor and rainmaker named Nya-Manda (the prefix *nya-* indicating "mother" and in extension, an older respectful female), who lived in Lituhi at the time of the German conquest in the late 19th Century. Other etymologies provided suggest that the name stems from a word meaning 'sorghum', a salient crop historically in the Manda speaking area, or 'cemetery, graveyard', alluding to the fact that Lake Nyasa in general and especially this part of the lake was famous for having dangerous gales in wihich it was easy to get drowned. Manda speakers are often referred to as (va-)*Nyanja*~(va-)*Nyasa* - i.e. 'lake people' - together with speakers of other communities along the lake. It should be noted that the referential range of Manda is most likely the result of a metonymic extension where the term eventually came to refer to a larger area and its inhabitants relative to its original designation. Fülleborn (1906:396) claims that the designation of Manda only referred to people living in the village of what was then German Wiedhafen and which is now the village of Nsungu (see Figure 2.1.).

[2] I thank Ulf Sandberg who has helped me to create the maps found in this study.

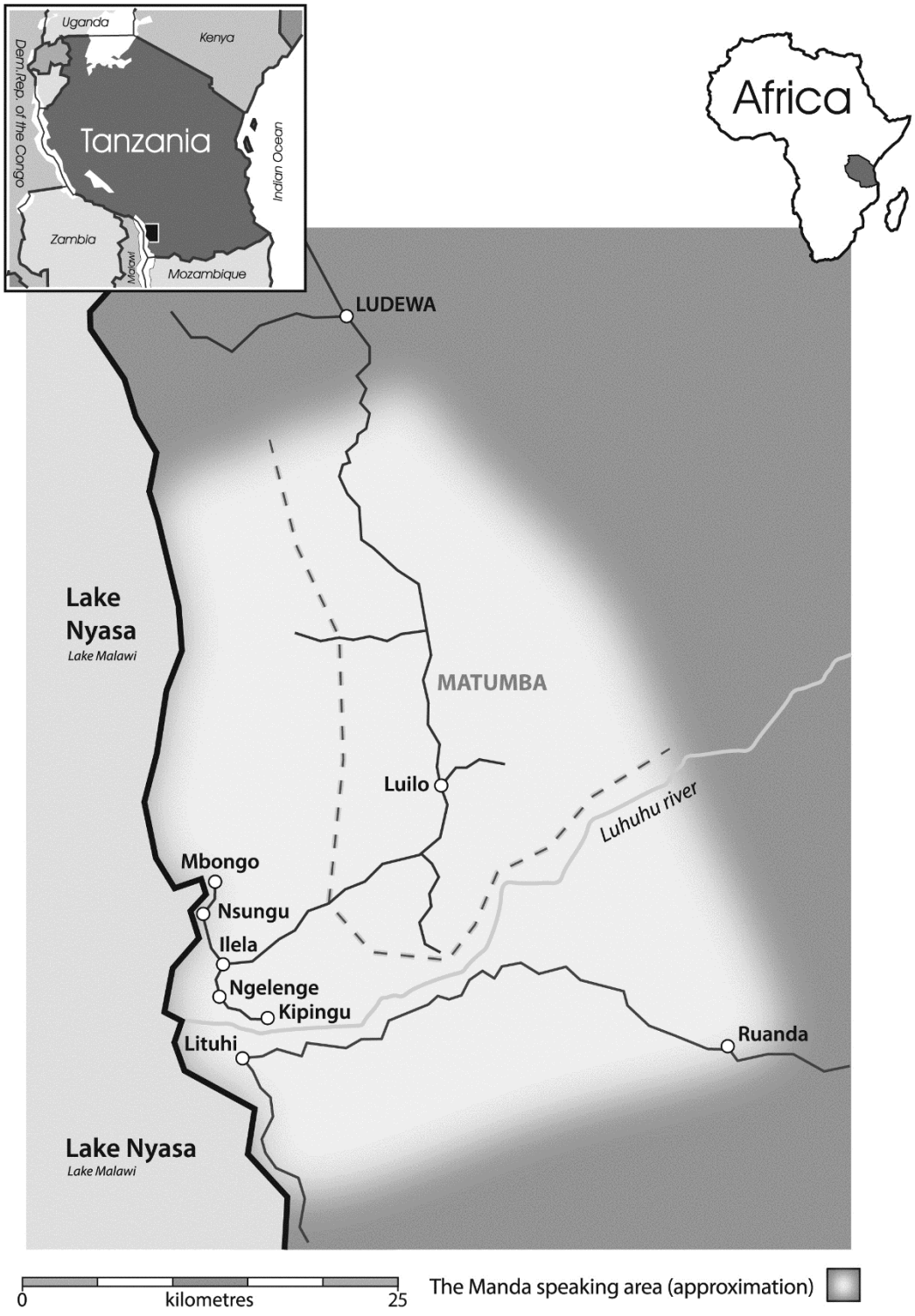

Figure 2.1. Map of the Manda speaking area

As represented with the dashed line in this map, Manda can be roughly divided into two dialects. The southern variety is spoken in the southern parts and to the west along the shoreline of the lake. There is also a north-eastern dialect called Matumba, spoken higher up in the slopes of the Livingstone Mountains. The southern variant is generally considered the

more prestigious variety and as representing the “pure” version of Manda. In fact, a dialectal survey by Gray & Mitterhoffer (2016; see also Anderson et al 2003) shows that all Manda speakers, both from villages speaking the Matumba dialect and the southern dialect, consider the lake shore area – and especially the villages of Nsungu and Ilela - to be the “heartland” of the Manda language community. This also stands in accord with the attitude expressed by most of my consultants. As described further in chapter 4, the main focus of this study has been directed towards the southern dialect, although differences found between these two dialects have been taken into account as well. See also Anderson et al (2003) and Gray & Mitterhofer (2016) for more information on these Manda dialects.

Manda (N.11) is adjacent to several other languages. Figure 2.2 is a map of Manda and its closest neighbors. (As anticipated initially, the letters and numbers given after Manda and these languages represent a referential system commonly used for Bantu languages. It is further described in section 2.2.) Its closest neighbors are Kisi (G.67) to the north-west and Pangwa (G.64) to the north-east. Ngoni (N.12) also neighbors the Manda area to the north-east (but south of Pangwa). Matengo (N.13) and Mpoto (N.14) are the Manda’s closest neighbors to the south. Another influential language spoken in the vicinity is Nyakyusa (M.31). Comparison with the linguistic data of Manda to these languages will form an important part of this study.

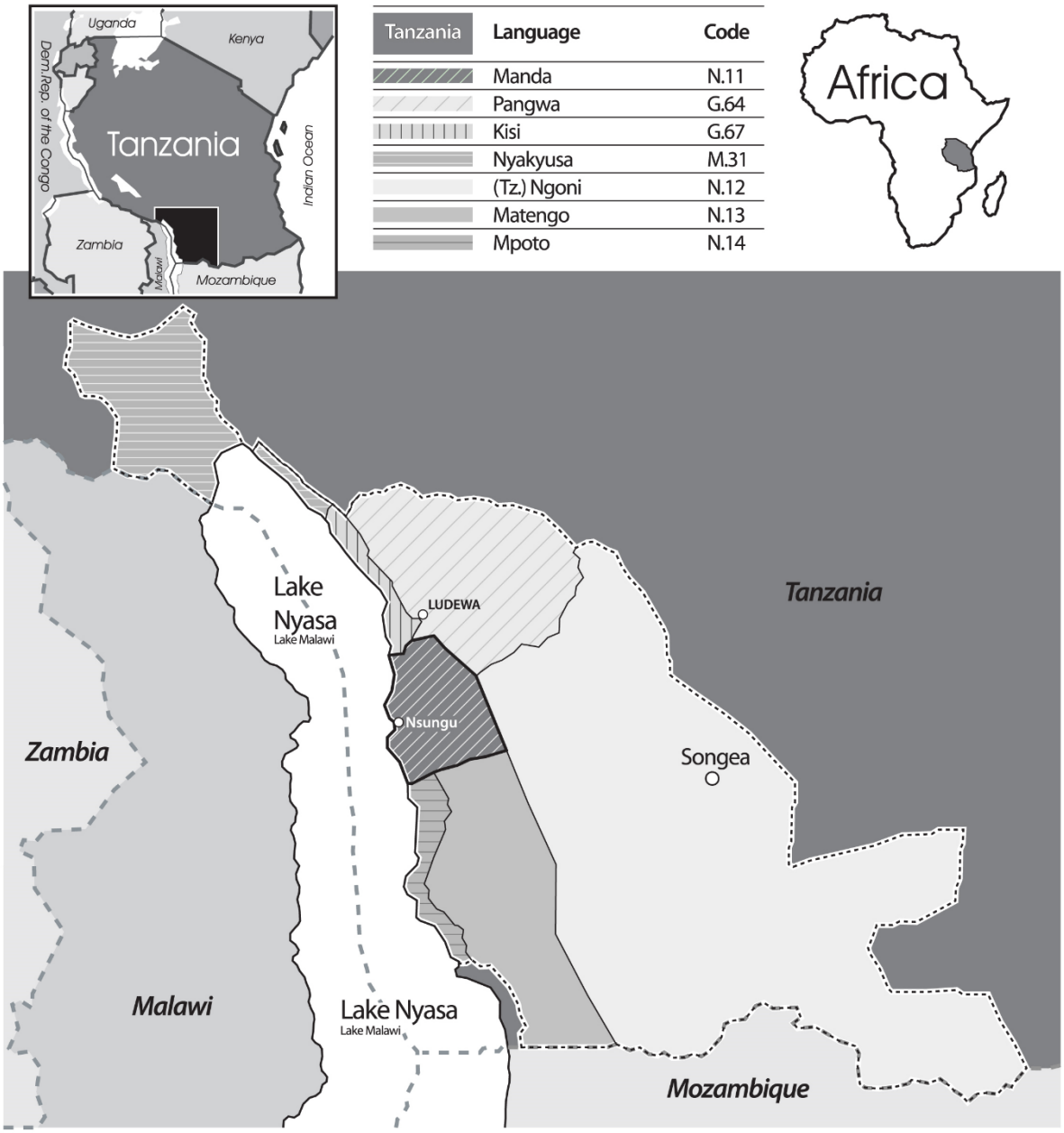

Figure 2.2. Map of Manda and its closest neighbors.

2.2 Classification

The exact genealogical classification of Manda is not clear. In Guthrie's classification of Bantu languages (1948, 1967/71), Manda is given the number N.11 and placed in the N.10 group together with languages such as (Tanzanian) Ngoni (N.12), Matengo (N.13) and Mpoto (N.14). Guthrie's divisions, in his coding system consisting of bigger zones (the letters) divided into smaller groups (the decimal digits), are primarily referential and are not intended to be seen as genetic/ genealogic groupings. Nurse (1988; see also Nurse 1982, 1999; Nurse & Philippson 2003) attempts to classify the languages of southern Tanzania into genetically coherent groups based on lexicostatistics and some (morpho)phonological traits. He forges Guthrie's N.10 group with the languages from P.10 and P.20 into a single group which he

refers to as “Rufiji-Ruvuma” (after the two large rivers that flow through the area where the languages are spoken). However, Nurse excludes Manda from this group, claiming that the language has a higher genealogical affinity with the languages of Guthrie’s G.60 group, which he sees as a coherent genetic group and labels “Southern Highland” (or SH in short). This group consists of languages such as Pangwa (G.64), Kinga (G.65) and Kisi (G.67). According to Nurse, “Manda […] is phonologically a Southern Highland, lexico-statistically a Rufiji [-Ruvuma] language, which is most easily interpreted by saying that it was originally a [Southern Highland] community battered lexically by neighboring N10 communities in recent centuries” (Nurse 1988:71; see also Hinnebusch, Nurse & Mould 1981:240).

However, this conclusion is dubious given the strong indications that Nurse’s Manda informant must have been speaking the northern Matumba dialect of Manda and thus a variety that is both geographically and linguistically closer to the other G.60 / Southern Highlands languages, and that is also considered as a less “proto-typical” variety by the speakers themselves. Matumba is more similar to G.60 / Southern Highland languages with regard to phonological traits, i.e. the characteristic which motivated Nurse to separate Manda from the N.10 languages. For example, a (historical or underlying) voiceless consonant occurring in a cluster with a nasal is deleted in Matumba, e.g. °*mu-ntɔ* > *munu* ‘person’. This is a strategy in accordance with the Southern Highland languages. However, it differs from the southern dialect of Manda, where the voiceless consonant is a) retained after nasals and b) voiced, e.g. °*mu-ntu* > *mundu* ‘person’. This strategy is in accordance with other Rufiji-Ruvuma languages. Gray & Roth (2016) have recently attempted to re-investigate the issue of the genetic status of Manda, addressing the dialect bias of Nurse’s study by also including data from the southern variety. However, the study which also relies on lexical and phonological data still leaves us with an inconclusive result with regard to which one of the two groups Manda is most closely affiliated to genetically.

As further discussed in section 3.2, the genealogical indistinctness of Manda is additionally obscured by the fact that Lake Nyasa has been an area characterized by thorough migration, intermixing and linguistic contact, probably for centuries.

2.3 Previous research on the Manda language

Previous research on Manda with regard to its linguistic structure is sparse.

With regard to the lexicon, Nurse and Philippson’s (1975) project of collecting linguistic data on all Tanzanian languages, the “Tanzanian Language Survey”, generated a list of roughly 1000 Manda lexemes. Note that this list is the main material for Nurse’s (1988) conclusions discussed in section 2.2 above.

There are no descriptions of the grammar of Manda alone. Guthrie’s attention to Manda is comparatively extensive, however. His thesis of 1948 includes the classification of the language, while his big comparative work on Bantu languages (1967/71) contains 46 word roots. In addition, interesting information on the structure of Manda is presented in both of his works (1948:59-62; 1971:57). These include a description of the seven vowel system and a brief introduction to (some of) the noun classes and their prefixes, as well as negation

strategies and tense forms within the verbal paradigm. Interestingly, he contradicts himself on the issue of whether Manda has tone or not, claiming first that it has (grammatical) tone (Guthrie 1948:62) and then that it does not (Guthrie 1971:57).

It should be noted that, in contrast with what is claimed in the bibliography on Tanzanian languages by Maho & Sands (2003:148), Manda is not mentioned in the comparative work by Johnston (1919-1922). In fact, according to Johnston (1919-1922:183), Manda's neighbors Kisi and Matengo meet at the Luhuhu river (i.e. in the middle of the Manda speaking area! See Figure 2.1). According to Maho (2009:67), "Johnston's geographical locations [are] sometimes [a bit off]"). Johnston does mention "Manda", but this is most probably a reference to a variety of Wungu (F.25). However, this may have been the cause of the accidental inclusion of this reference under the section on Manda in Maho & Sands (2003).

Three new sources on the Manda language consist of master theses from the University of Dar-es-Salaam. Notice that they are written by three different authors, who merely by accident happen to share the same common Manda surname (which is rather a kinship or "clan" name). Haule (2004) describes folk omens in Manda and their use with regard to agriculture. Haule (2008) offers a textual analysis of several *muganda* songs of the Manda community.[3] As mentioned in 4.3.2, Manda data from these theses have been included in my corpus. Finally, Haule (2016) offers an account of the nominal morphology of Manda.

Finally, the work of SIL International on Manda should also be highlighted here. This work includes the studies mentioned, namely Anderson et al (2003) on socio-linguistic issues, the dialect survey by Gray & Mitterhoffer (2016) and Gray & Roth's (2016) investigation on the genetic status of the Manda language. (Thanks also to Hazel Gray for discussions on Manda data.)

[3] The *muganda* (*kihoda* for female participants) is a group dance accompanied with singing, characteristic of the Manda speaking community as well as for most communities around Lake Nyasa (see Hill 2002:217-242).

3 Manda in contact

3.1 Introduction

This thesis focuses specifically on grammatical change and change triggered by internal motivation and mechanisms in Manda. However, there is also another important kind of change affecting Manda, namely the one induced from contact. The issue of contact-induced change will serve as the topic of this chapter, which consists of two main sections addressing two issues connected to language contact, namely areal diffusion and the (increasing) impact from Swahili - the "Swahilization" - of Manda. Both sections presents the socio-linguistic and historical background to these contact situations and offer a brief account of their linguistic influence of the Manda language. In addition, their methodological impact on this study will be raised.[4]

Section 3.2 addresses the question of areal influence and diffusion. It presents the historical convergence between languages spoken in the vicinity to Manda, most explicitly reflected in the dubious genetic status of Manda. The focus is on the G.60/Southern Highland and the N.10 groupings, two groups which have converged linguistically for 1500 years according to Nurse (1988). As will be argued, this motivates treating Manda and its closest neighbors as a grammaticalization area, making inferences with regard to grammatical change from comparison of variation as reflected in a set of neighboring languages from both of these subgroups as well as with Nyakyusa (M.31), which also have had a profound impact on Manda.

Section 3.3 addresses the relatively newer contact situation between Manda and Swahili. As shown, the socio-linguistic pressure of Swahili has an increasing impact also on the linguistic outcome of Manda. However, much of the wider TAM domain in Manda (the focus of this study) appears still to be unaffected. As argued, the influence in the Manda data from Swahili contact should also be accounted for in the analysis and presentation of this study.

3.2 Contact and areal convergence

This section accounts for the social and linguistic contact between Manda and its neighbors. Starting with a general overview of the Lake Nyasa area as a whole and then zooming in to Manda and its direct neighbors, this section argues that the "mixed" status (Nurse 1985) of the Manda language can be understood as being due to the fact that this language community finds itself in the very center of a linguistic area consisting of the historically converging members of the Bantu subgroups of the G.60/Southern Highland and the N.10 branch of the Rufiji-Ruvuma subgroup (Guthrie's N.10 plus P.10-P-20), additionally spurred by the Ngoni intrusion in the 19th Century and the influence by the regionally prominent Nyakyusa (M.31). This has led to the situation where the original lines of descent are obscured and where the

[4]It should be noticed, that due to the lack of extensive historical records, some of the facts presented in this section stem from data collected from semi-structured interviews with (old) Manda speakers regarding the history of the Manda language community and the Lake Nyasa area. They are referred to as personal communication (pers. comm.).

exact genealogy of Manda still is not clear. From a methodological point of view, this also entails that it is hard to separate linguistic material found in Manda as being (directly) inherited or gained via geographical diffusion, particularly as all of these languages are already closely related Bantu languages to begin with. This is also the case with regard to the grammatical system and, in addition, change in the grammatical system. As argued by Heine & Kuteva (2005, 2011, 2012), however, the same mechanics of grammatical change are at play regardless of whether the motivation of change is internal or external (i.e. contact-driven). As will be argued here – and further demonstrated in the subsequent chapters - this fact motivates treating Manda and its neighbors as forming a "grammaticalization area" (Heine & Kuteva 2005:5.2.1, 2011, Kuteva & Heine 2012), characterized by both a converging grammar and converging patterns of grammaticalization. As a consequence, inferences with regard to the Manda data will be drawn through comparison with members of both the G.60 and the N.10 branches as well as Nyakyusa (M.31), despite them representing different genealogical subgroups of Bantu.

3.2.1 Lake Nyasa as a linguistic area (?)

As described in e.g. Nurse (1988), Ehret (1999) and Ebner (1955:50-51), the area around Lake Nyasa has been characterized by extensive migration, intermingling and contact since the Bantu speaking people first arrived some 2000 years ago. Park (1988:151) sketches a scenario where re-peopling of Bantu speakers in the wider Lake Nyasa area was continuous over at least a millennium, from the middle of the 1st millennia and onwards, creating several layers of Bantu settlement (see also Ehret 1999). Park (1988:171) further demonstrates that regional trade networks had developed before any ethnic identities or harder political borders had developed in this area. Especially iron tools were an important commodity and according to Mapunda (2001:108-109) there are traces of trade in iron (hoes) in this area, dating at least five hundred years. Other important factors leading to movement and contact between the various communities throughout this geographical area also included the diffusion and relocation of communities in the aftermath of the Ngoni invasion in the 19th Century, which is further described below. The contact between various groups and linguistic communities has arguably been facilitated by the constant access to different vessels for crossing the lake, from dug-out canoes to sailing vessels and from steamers to the ferries and motorboats of today.[5]

The movement and intermingling of this area is reflected in terms still used today such as *balowoka* 'crossers' used to refer to groups or families who have migrated from one part of the lake to another (see Kalinga 1985:74, 153-155, Mapunda 2001, van Velsen 1959, Kolimba pers. comm. 18-05-15) as well as the fact that people from different language communities share kinship ("clan") names and claimed heritage.

Given the degree of social contact described above, it is also justified to suspect that the area around the Lake Nyasa has converged linguistically over the years, perhaps even forming a linguistic area. This suspicion is further strengthened in the light of the fact that this region has historically been characterized by a high degree of multilingualism between relatively

[5]In connection to this, it may be noted that the word *wáto* 'canoe' in Manda is a reflex of a Proto-Bantu stem *-*áto* (Bulkens 1997), which suggests that not only the word but also the item is inherited into the Manda community.

small and sparsely organized communities speaking structurally similar varieties (Nurse 1988; Park 1988; see also Ehret 1999), serving as a fertile ground for linguistic diffusion. There are also shared structural phenomena among many of the languages around the lake, such as restricted tone systems and free-standing post-verbal negation, which would support such a suggestion. In fact, narrowing the scope and zooming into the specific part of the area surrounding the Manda speaking community, a more clear case of linguistic convergence can be spotted. This is the subject of the following section.

3.2.2 Areal convergence around the Manda speaking community

As suggested above, the whole Lake Nyasa area could plausibly be considered a linguist area. More specifically – and of greater importance for this study - Nurse (1988) concludes that the Southern Highland group of Bantu languages (i.e. Guthrie's G.60 group) and the Rufiji-Ruvuma group (i.e. including the N.10 languages) are two groups of Bantu language communities in this area characterized by both an extensive cultural contact and, as a consequence, also a high degree of linguistic convergence. Nurse (1988:70-72) claims, on the one hand, that N.10 languages have been "pounded" culturally and as a consequence also linguistically by G.60 languages. On the other hand, he also argues that G.60 languages have been affected by N.10. In this case he makes specific reference to Pangwa (G.64) and, in particular, Kisi (G.67). The latter is a language also extensively affected by Nyakyusa (M.31). Note that both of these languages are direct neighbors to Manda. The close contact between these two Bantu subgroups are reflected for example in shared cattle terminology (Nurse 1988) and shared traditional cultural traits, one example being drums of the similar (hour-glassed) shape (Hill 2002:198). In addition, convergence manifests itself in the various, and occasionally contradictory, accounts of the claimed ethno-social background between, but also within, these language communities and from both historical sources and oral testimonies of the people themselves. These claimed origins tend to cut through the delineation of G.60 and N.10. Thus, for example Mapunda (2001) claims that both the Manda and the Matengo (N.13) originate from the Pangwa (G.64), whereas it says in a jubilee publication by the parish of Lituhi (2012) that Manda speakers are a "mixture" of Pangwa (G.64) together with Matengo (N.13) and Ndendeule (N.101), of which the latter two - according to Park (1988:143) - constituted a single variety before the Ngoni invasion.

One especially significant historical event which had an effect on the composition of the linguistic communities of these two Bantu subgroups was the intrusion and settlement of the Ngoni in the 19th Century. The following section aims at unravelling the background of the Ngoni community and the effect their presence has had on Manda and the area. This will be followed by a brief discussion in section 3.2.2.2 on another regionally influential language, namely Nyakyusa (M.31).

3.2.2.1 The impact of the Ngoni

The convergence of the G.60 and N.10 Bantu sub-groups and the obscurity of the exact genealogy of its members are strongly connected to the Ngoni migration and invasion into southern Tanzania in the 19th Century. As further seen below, the modern (Tanzanian) Ngoni language (N.12) is also considered Manda's (N.11) closest relative on linguistic grounds.

Taken together, this motivates a brief explanation of the historical background of the Ngoni and the composition of their language.

The Ngoni ultimately originated from a group of Nguni (S.40) speakers who had raided and looted their way up from Natal in South Africa (Redmond 1985). They came to settle in the area of Tanzania where the Ngoni (N.12) are to be found today - i.e. to the east of the Manda speaking area as can be seen in Figure 2.2 in 2.1- first in the 1860's (Gulliver 1974, Roberts 1969), where they continued with their raiding, taking slaves and wives from the nearby communities. As a consequence of this influx of new members, the majority of this Ngoni community eventually came to consist of members of south Tanzanian origin. Initially, a diglossic system appears to have existed, where a variety of Nguni, called "True Ngoni" (Gulliver 1955), also "Alt-kingoni" (Spiss 1904) or "Old-Kingoni" (Ebner 1955), continued to be spoken by the leaders and high-ranked vassals who claimed their origin from southern Africa. This language was, however, never disseminated to the other members of the community, who instead spoke a variety often referred to as "Sutu" (Ki-Sutu), which literally means 'slave-ish' or 'slave language'. This variety was mainly derived from local languages spoken within and surrounding the area where the Ngoni had settled and from where most of the serfs originated. According to Ebner (1955:159, 1939:D) and Gulliver (1955:24-25), this language grew from the input of several languages and varieties as the serfs had different origins. However, it was probably mainly influenced by Pangwa (G.64) - i.e. a G60/Southern Highland language - as well as what is now Ndendeule (N.101), a N10/Rufiji-Ruvuma language (Ngonyani 2001, Ngonyani 2003:2).[6] Moser (1983:39; see also Nurse 1985:209) also mentions influences from Matengo (N.13), Bena (G.63), Kinga (G.65), Yao (P.21) and (?) Nyasa (N.201)[7]. Eventually, due to the constant growth of members of the Ngoni community descending from modern Tanzania and the brutal suppression by the German colonizers of the Ngoni leaders during the aftermath of the Majimaji uprising, the social barriers broke down and with them the upholding of a language barrier between True Ngoni and Sutu, with the result that True Ngoni vanished (Ebner 1955:159). Consequently, it is what was called Sutu – i.e. the language of the serfs - which constitutes Tanzanian Ngoni (N.12) of today, whereas the variety with its roots in the Nguni languages of South Africa is basically extinct.[8] As Ngonyani (2001:322) points out: "The powerful Ngoni kingdoms of southern Tanzania did not leave a language, they left behind only the name." However, this statement is in need of some modification. That is, there are reasons to believe that although the linguistic influence of Nguni (S.40) origin is scanty, it is not totally non-existent (see Miti 1996, Nurse 1985:211, 1988:72). In fact, influence from Nguni can be deduced by

[6] Recall from the discussion in section 3.2.2, that Ndendeule (N.101) and Matengo (N.13) are claimed to initially have been the same people who got scattered due to the Ngoni invasion. This is reportedly also the case with the "vanished" Nindi (N.102; Ebner 1939), occasionally also claimed as an important Sutu source (Moser 1983:37; Johnston 1919-1922:792).

[7] It is not clear what "Nyasa" refers to in this case. It can refer to exclusively to the variety of Nyanja (N.201) spoken around Mbamba Bay at the south-western border of Tanzania-Mozambique or it may serve as hypernym referring to this variety together with Mpoto (N.14) and Manda (N.11). The latter is the more probable explanation (see also Gulliver 1955).

[8] Moser (1983:38) reports that already by the time of his field studies, no one under the age of 60 spoke the True Ngoni variety.

comparison of the records of Old Ngoni retrievable in Spiss (1904) and (Ebner 1955) with records on Nguni language such as Zulu (S.42) - both historical and modern linguistic studies - and to records on other Ngoni varieties, e.g. as spoken in Malawi (Elmslie 1891) as well as the previous comparative notes by Doke (1954:80, 237, 1967:54) and Ebner (1939). Important for this study, such an approach suggests that the persistive marker *-(a)kona* actually originated from True Ngoni and diffused into several Rufiji-Ruvuma languages, including Manda. This is further argued for in 9.3.

Interestingly, the linguistic evidence in form of lexico-statistics and phonological traits (Nurse 1988; Gray & Roth 2016) but also speaker's self-perception of mutual intelligibility and cultural similarity (Anderson et al 2003), provides evidence that Ngoni (N.12), with its complex linguistic background, actually also is Manda's closest affiliate. As the two major contributing languages of Ngoni appears to be Pangwa (G.64) – a G.60 language – and Matengo (N.13) – an N.10 language - these facts add an additional ambiguous layer to the genetic situation. In general, it further highlights the uncertain division between the G.60 and the N.10 subgrouping. That is, if Manda is to be re-categorized as a G.60/Southern Highland as suggested by Nurse (1988, 1999), then why not Ngoni (N.12) as well? Indeed, such a re-categorization has actually been proposed by Ngonyani (2001). Specifically, it strengthens the suspicion that Manda is a mixture. That is, if Ngoni with its mixed status is the language linguistically similar/most closely related to Manda, this would suggest that a situation similar to Ngoni holds for Manda as well.

3.2.2.2 A note on the impact from Nyakyusa

In addition to the Ngoni (N.12), the Nyakyusa (M.31) has historically been a well-organized community and a strong political factor in the area up to modern days. This has also resulted in a considerable linguistic impact on the other linguistic communities around the lake. Nurse (1988:81) explicitly states that Nyakyusa (M.31) has had a profound linguistic influence on members of both the G.60 and the N.10 branches, in particular Kisi (G.67) and Manda (N.11). Furthermore, Nurse (1988:55) finds that innovations in Nyakyusa are shared also by Kisi and Manda.

The Nyakyusa - who also claim a common heritage with the speakers of Kinga (G.65), i.e. a G.60 language (Park 1988:140, 174, Persohn & Bernander forthcom.)[9] - are historically renowned for being expansive and incorporating smaller surrounding communities (Park 1988:135). Although this never affected the Manda community directly, the geographical proximity and its small size relative to the Nyakyusa conceivably resulted in a strong social impact throughout the years. The contact between the Manda speaking community and the Nyakyusa was further enforced during (the early years) of colonialization. During the German colonial era, a large part of the Manda speaking area belonged to a district with the administrative office at Langenburg, now Lumbila, near Kyela in the Nyakyusa speaking area. Close to Langenburg was also the only main hospital for this region, namely at Mwaya, near the port of Itungi (Deutsches Kolonial-Handbuch vol 1; 1901:338; Kolimba pers. comm. 18-

[9] In addition, waves of migration from Kinga to Nyakyusa have been attested resulting in substratum influence on the Nyakyusa language (Persohn & Bernander forthcom., citing Labroussi 1998:218).

05-15). Both the regional headquarters and the hospital at Langenburg were easily reachable from the village of Nsungu (called Wiedhafen by the Germans) with the regular fare of the steamer Herrman vos Wissman, as well as along a walking path going via the Kisi speaking area (DKH, vol 1; 1901:339; Ngolibaha pers. comm. 31-03-17). (Langenburg was later to be called "Alt-Langenburg" as the Germans moved the district office and with it its name to what is now Tukuyu, also in the Nyakyusa speaking area). There is still today a vividly used ferry connection between Nsungu and Itungi in the Nyakyusa speaking area and an extensive contact between members of the two communities (although the medium of interaction today is more typically Swahili, see section 3.3.1).

An example of a salient category of Nyakyusa loans identified in Manda are expressions connected to greetings (cf. Walsh 1982), such as *isaga* 'welcome ~come here (and greet me)' and *mwangele* literally 'you (pl.) have amused yourself/conversed', used to greet a person you meet for the second time in a day.[10]

3.2.3 Manda and its neighbors as a grammaticalization area

As described above, Manda can be seen as being in the center of a geographical area consisting of the linguistically converging languages of the G.60 and N.10 groups with the lines of affiliation being further obscured by the Ngoni invasion and the additionally strong influence from the Nyakyusa community. This is reflected in the ambiguity surrounding the question of the exact genealogical affiliation of Manda, as described in 2.2. As argued in this section, the ambiguous lines of affiliation and the long-term contact, implies taking members of both the G.60 and the N.10 group as well as Nyakyusa (M.31) into account when drawing comparative inferences in this study. As this thesis chiefly revolves around the issue of grammaticalization, this means that the area consisting of Manda and its neighboring languages can be treated jointly as forming a "grammaticalization area", in the sense that it forms as a group of geographically contiguous rather than strictly genetically related languages affected by similar grammaticalization processes (cf. Heine & Kuteva 2005:5.2.1, 2011, Kuteva & Heine 2012). According to Heine & Kuteva (2011), a grammaticalization area can be seen as consisting of minimally two languages, where the first language has provided a grammatical model replicated by the second language. However, it is often not possible to single out what is the donor and what is the replicating language in situations of long-term contact, only that similar shifts have taken place. This is also the situation with Manda and its neighbors, further obscured by the fact they also are related. (An exception is the persistive *-(a)kona* discussed in section 3.2.2.1 above and further in 9.3, which, as will be argued, spread from Ngoni).

As argued by Heine & Kuteva (2011) and Kuteva & Heine (2012), the motivation and mechanism of grammatical change work in an identical manner (see 6.3 for a more detailed description of this process and the mechanisms involved), regardless of whether the process initially is induced from contact or not. Furthermore, rather than working in opposition to each other, grammaticalization and language contact can be seen as conspiring towards

[10] Plausibly, the main Manda greeting *monílí* also originates in Nyakyusa *mugónile*, literally 'you (pl.) slept' (cf. Walsh 1982).

change. Thus, Kuteva & Heine (2012) argue that influence from contact can serve as both a "propelling force", i.e. as the driving force of a linguistic expression to develop further along a grammaticalization pathway, as well as "accelerating force", speeding up a change. Kuteva & Heine (2012, citing Thieroff 2000), exemplify this with the pathway of grammaticalization resulting in that lexical 'be/have' becomes a marker of perfective/simple past, via less grammaticalized stages of marking resultative and perfect aspect. This grammaticalization pathway pervades throughout the European continent, demonstrating identical characteristics of change in different languages (and dialects) belonging to different families and from a less to more grammaticalized status. Another example of areal grammaticalization is the development of future tense auxiliaries - occasionally further grammaticalized into affixes - from volition verbs in a diverse set of neighboring languages of the Balkans (Heine & Kuteva 2011). Importantly, this means that the process(es) of grammaticalization may not only work through time but also through space (Kuteva & Heine 2012). Crucially for this study, this means that inferences with regard to a grammaticalization pathway – i.e. its features, directionality as well as various stages of change represented in different languages – can be drawn from comparison with the linguistic data of the members of this grammaticalization area. Thus, it is less relevant whether the similarities of change detected in Manda relative to its neighbors fundamentally originate from shared innovations or from diffusion as the pathway of change is identical.

In his study, Nurse (1988) focuses on lexical (and to some extent) cultural traits when arguing for the linguistic convergence of Manda and its neighbors. However, he also concludes that the kind of advanced and long-going contact which is the case here is bound to have had an effect structurally as well. Thus, given the strong level of contact and convergence which have even resulted in the ambiguous status with regard to the genealogical division of the G.60 and N.10 groups, it might be expected for grammatical convergence to be found in some of these languages. Indeed, there are some striking structural resemblances found in the languages spoken in the vicinity to Manda. Examples of grammatical features permeating this area include many of the TAM conjugations in the past tense paradigm which are identical or near-identical in most of the languages (see 7.4), the use of non-canonical copulas (see chapter 9) and the expression of standard negation with post-verbal particles (see 11.2). These findings, detailed in the respective chapters, points towards the fact that grammatical change in this area has also been driven by contact-induced grammaticalization (Heine & Kuteva 2005:80, 2011), i.e. that the structural resemblances between these languages are (at least partly) due to grammatical replication as a result of the advanced contact between them. Typologically, this would not be surprising given the fact that "new forms for tense, aspect and modality constantly arise in situations of language contact" (Heine & Kuteva 2011:297). With this said, it should be remembered that for the case of Manda and its neighbors this has conceivably also been triggered by the fact that the languages are initially related – i.e. they all originate from an earlier proto stage of Bantu - and consequently already are highly similar from a structural point of view.

Taken together, treating processes of grammaticalization as originating from either external or internal motivation, has a methodological impact on this study. That is, in order to strengthen

the grammatical reconstructions suggested for the wider TAM domain in Manda, comparative data has served as an important diagnostic tool, as further described in 6.4.1.2. As a consequence of the intense contact as described above - which also has resulted in that the exact genealogical composition of this area is unclear, in general, and in particular with regard to Manda - the decision has been made to compare Manda with its closest neighbors regardless of whether they belong to the G.60 group or the N.10 group. Furthermore, due to the intense influence from Nyakyusa (M.31), this language will also be included in the discussion of comparative indications of processes of grammaticalization.

3.3 Swahilization

This section addresses another contact situation, namely the increasing impact of Swahili or "Swahilization" on the Manda language. This is an important issue which – although being beyond the main focus of this study - needs to be addressed, not least as it is also an important case of ongoing linguistic variation and change manifesting itself in the language. As also mentioned in 4.2, all Manda speakers are (at least) bilingual in Swahili, which is the typical linguistic situation in Tanzania. This bilingual situation can be understood as stratified or "unequal" (Batibo 2005). Swahili enjoys a fair larger share of both official and unofficial status and is promoted at the expense of local languages, especially those with few speakers like Manda. This is, in turn, reflected in the linguistic outcome in these languages in form of a large and increasing degree of code-switching and borrowing from Swahili. This section aims at providing insight into the reasons behind this contact situation and how the process of Swahilization is affecting the Manda language. It will also give a description of how this factor has been tackled methodologically in this thesis. As briefly exemplified here and as shown throughout this thesis, Manda has been linguistically affected by the contact with Swahili and, as argued, this should also be taken into account in the analysis as well as the presentation of the Manda data.

3.3.1 The socio-linguistic background of the contact situation

This section describes the socio-linguistic setting of the contact situation between Manda and Swahili, starting with the historical background and continuing with a description of attitude toward and usage of the two languages today.

Historically, Manda has probably been in contact with Swahili for centuries, beginning with the large trade caravans in East Africa of the 18th and 19th century which penetrated inland from the coast of the Indian Ocean and which typically consisted of Swahili speaking middlemen (Salim 1998:232). Some of these trade routes were also established in the Lake Nyasa area. According to Kalinga (1985:126, 130), caravans passed through what he refers to as Manda (which, based on his characterization, appears to be what is now the Nsungu village) from the Malawian side, by crossing the lake but also by land. The caravans along this trade route, which mostly carried slaves from the hinterland, would then continue further to Kilwa at the coast of the Indian Ocean, via Ruanda and Songea (Hill 2002:23, Kolimba pers. comm. 18-05-15).

Although the caravan trade provided an initial contact with the Swahili for the Manda speaking community, it can be assumed that the contact with Swahili became more intensified during the colonial years. There were several factors behind this. Crucially, the colonizers came to use Swahili as an official political and administrative language (Malik 1996, Whiteley 1969) including the imposition of *akidas*, that is, (low-level) local administrators of often Swahili origin (Rodney 1980: 130). One example of such an *akida* is Wabu bin Musa who came to govern much of the southern parts of Manda from Liuli (Ngolibaha pers. comm. 31-03-17; Songea District book I). Swahili was also the language of the colonial army, including during the 1st World War, where combating took place in the Manda speaking area and where many Manda speakers were recruited as soldiers. The Manda speaking area close to the lake was in general of strategic importance and was an important hub during the colonial years. The Germans installed a government station ("Regierungsstation"; Meyer 1909:597) in what they referred to as Wiedhafen (lit. "Broad harbor"), which is today's Nsungu. It became the main port of the German share of Lake Nyasa and considerable trade was carried out there (Meyer 1909:597, Wenban-Smith 1963). According to Barnes (1933:194), the Manda speaking part of the lake shore line continued to be an important regional center which saw a constant influx of visitors from outside, also after the British took over the colonial administration. Arguably, this strategic position of the Manda speaking area and the cosmopolitan atmosphere facilitated the spread of Swahili as a useful tool for inter-ethnic communication and further exposed the Manda speakers to it. Similarly, returning migrant workers from ethnically and consequently linguistically inter-mixed plantations and mines (see Legère 1983, Whiteley 1969:64), as well as the entry of Indian shopkeepers who practiced their trade in Swahili (Mbaabu 1985:50), are other social factors which allowed for a further dissemination of Swahili during these years. As further discussed in 6.4.1.1, the Manda used for ministry and other clergy work of the arriving British Anglican missionaries in the early 20th Century, including the translation of the New Testament (1937), was probably also influenced by Swahili to some extent. Furthermore, already in the 1950's - and thus even before independence - Swahili came to officially replace Manda as the language of church activities and also as the medium of instruction in primary school education (Ngolibaha pers. comm. 30-03-17; see also Petzell 2012 and Whiteley 1969 on the general increase of Swahili in Tanzania in the years leading up to independence).

Although contact with Swahili thus intensified during the colonial era, the main influence of Swahili on Manda, however, comes from the post-independence governmental initiative of promoting Swahili as a national and official, inter-ethnic and unifying language of the nation of Tanzania. As pointed out by Blommaert (2014:43; see also Batibo 2009, Legère 2010), Swahili served a practical purpose as an important tool for the spread and implementation of the new socialist policies throughout the nation. Importantly, it had, in addition, high symbolic value as it, on the one hand, was an African and thus not a colonial language and, on the other hand, was not ethnically biased. However, this promotion of Swahili occurred at the expense of the local languages in Tanzania. Thus, the creation of a national identity also involved actively opposing "acts of tribalism", including the use of other local languages (Legère 2006a,b). As a consequence, other Tanzanian languages were at best ignored but often their use was even openly discouraged (Muzale & Rugemalira 2008:69) and prohibited

(Legère 2006a, 2007). The influence of Swahili continued to increase extensively also after the democratic and economic liberalization of Tanzania during the 1980's and 1990's and penetrated further into more remote and linguistically homogenous communities of Tanzania (see e.g. Mekacha 1993, Msanjila 2003, see Legère 2006a for an exposé). As pointed out by Msanjila (2003:299-300; see also Blommaert 2014:42) this focus on Swahili at the expense of the local languages in Tanzania has left them under-developed and ill-prepared for coping with the changes in society.[11] Consequently, basically all language used in the public domain is - with the occasional exception of English[12] - in Swahili, in today's Tanzanian society, including education, law enforcement, business, politics, mass media, literature, music and also information and communication technology. As argued by Batibo (2005:89), this has created a state of "unequal" or stratified bilingualism where Swahili represents a language with much higher social status and support compared to the local languages.

It is interesting to compare the characterization given above with the survey by Anderson et al (2003) on language attitude and self-perception among the Manda speakers. This study indicated that the Manda speakers in general had a positive attitude and pride towards their language. In this study, the interviewees clearly claimed a preference for using Manda rather than Swahili, or as for younger speakers, at least for using both languages. Next, the Manda speakers consider their language as being vital and sufficient in expressing thoughts and ideas. Additionally, the Anderson et al (2003) study indicated that children were taught Manda and that both children and youths spoke a "proper" Manda. A similar standpoint has also been expressed by my consultants who, while similarly stressing that Swahili fills an important role - as a national language creating sentiments of unity and facilitating inter-ethnic mediation, as well as being a tool for progress on both a personal and community level - in general have a positive attitude towards their own mother tongue and claim to use it extensively. However, it should be noted that these are reports on self-perceived language attitude and usage rather than actual performance. For example, as pointed out by Rosendal & Mapunda (2016), Rosendal (forthcom.) for the neighboring language Ngoni, there is a notable difference with regard to what is expressed as the norms around language use and the self-perception by speakers about how they speak in relation to the actual speech, where code-switching occurs unconsciously and Swahili is *de facto* more extensively used than what is claimed. In addition, the report from Anderson et al (2003) as well as discussions with my consultants seem to confirm the more general pattern of the division of usage between Swahili and a local Tanzanian language. Thus, the speakers claim that they tend to use Manda within the family, at home and at work (i.e. domestic work, cultivating and fishing) rather than in the public domains and formal fora. For example, Swahili is more extensively used at the local markets (Anderson et al 2003). Importantly, for a Manda speaker to get to a more urban setting to visit governmental and other official institutions, conduct bank and postal errands

[11] In 2007, the Culture Act (*Sera ya Utamaduni*) was passed: this opted for the protection and development of the local languages, but according to Legère (2007) this act did not come with any additional support and little seems to have happened in practice.

[12] Petzell (2012) refers to the linguistic society of Tanzania as a "triglossia" in the sense that there is also an extra layer of influence of English as the former colonial language and the "global lingua franca", both informally but also formally as it is the official language together with Swahili and is further dedicated for the use in higher court, higher education and international business.

and to engage in transactions at a bigger market, in fact requires travelling into an area belonging to a disparate linguistic community, i.e. Ludewa in the Pangwa speaking area and Songea in the Ngoni speaking area as well as Tukuyu (-Itungi) in the Nyakyusa speaking area. These urban settings are generally also more linguistically intermixed. In these cases, there is most often no choice but to use Swahili as medium of communication. Moreover, as already touched upon, Manda is not used in activities such as schooling, church activities, local governmental issues and official meetings (Anderson et al 2003)[13]. Furthermore, according to Anderson et al (2003), the attitude still today among governmental, religious and educational officials in the Manda speaking area, is that a promotion of the language Manda is inevitably also a promotion of tribalism, and Manda is not suitable as neither as subject nor as medium of instruction. Taken together, even though the general attitude of the Manda speakers towards their language generally is positive, there are social factors indicative of a substantial and increasing Swahili influence in the linguistic outcome.

This stratified state of bilingualism and the extensive impact of Swahili on the local languages of Tanzania have also spurred studies more specifically focusing on the linguistic outcome of this situation. Some of these studies - such as Mkude (2011) on Luguru (G.35) and Bernander (2012) on Bena (G.63) -concern languages spoken in the vicinity of the Manda speaking area. Interestingly, the issue of Swahilization has also been studied specifically with regard to two of Manda's neighbors, namely Yoneda's (2010) study on Matengo (N.13) and various articles on Ngoni (N.12) by Rosendal & Mapunda, e.g. Rosendal & Mapunda (2014, 2016), Mapunda & Rosendal (2015), but also by Lodhi (1994, 2000:104). What these studies argue is that there has been a drastic increase in Swahili borrowing and code-switching, where also original lexis and structure is being replaced, and that there appears to be a constant and ongoing process in which the unequal status between Swahili and the local languages leads to language shift as many of the functions traditionally connected to them are being replaced with Swahili. In section 3.3.3, we will turn the attention to the linguistic impact of Swahili on Manda. Before that, however, follows in section 3.3.2 a discussion on how this impact has been detected and dealt with from a methodological point of view.

3.3.2 The methodological implications of Swahilization for this study

Given the social factors of an intensive and stratified bilingual relationship between Swahili and Manda as described above, it is no surprise that also extensive linguistic inference - or Swahilization - has taken place (see e.g. Batibo 2005:89). This section discusses how to conceptualize such influence and how to deal with the variation it causes in the Manda data, but also how it can be singled out in the first place. Swahilization needs to be taken into account not least with regard to the analysis and conclusions regarding the wider TAM domain in Manda, the main focus of this study. The policy underpinning this study has been to represent the language as it is actually spoken, which means also including the variation resulting from Swahilization.

[13] According to the speakers interviewed by Anderson et al (2003), some clergy still use a mix of Swahili and Manda for some parts of their ministry. I have personally participated in mass (in the Anglican Church) were Manda hymns were sung. However, this was most likely done just exactly because of my presence.

With this said, however, what is considered code-switching in Swahili is still excluded from this study. Code-switching has for this study been treated as inter-sectional use of more than a single code (language or dialect) during communication (Myers-Scotton 2006:242) and is seen as representing a contact-induced speech behavior rather than contact-induced language change, following Haspelmath (2009). Code-switching is prototypically characterized by being morphophonologically unadapted and as consisting of bigger chunks of discourse (see Haspelmath 2009; see also Rosendal & Mapunda 2014 for the analysis of the neighboring Ngoni). This is also the characteristic code-switching pattern among the Manda. An example of Swahili code-switching in my data is illustrated in (1), a sentence taken from a conversation (Swahili in italics, Manda in bold). In this example, already the prepositional phrase *kwa vigezo gani* 'by which criteria' in the first utterance is a relatively big chunk of discourse not phonologically integrated - as it consists of /z/, a phoneme not part of the Manda phoneme inventory - whereas the whole answer simply consists of Swahili and no Manda.

(1) N: […] **uholáléla kíta vatóla ndíma ówʊ** *kwa vigezo gani*?
[…] by which criteria do you think they will win the election (lit. take this land)?
C: *Vigezo gani? Kwa sababu wametawala miaka yote* […]
Which criteria? Because they have always governed […]

Such data as in (1) above have not been included in this study as it is seen as not reflecting the Manda linguistic data – which is the focus of this study - but rather the bilingual competence in Swahili and Manda by the speakers. Fundamentally, such big chunks of non-embedded code-switching are not common in my data, probably due to the speakers' attention towards speaking Manda during our sessions (see a further discussion in section 3.3.3). Notice, however, that it has been beyond the scope of this study to develop a more fine-grained technique singling out more established or "proper" loans, based, e.g., on criteria such as synchronic stability (frequency) and diachronic stability (attested examples during several points in time). Consequently, what arguably may constitute so called "nonce" borrowing or "lone words", i.e. less recurrent or widespread loans sometimes considered "single-word code-switches" (Haspelmath 2009), have been included in this study. Sometimes speakers differ in their use of Swahili or "original" Manda. In those cases, a parallel original Manda term was suggested for a Swahili loan by another consultant during transcription or during other kinds of cross-checking of the data, this term has been included in brackets in the interlinearization. Example (2) is an illustration of this with *sana* 'very' and the suggested original Manda equivalent *nyamuhopi*. Swahili loans without a parallel term is simpy marked as "[Sw.]" in the interlinearization.[14]

(2) *sána*
sana [nyamuhopi]
'very'

The motivation behind following this approach instead of "purifying" the Manda data by simply replacing the Swahili terminology – a method argued for by other field linguists, e.g.

[14]Those rare cases, such as *sipitali* 'hospital', where it is just as plausible that the term is adopted directly from a colonial language rather than via Swahili, are left unmarked.

Bowern (2008:88-89) – is essentially seen as adhering to the explicit goal of this study to take variation and ongoing change into account. The methodological implications of this decision are also discussed further in 4.3.4.

In order to detect Swahili influences in the Manda data in the first place, three diagnostics have been used. First and foremost, speakers themselves are often aware of when a word or construction is of Swahili origin, which means that their testimonies of the origin of a form during transcription or other kinds of cross-checking of data have served as a useful initial heuristic. Furthermore, following the approach of Rosendal & Mapunda (2014), words/constructions of Bantu origin could be separated as being cognates or induced by Swahili contact based on the disparate sound changes in Manda relative to Swahili (see more on the Manda phonology in relation to Proto-Bantu reconstructions in 5.2). Thirdly, the Swahili language itself is a "contact language *par excellence*" (Schadeberg 2009:78) with extensive borrowed lexis from Arabic, English, various Indian languages, Portuguese, Persian, Malagasy, Chinese, Turkish and German (Schadeberg 2009:86; Lodhi 2000: 49-127; Polomé 1967: 172-177). Furthermore, it is also characterized by structural influence from, specifically, Arabic, including some phonemes and syntactical configurations as well as the adoption of certain consonant clusters not found in common Bantu (Batibo 2009). This means that there is a strong likelihood that a word or construction which is not only attested for Swahili but also considered a borrowing in Swahili (in e.g. Schadeberg 2009, Johnson 1939) is also a borrowing in Manda, and most likely from Swahili due to the overarching setting of wide-spread bilingualism.

3.3.3 Some notes on the linguistic outcome of Swahili contact on Manda

With this background on Swahili impact on Manda, this section will turn to the actual linguistic data. As mentioned, a thorough research of the contact induced change in Manda was unfortunately beyond the scope of this study. Yet, there are some tendencies which have been detected and which deserve to be discussed. However, given the characterization above, the results and conclusions presented here must necessarily be seen as tentative. In many ways, the results are similar to what has been found for other languages in the vicinity of Manda (as presented in the previous section 3.3.2).

To begin, although any wider inferences from socio-demographic factors cannot be drawn, the fact that the data from older speakers appear to include a lower degree of Swahili influence and that older speakers furthermore have been more attentive in pointing out Swahili influence when analyzing the speech of other consultants, indicates that the phenomenon of Swahilization is increasing. A similar tendency has been observed for Ngoni in Rosendal & Mapunda (2014, 2016). However, despite the extensive contact situation, it still appears to be the case that Swahili mostly has affected Manda lexically rather than structurally, and mostly in the case of additive gap-filling cultural borrowing (i.e. borrowing of words to refer to new concepts/objects), expanding rather than substituting the original vocabulary and taking place in open word classes. Examples include concepts such as *símu* 'phone', *kitábu* 'book' and *diwáni* 'councilman'. However, there are also cases where more basic vocabulary occasionally is substituted and expressed with a Swahili term. There is for example variation in the expression of 'knife', where both the original word *mpámba* and the

Swahili term *kísu* is used. Another example is the word for 'language, speech', *njóvélu* in Manda, which is often substituted by the Swahili *lúgha* equivalent. Rosendal & Mapunda (2014, 2016) report a large amount of such parallel use of both original and Swahili terminology for referring to concepts in the neighboring Ngoni, which they suggest are representative of an ongoing transition stage towards the shift into Swahili (see also Marten & Petzell 2016 for similar results). This motivates the inclusion of "nonce borrowing" as discussed in section 3.3.2. Another salient category of borrowings in Manda are markers originating from Swahili (and here represented in Swahili orthography) such as *baadaye* 'afterwards', *halafu* 'then', *kwa hiyo* 'thus' and *maana* 'that is'. Although such markers originally belong to a more closed class of function words (and thus less easily borrowed; see Haspelmath 2009, Winford 2003:51), their position and status in the linguistic context is more reminiscent of a freer discourse marker. Mous & Qorro (2009:111-112) refer to such markers as "sentence introducers" and claim that they are easily borrowed as they "occur at an initial position where code-switching easily occurs and they serve the communicative purpose of an early and easily recognizable indication of attitude of the speakers toward the information to come". Another category of Swahili borrowings in Manda which deserves mentioning are numerals (see 5.3.2.2). Numerals of lower digits appear in parallel use with the original Manda and reference to higher digits is almost exclusively expressed with Swahili.

Most crucially for this study, the wider TAM system of Manda seems to be largely unaffected by Swahili intrusion. There are two notable exceptions. Firstly, it is possibly the case that the consecutive conjugation SM-*ka*-B-*a* (discussed in 7.6.1) is a borrowing from Swahili. The cognate conjugation has been suggested by Morrison (2011:254-255) as a borrowing from Swahili for Bena (G.63), spoken in the vicinity of Manda. However, the consecutive is a common conjugation cross-Bantu and consists of affixes reconstructed for Proto-Bantu (Nurse & Philippson 2006). Furthermore, the tone pattern of the consecutive conjugation is indisputably Manda and not Swahili. Thus, it does not adhere to the diagnostics discussed in the preceding section 3.3.2 and consequently its status as a loan is considered to be less likely. A clear instantiation of a Swahili borrowing with the wider TAM domain, however, is the modal necessity marker *lásíma* < *lazima*, phonologically integrated into Manda by the devoicing of /z/. This word stem is clearly from Swahili, given the second criteria discussed in 3.3.2, namely that this word was originally also borrowed into Swahili from Arabic *lāzim(an)* 'necessary' (see Schadeberg 2009). Interestingly, unlike what has been reported for neighboring languages like Matengo (Yoneda 2010; pers.comm. 25-09-15) and Ngoni (Mapunda 2016:116), Manda has not borrowed the modal possibility verb -*wez*- from Swahili. The borrowing of *lásima* and the non-borrowing of -*wez*- are further discussed in chapter 7, concerning the modal domain in Manda.

In sum, there is clearly an ongoing process of Swahilization in Manda, which appears to be similar to what has been described for other local Tanzanian Bantu languages in the vicinity of Manda. However, the factors presented here would still suggest a relatively stable bilingual situation (cf. Thomason & Kaufman 1988:50, 74-76). That is, speakers express a general positive attitude towards the language and claim to pass it on to their children. Furthermore, contact-induced change from Swahili appears to have yielded relatively sparse structural

effects on Manda, where the main function of borrowing still appears to be to expand the vocabulary.

One should still keep in mind, however, the possibility that my data collection is biased in relation to this issue. To begin with, as explained in 4.2, the sample of Manda consultants consisted partly of speakers directed towards me with a reputation of being good Manda speakers. As a consequence, they conceivably also had a higher competence in Manda and used the language more than an average member of the Manda speaking community. Furthermore, it is also possible that the informants during the elicitation sessions made conscious efforts to avoid interference from Swahili. Such a hypothesis is strengthened by the fact that especially conversations – as exemplified in (1) in section 3.3.2 above - were characterized by more code-switching. This could be explained by the fact that the conversations took place in an environment where the concentration of the speaker was directed towards the co-discussant rather than to me in order to uphold the social practices of communication rather than to more explicitly deliver Manda data.

3.4 Summary

This chapter has addressed the issue of how contact with other languages has affected Manda and also which methodological implications contact-induced change has had on this study.

To begin, it was shown how the Lake Nyasa in general, and the Southern Highland/G.60 and N.10 groups in particular, have been characterized by a long duration of contact, further affected by the Ngoni intrusion and the impact of Nyakyusa. This social contact has also resulted in linguistic convergence, making it hard to disentangle the exact genetic affiliation of languages or groups of languages and to decide whether shared linguistic material is inherited or has spread through areal diffusion. As argued, Manda is found in the very center of a converging set of languages from the Southern Highland/G.60 group and the N.10 group as well as the neighboring Nyakyusa (M.31), which explains its dubious genetic status. Furthermore, the center position of Manda motivates using an areal approach for comparison in the following analysis. That is, inferences with regard to the presence of grammatical elements and (stages of) grammaticalization will be drawn from the comparison with Manda's neighbors regardless of their (suggested) genetic affiliation.

Secondly, this chapter addressed the question of "Swahilization" in Manda, i.e. the increasing linguistic influence from the bigger, more prestigious and officially promoted language of Swahili. It was shown that Manda clearly is affected by Swahili intrusion, albeit not to the extent suggestive of a language shift. Of especial importance for this study, it was shown that Swahili seems to play a small role within the TAM domain. Furthermore, it was argued that Swahili influence found in the Manda data should be included in this study as a representing a part of the language of today, rather than being edited out.

Taken together, it has been shown that contact is an important factor in accounting for the Manda language, both with regard to historical and ongoing change. Especially for this study, the issue of language contact has had an impact on how to design the analysis and presentation of the Manda data. However, it should be stressed, that both the areal contact

situation and the question of genetic affiliation as well as the Swahili influence are all interesting topics by themselves and deserve to be more thoroughly studied.

4 Field methodology

4.1 Introduction

The vast bulk of the linguistic data presented in this study was collected over a total of six months of field-work within and just outside the Manda speaking area, during which I cooperated with a number of different speakers of Manda.[15] This chapter aims at providing an insight in how the data discussed in my thesis was collected. It offers a description and reflections over the field methods used in collecting and analyzing the Manda data, arguing for a mixed set of methods based on cross-linguistic and cross-Bantu assumptions.

After discussing the sample of Manda speakers used as language consultants in section 4.2, this chapter will continue by describing and discussing the use of the different methods of extracting data in section 4.3. This section starts by discussing the use of elicitation and continues with text collection as the recording of more spontaneous free speech. In section 4.3.3 the attention is turned towards how this collected data was processed, including how Swahili code-switching was handled.[16]

4.2 Selection of speakers

This section describes the sampling of Manda speakers. The Manda speakers selected for this study were all mother-tongue speakers of Manda. In addition, they were all bilingual in Swahili and spoke it fluently. Two of the consultants (of which one is a core or main consultant) also had a sound knowledge in English. Some speakers also attested to have knowledge in one of Manda's neighboring language. During the field-work sessions, Swahili was most often used as the medium of interaction. Occasionally, English was also used.

The selection of speakers can be described as "snowball sampling", i.e. recruiting from a network of prior contacts (Johnstone 2000:92; see also Petzell 2008:21). However, parts of the sampling procedure arguably had more the character of purposive sampling, as I have been directed to consultants known as having a thorough familiarity with the language - i.e.

[15] Research has been performed with an official permit (number 2015-125-NA-2014-269) provided by COSTECH (Tanzania Commission for Science and Technology).

[16] Due to the tension between Tanzania and Malawi about the delimitation of the border of Lake Nyasa and, as a consequence, the military activity around the lake littoral, I was prevented from entering the Manda speaking area during a large period devoted to field studies. Fortunately, I had by then already got in contact with many of my main consultants who would instead travel and stay with me for elicitation and text collection sessions just outside of the protected area. Obviously, there are big disadvantages of not being able to work in the very area where a language is spoken - not least with regard to issues such as getting a more sound contact with the community as a whole and to engage more extensively with methodological techniques such as participant observation (as further discussed below). However, these disadvantages were at least to some extent balanced by the fact that I instead had access to both electricity and - more importantly - the consultants throughout the day (as they were cut off of their regular duties at home). See Dimmendaal (2001) for further discussion on the advantages and disadvantages of staying outside of the speaking area of a language under study.

both a high competence in speaking Manda and a good knowledge of the language and the language community - by other members of the community (see Dimmendaal 2001).[17]

In total, a sample of 16 Manda speakers have been used as language informants or consultants to some extent, i.e. they have participated explicitly in an interview session of some kind. In addition, several other Manda speakers as well as speakers of neighboring languages have contributed with interesting insights in the language outside of any formal session of elicitation or narration - e.g. by just striking up a conversation in the streets or as part of a dinner conversation - which, in turn, has led to the forming of new hypotheses or ideas, in turn leading to further data collection.

The intention of this sampling has been to cover as wide a socio-linguistic spectrum of speakers as possible and to obtain a variety of data and language-internal variation. This has been done in order to provide as accurate a description of the Manda language as possible. Crucially, as a big part of this thesis revolves around the question of language change, variation has also served as a good language internal indication of ongoing change. Consequently, the informants come from different parts of the Manda speaking area, from Lituhi in the south to Luilo in the north. (Note that the villages indicated on the map of Manda, i.e. Figure 2.1, represent those villages from where my informants originate). Consequently, both the Southern variety as well as the Matumba dialect is represented in my Manda language data. Despite this geographical spread, a majority of the speakers do come from the more southern shore area, in accord with the general sentiment that this part forms the "heartland" of the Manda speaking community. The speakers are of both sexes and of different ages, the youngest being 25 and the oldest 82. Furthermore, they represent different levels of formal education. The study has benefited from the use of both core consultants and more peripheral ones, where some informants have contributed considerably more than others. Also, different consultants have different skills and have thus been more or less suitable for different kinds of data collection, similar to what has been pointed out by Dimmendaal (2001). The two main or key informants are John Ngolibaha, an 82 years old male who comes from Nsungu and thus speaks the southern variety of Manda, and Cecilia Haule, a 32 year old female from Luilo, who speaks the Matumba variety. Thus, they represent two ends with regard to age, sex and geographical variation. They are also speakers with a sound knowledge of their mother tongue and a strong linguistic intuition.

The metadata about the speakers was gathered from structured interviews using a questionnaire based on Petzell (2007; see also Sakel & Everett 2012:22; Bowern 2008:58). It asks for information such as sex, age, origin, level of education and occupation and which other languages the informant knows and speaks, including Swahili (which all consultants speak). Furthermore, it asks about attitudes towards the Manda language (also in relation to the superstrates Swahili and English) and in which contexts it is preferably spoken. Such data

[17]I am especially indebted to the *diwani* of Nsungu *mama* Kisota for initially pointing out good consultants. In addition, although not being a member of the Manda speaking community, I would like to thank Abel Mreta who in a similar way put me in contact with a student at the University of Dar-es-Salaam, who was to become one of my key informants.

can be seen as “life stories” of the consultant (Dimmendaal 2001), and are invaluable in identifying factors of variation (see Bowern 2008:58).

In addition to my Manda consultants, proper elicitation sessions have also taken place with speakers of the neighboring languages Matengo and Mpoto, in order to get further insight into these languages for comparative reasons (see more about this in chapter 6). Those speakers were selected through purposive sample and their metadata were gathered in a similar way as described above.[18]

4.3 Data collection

This section describes and discusses the tools and techniques employed for gathering the linguistic data of Manda. The linguistic data was collected both through translation elicitation and from more spontaneous or natural speech, including data collected from participant observation. This was done for two reasons. Firstly, it is a way to extrapolate as much data as possible. Moreover, as pointed out by Johnstone (2000:61) and Bowern (2008:121, 2010:352-53), this also allows for checking of the validity and reliability of the material, as there are advantages with both techniques but also disadvantages which can be balanced by the other. Thus, translation elicitation allows the collection of linguistic paradigms in a controlled and transparent manner as well as the checking for negative evidence (Matthewson 2004, Cover 2015), whereas the recording of more free speech generates more spontaneous data less biased and bound by the limits built in by the translation language. Furthermore, recording of spontaneous speech captures more/different registers and speech styles of a speaker, as the speech produced during an elicitation session is only one kind of register specific for such a situation, as argued by e.g. Bowern (2008:121).

Fundamentally, the hypotheses tested and the tools and techniques used for extracting and analyzing the data are typologically informed. That is, they have been based on generalizations from cross-linguistic and intra-genetic comparison, both with regard to universal traits as well as specific Bantu characteristics (including the limited information on the Manda language itself from previous sources), also with regard to how historical changes manifest itself in a language. These generalizations and explanations adjoined with fundamental terms and concepts constitute a suitable ground to depart from when trying to capture a previously virtually unstudied language like Manda. In addition, it forms a methodological axiom to follow, namely the value of cross-linguistic comparison for the understanding and structuring of the data.

In the following, the various techniques of data collection used will be described in more detail, starting with elicitation and continuing with the recording of texts.

4.3.1 Elicitation

This section focuses on elicitation as a tool for gathering linguistic data. The elicitation of Manda data has been executed in what Cover (2015) refers to as its more “complex” and “broad” sense. This means not only asking targeted questions to a native speaker consultant

[18]Also data on Nyanja (N.201) was elicited for some initial comparison. However, this data has not been included in this study.

while transcribing and/or recording their response, but also engaging in a dialogue with the speakers, taking their additional comments into account and being flexible and prepared to manipulate the elicited sentences and/or interweave them in (additional) discourse. By such a technique, supplementary Manda data could rapidly be gathered, but more crucially, a more accurate understanding of the meaning of a certain form or construction evolved.

A variety of elicitation techniques have been used. From as early on as possible, they have all been framed as a dialogue and been strengthened by the additional comments of the consultants as prompted by the elicitation material. Both translation elicitation and so called non-translation elicitation have been used during the course of fieldwork. Non-translational elicitation refers to techniques avoiding direct translation from the contact (mediate) language (Mosel 2011) including immersion, i.e. my own attempt at speaking Manda. The techniques of non-translational elicitation will be further discussed below. First, however, an account of the use of more "traditional" translation elicitation by the use of questionnaires will be offered.

In order to get a rough initial understanding of the structure of Manda, the initial elicitation sessions started out as being cases of more strict translation elicitation, characterized by collecting words, sentences and paradigms in isolation, typically from structured questionnaires consisting of a closed set of questions, developed by other scholars (see the reference in the two following paragraphs). Most of these questionnaires had to be translated to Swahili (except for the rare cases when the consultant spoke English). Many of these elicitation questionnaires served as the foundation of early collection of data, in order to get an initial understanding of the linguistic system of Manda and their encoding, with the major focus on the encoding of the wider TAM domain (i.e. tonal patterns, morphemes and complex constructions).

The questionnaires used include the semantic word list and questionnaire for Bantu morpho-syntax developed at the Department of Foreign Languages and Linguistics at the University of Dar-es-Salaam (see Petzell & Hammarström 2013). Furthermore, paradigmatic elicitation, with specific reference to the tone patterns within the simplex verb conjugations in Manda was executed with the help of Marlo's (2013) step-by-step guide on how to stage such a task for a Bantu language. (I developed a similar questionnaire to test tone patterns also with regard to different "extensions", i.e. verbal derivation morphemes). Collecting the tone paradigms indirectly also served as a way of cross-checking other paradigms, e.g. subject markers, object markers, relative markers and TAM markers, as they are all part of the verbal conjugation in Manda and modify the tone patterns in different ways.

Next, Dahl's (1985) scenario questionnaire on catching TAM categories was employed and also Winford & Migge's (2007) adaption and extension of this questionnaire focusing on the categories of mood and modality.[19] To capture the modal system - i.e. the different modal forms and categories in Manda - but also the typically subtle semantic differences between them, the questionnaire by Vander Klok (n.d.) was employed. Unlike other questionnaires which are typically decontextualized (Mosel 2011), this questionnaire comes with a rich

[19] I am indebted to Vera Wilhelmsen for bringing this questionnaire to my attention.

context for every sentence to be translated, which allows discriminating between ambiguous readings of an expression (e.g. with regard to deontic or epistemic modality).

Taken together, these questionnaires all provided valuable fundamental insights into the wider TAM domain of Manda, not least as serving as inspiration for the creation of adapted and modified sentences and/or scenarios (i.e. both with regard to a certain construction or paradigm but also with regard to the linguistic as well as cultural context used for eliciting data of various kind.)

Ultimately, however, the elicitation sessions came to shift from consisting of mainly translational elicitation from questionnaires as described above, to consist mainly of non-translational elicitation. That is, as the informants got more acquainted with the interview situation and procedure, on the one hand, but perhaps even more crucially, as I got more acquainted to the linguistic system of Manda, the field sessions evolved into more free, spontaneous and eclectic discussions. Techniques used at such sessions included the manipulation in different ways of previously elicited sentences (or other constructions), for example creating “minimal pair” sentences, by substituting a modal or temporal adverbial or transforming a construction from expressing an affirmative to expressing a negative proposition (see Mosel 2011, Cover 2015, Bloom Ström & Petzell forthcom.). Also, the consultants were asked to create or spontaneously came up with their own example sentences or contexts for an utterance, given a certain word or construction, often with reference to real events which had recently occurred. Also, in the cases of more traditional translational elicitation, additional context was provided in order to create disambiguated and felicitous utterances (see Matthewson 2004). Such elicitation sessions allowed collecting data presumably less flawed from Swahili (or English) inference. Furthermore, it facilitated the finding of categories not present in Swahili and allowed for the fine-tuning of the data but also the collection of a certain form or paradigm where data was lacking or not sufficient.

An important part of non-translational elicitation has been acceptability judgements, i.e. asking the consultant about which usages of a form or construction are not acceptable. This is an important technique as it provides negative evidence (Matthewson 2004; Bowern 2008:78-80) and in this way, a more fine-grained understanding of the actual usage and semantic extension of a form or construction may be captured. Furthermore, it allows discrimination between whether a reading is cancelable - and thus an implication - or not - and thus entailed in an expression (Cover 2015). In this sense, judgement of acceptability is also an extremely important tool for testing hypotheses of whether a certain form or construction is grammaticalized. That is, it has allowed checking for whether an inference has been reinterpreted and semanticized as a new meaning (i.e. if this reading is entailed in an expression or not) and if it has expanded in usage and thus is acceptable in contexts where the source form/construction would not be accepted. Simultaneously, it has provided evidence with regard to whether the target expression has been subject to structural restrictions in comparison to its source, as is typical for a grammaticalized item. The phenomenon of grammaticalization and the hypotheses and methodological tools developed for capturing such processes are more extensively discussed in chapter 3.

It should be noticed that judgement of acceptability is considered a controversial technique by some authors, e.g. Mithun (2001; cited in Matthewson 2004) and Mosel (2011). Indeed, it is important to make sure during such gathering of data that what the speaker rejects is the well-formedness of the sentence and not some other reason (e.g. that the sentence is not felicitous or that the state of affairs described in the sentence is not possible given "real world" conditions). However, as pointed out by Matthewson (2004; see also Bowern 2008:79-80, Cover 2015), such misunderstandings can be effectively parried by follow-up questions and by simply engaging in a discussion with the consultant on why the sentence is rejected.

4.3.2 Text collection

After describing the different elicitation techniques used, the focus of this section is on the collection of more spontaneous speech. An important part of the collection of spontaneous speech was the recording and transcription of what Samarin (1967:67) refers to as "interesting texts", i.e. of discourse which also has a cultural value and provides an insight into the living conditions and history of the speech community (see also Mosel 2011, Sakel & Everett 2012:104-105). The aim has also been to collect a broad variety of different types of texts concerning different topics, in order to get as wide a selection of registers and speech styles as possible. See Table 4.1 in section 4.3.3 for the exact numbers of the compilation of Manda texts.

The largest category of texts is narratives. The narratives consist of both traditional stories - typically fables - but also more informal or spontaneous accounts such as anecdotes. See text I in the appendix of this thesis for an example of the kind of Manda narratives collected. The collection of texts further includes expository texts, typically procedural texts (e.g. how to bake bread, brew local alcohol, make cassava flour or fish for sardines). See text II in the appendix for an example of a procedural text on how to make cassava *ugali*. The collection of texts also contains examples of hortatory texts, i.e. texts "urg[ing] the listener[s] to take some sort of action" (Sakel & Everett 2012:105), for example how to raise a child. Another example of a hortatory text is given in the appendix (text nr III in the appendix). The collection also contains expository texts about historical events, both on the claimed origins of the Manda speaking community, and also accounts of relatively recent events that have affected the Manda speaking area, such as colonialization, the *Majimaji* uprising, World War I and the conflict with Malawi after independence. Other texts collected include songs (occasionally together with some dancing), riddles, proverbs and religious recitations. Obviously, such texts are of value as they create an insight in the culture of the Manda speaking community (see e.g. Barwick 2011). As further discussed in 6.4.1.1, such ritualized means of expressions may also conserve archaisms and are thus also interesting from a historical-linguistic point of view.

Furthermore, informants were asked about "upsetting" topics, chiefly on political issues. One of the main field trips took place in the summer of 2015 and thus in the middle of the preparations of the general elections held later that autumn, including the campaigning and election of candidates for positions on different political levels. Also, speakers were asked to retell an event when they were scared. This emotional focus supposedly makes the speaker

less aware of the artificial setting of the recording session, resulting in more natural speech (see e.g. Petzell 2008:19).

Most recordings contain a single speaker but there are also some recorded conversations, consisting both of discussions between two speakers or of one speaker interacting on the phone with another speaker. According to Sakel and Everett (2012:105) conversations are the most explicit type of natural, everyday use of the language. However, as a consequence of this, it was also the most "messy" data to transcribe and typically it included much Swahili code-switching.

In order to gain non-translational and thus more spontaneous data which could still be fairly comparable between different informants, records containing more structured discourse were also collected. Firstly, "picture stories" or "story boards" were used, i.e. a set of wordless cartoons that the different informants have studied and then told a story around (see Sakel & Everett 2012:24; Bowern 2008:82, 166). To avoid problems with regard to cultural applicability, the pictures used originated from a similar exercise found in an old Tanzanian primary school reader. Secondly, with inspiration from Kiso (2012:73), semi-structured interviews with speakers were performed in which they were asked to describe what they had done or would do at different points in time. This specifically allowed for capturing tense distinctions and tense granularity and how concepts such as relative ordering, deixis and degree of realis interplay with different tense markers.

Similar to what was described for the elicitation sessions above, the transcription of the recordings of these texts - as further described in section 4.3.3 below - was also framed as a dialogue with the consultant assisting with the transcription, spurring further questions and comments which in turn corroborated or challenged the working hypotheses.

Some of the data originates from so-called participant observation (see for e.g. Sakel & Everett 2012:136; Cover 2015), i.e. from the spontaneous collection of data from discussions and the interaction with Manda speakers outside of elicitation sessions, e.g. by asking them to explain or translate certain objects or actions as they appeared in real life. Similar to what has been described by Cover (2015), participant observation often led to "serendipitous discoveries" that could be further elaborated during more regular elicitation session (including their proper recordings).

4.3.3 Data processing and the field-work corpus

All the elicitation and recording sessions were audio-recorded into uncompressed WAV format with a Zoom H4n recorder. The data was acoustically analyzed with the computer software Praat. The program Audacity was used for replaying chunks of recorded data during transcription/translation sessions. The recordings were also transcribed, translated and/or cross-checked with the assistance of native speakers. A database containing the texts and a word list/dictionary was created using the program Fieldworks (FLEx). FLEx allows both producing a word list/dictionary and to make the collection of texts into a searchable corpus.

The lexicon (dictionary), with a focus on the verbs in Manda, contains roughly 3000 individual words and morphemes. It includes the word list generated from the Tanzania

Language Survey (Nurse & Philippson 1975; see a further discussion about this in 2.3).[20] The lexicon also includes reflexes of Proto-Bantu verb roots in Manda, as identified by comparison with the list of Proto-Bantu verb roots in Marlo (2013), in turn extracted from Bastin et al (2002).

FLEx was also used for storing and processing the collected texts as well as elicited sentences into a "fieldwork corpus" (Sakel & Everett 2012:139). Thus, this software allowed creating a directory of the collected files and to register them based on metadata information (cf. Bowern 2008:59). Table 4.1 is an overview of the compilation of the Manda corpus, including information about token frequency.

Text type	**Files**	**Total word count (tokens)**
Expository - Procedural	8	1779
Expository - History & culture	3	473
Narratives	20	3393
Hortatory	7	717
Structured discourse (pictures stories etc)	11	5748
Conversations	11	2243
Ritualized~formulaic discourse (songs, proverbs etc.)	3	851
		15 204
New Testament	1	113 543
Hymns	1	9268
		114 511
Elicited sentences	1	15 888
TOTAL		145 603

Table 4.1. The compilation of the Manda field-work corpus

As seen in the table, the corpus contains the variety of texts collected from my own recordings as discussed in section 4.3.2. Next, it includes the New Testament (1937) and the Hymns (n.d.) and the data on songs and folk omens, respectively, taken from two master theses (Haule 2004, Haule 2008) from the Department of Literature at the University of Dar-es-Salaam. Furthermore, it contains sentences collected during elicitation. Note, however, that the approach used with regard to elicitation as described above, does not lend itself easily to quantification. The number of elicited sentences must thus necessary be seen as a rough estimation. (Naturally, non-complete sentences or sentences judged as ungrammatical are not included here). As mentioned initially in this section, this Manda field-work corpus is also searchable within FLEx, allowing the search of a translation, or a form or a part of a linguistic string, in order to get an overview of the instances of certain forms and categories and to generate examples.

Finally, it should be noted that, as mentioned in section 4.3.2 above, three interlinearized (glossed) texts with translations from this corpus - one narrative text, one procedural text but also a hortatory text - can be found in the appendix of this thesis.

[20]Note that this list does not mark tone on the words.

4.3.4 A note on the methodological implications of Swahili influence

As discussed in 3.3, Manda is heavily affected by "swahilization", i.e. the increasing impact of contact with the national language Swahili, both on the lexical and grammatical level. As pointed out in Petzell & Marten (2016), exemplifying with Kagulu (G.12), another local language in Tanzania, swahilization provide a challenge with regard to the editing and presentation of the field data. According to these authors, there exist both "pure" and "mixed" variants of Kagulu - the latter involving more Swahili code-switching - and these differences have to be taken into account. See also Bowern (2008:88-89, 2010), for a more general note on how to handle borrowing/code-switching in field data.

For this study, the collected data have been closely checked and marked for what is conceivably borrowing and/or code-switching from Swahili (deciding whether a form of Swahili origin found in the Manda data was to be considered a proper borrowing or a code-switch was unfortunately beyond the scope of this study).[21] However, in order not to tamper with the validity of the naturally produced data exemplified throughout this thesis, a decision was made not to edit out linguistic strings of Swahili origin, even when a language assistant, during transcription, suggested shifting a word or other linguistic item from Swahili to a more "pure" - or "inherent", "original" or "true" - Manda variant. Instead, in these cases the suggested "original" item has been added in brackets in the second row of the gloss. This is considered an approach more consistent with the main focus of this study which is to account for linguistic change, of which contact-induced change naturally also is an important factor.

4.4 Summary & point of departure

This chapter has accounted for the methods used in the collection of Manda data. As shown, a mixture of different methods has been employed, i.e. both collection of texts containing more natural speech as well as elicitation, both through translation and non-translation techniques. The chapter also briefly touched upon how participant observation as well as immersion with Manda speakers has resulted in additional collection and corroboration of data, as well as how Swahili influence has been dealt with. Taken together, these different methods have enabled the gathering of different important aspects of the Manda language, each making up for the weaknesses of the other and together leading to a more representative data set and facilitating a more accurate interpretation of the data.

In essence, field-work is a cyclic enterprise, as pointed out by e.g. Mosel (2011). That is, the processing and the analysis of the collected data and of the comments by the consultants both during sessions, after the session as well as back at the office between the different field trips, constantly generated new questions in need of being answered and scenarios to be tested that had to be prepared for a next field trip or session. This leads to more refined working hypotheses and eventually a more coherent data collection.

The Manda data collected during field-work serve as the foundation for the analysis and conclusions presented in this thesis, in turn encompassed in a typological-functional framework. Thus, also the second part of this thesis, i.e. the analysis and reconstruction of

[21] It should be noted that some of the recordings contain big chunks of Swahili code-switching.

grammaticalization processes in the wider TAM domain in Manda, will chiefly consist of the comparison of variations found within this collection of field data. However, the data will also be compared with older sources of Manda and with related/neighboring languages, Proto-Bantu reconstructions and cross-linguistically induced generalizations of conceptually (semantic and functional) and structurally motivated patterns of grammatical change. This approach of internal and external comparison is further discussed in chapter 3.

5 Grammatical sketch

5.1 Introduction

This chapter is a description of the grammar of Manda outside the wider TAM domain. The main focus of this chapter is to serve as a background for the following chapters of this thesis. In addition, it aims at being a reference grammar for readers interested in the other parts constituting the Manda grammar

Section 5.2 is a description of the phonological system of Manda, including its supra-segmental features. Section 5.3 is a description of the nominal morphology of Manda. Section 5.4 describes the verbal morphology of Manda, restricted to those affixes not marking TAM, i.e. prefixes of nominal indexation and derivational suffixes (extensions).

5.2 Phonology

This section describes the phonology of Manda. It will describe the inventory of phonemes and some processes of alternation affecting these phonemes. Crucially, the Manda system is compared to the phonemic inventory of Proto-Bantu. It will be shown that most of the phonemes in Manda can easily be traced to Proto-Bantu, as either retentions or as stemming from common sound laws such as spirantization. Other issues affecting Manda on the segmental level will also be addressed in this section. Furthermore, the tonal system, i.e. the supra-segmental system of Manda will be introduced here.

This section is organized in the following way: section 5.2.1 introduces the vowel inventory, section 5.2.2 the consonants and section 5.2.3 the syllable structure in Manda. Tones are discussed in section 5.2.4.

5.2.1 Vowels

As seen in Figure 5.1, Manda has a vowel inventory consisting of 7 vowels. The phonetic representation of the mid-vowels is in brackets (it is only in those cases where the phonetic and orthographic representation differs). The vowel inventory corresponds in both quantity and quality to what has been reconstructed for Proto-Bantu, as represented in Figure 5.2 (see e.g. Schadeberg 2003b; Hyman 2003).

i	u
ɪ	ʊ
e [ɛ]	o [ɔ]
a	

Figure 5.1.The vowel inventory of Manda

*i	*u
*ɪ	*ʊ
*e	*o
*a	

Figure 5.2. The vowel inventory of Proto-Bantu

This seven vowel system contrasts with many other Bantu languages, including several of the neighboring languages to Manda, where the mid-high (or second degree) vowels have merged with the high (first degree) vowels into a five-vowel system. Importantly, this means that there is a contrast in Manda in height between first degree and second degree vowels (and mid-vowels). The (near) minimal pairs in (1) illustrate this contrast between the degrees of height. This contrast is illustrated for the front vowels in the left column and for the back vowels in the right.

(1)	/i/ ***lilá**mbi* ‘flame’	/u/	*li**yún**ju* ‘hair (of head), bunch’
	/ɪ/ ***-lıla*** ‘cry’	/ʊ/	*li**yón**gʊ* ‘pumpkin’
	/e/-***lela*** ‘bring up child’	/o/	*li**yók**a* ‘snake’

There are some restrictions in the distribution of these vowels in Manda. Only /i, u, a/ occur in prefixes. All seven vowels may occur in the stem; due to assimilation with the root vowel they may occur in suffixes as well (see more in section 5.2.1.2).

5.2.1.1 Vowel length

Although Manda has retained a seven-vowel system it has, however, lost (inherited) vowel length (as also pointed out in passing by Nurse (1988)). This means that there is no contrastive lexical vowel length, in opposition to what has been reconstructed for Proto-Bantu (Meeussen 1979, Bastin et al 2002) and still surfaces in many other Bantu languages (see e.g. Marlo 2013). This reduction in length in Manda can be exemplified by comparing Manda forms with their Proto-Bantu cognates words reconstructed with a long vowel, as in (2).

(2)	**PB**		**Manda**	
	**-béede*	‘breast’	*li-véle*	‘breast’
	**-caagud-*	‘choose’	*-hagul-*	‘choose’
	**-caakad-*	‘be worn out'	*-hakal-*	‘be worn out, be dirty’
	**-póóm-*	‘breathe; rest’	*-pʊmʊlıl-*	‘rest’

Although Manda lacks lexically determined long vowels, there is some (non-contrastive) lengthening of vowels occurring before NC sequences, e.g. *nigénda* [*nigé:nda*] ‘I’m going’ and after glides, e.g. *gwáli* [*gwá:li*] ‘ugali’. Moreover, there are indications that Manda displays so called “automatic penult lengthening” (see e.g. Devos 2013), i.e. that the next-to-final syllable is pronounced with a longer duration and thus has a relatively stronger prominence. According to Hyman (2014) and Philippson (1998), this is common for a Bantu language that has lost contrastive vowel length.

Automatic penult lengthening occurs phrase-finally in Manda, i.e. on the final antepenultimate position of a phonological phrase, rather than on a word.[22] As works like Downing (2010) and Hyman (2014) show, this is the most common pattern for this phenomenon in Bantu languages. Thus, the penult of the final word of the two conjoined noun phrases in example (3) is lengthened. Similarly, the addition of an object in (4) and a negator in (5) shifts the penult lengthening from the verb (in isolation or as a verb phrase of its own) to the end of the entire verb phrase. Notice that the tones stay in their word-level position.

(3) (*né:nga) (nu múndu wá:ngu*) 'I am your man'

(4) (*nang'kotí:ti*) 'I meet him' vs. (*nang'kotíti Kolí:mba*) 'I met (him) Kolimba'

(5) (*ahogólí:ki*) 's/he has been born' vs. (*ahogólíki lé:pa*) 's/he has not been born'

As neither pre-nasal, post-glide lengthening nor automatic penult lengthening is contrastive in Manda, it is not marked in this thesis.

5.2.1.2 Vowel-to-vowel interaction

In Manda – and as is common cross-Bantu (see e.g. Hyman 2003) – a hiatus between vowels, typically at morpheme breaks, tends to be avoided through glide formation or deletion. Some of these processes can even be traced to vowel sequences in Proto-Bantu. The typical context in which vowel alternation occurs at a morphemic break in Manda is between a noun class prefix and a vowel initial noun stem, as illustrated in (6).

(6) *mwési* /°mu-esi/ 'moon'

Depending on the quality of the vowels involved, different kinds of vowel reduction occur. In a non-harmonic vowel sequence the first vowel is typically turned into a glide. A high front vowel standing before another vowel becomes <y> /j/. Some of the possible combinations and glide formations are exemplified in (7).

(7) *i + ʊ > yʊ* /°ki-ʊma/ > *kyʊ́ma* 'steel, wealth'
i + e > ye /°li-enje/ > *lyénye* 'bad smell (esp. of fish)'
ɪ + a > ya /*-bɪ-at-/ > *-byat-* 'burp'

A similar pattern occurs with high back (rounded) vowels which turn into /w/. This is illustrated in (8).

(8) *u + a > wa* /°lu-agi/ *lwági* 'fur'
u + o > wo /°u-oga/ > *wóga* 'mushroom'
u+ ɪ > wɪ /°lu-ɪmbʊ/ > *lwímbʊ* 'song'
ʊ + a > wa /*-gʊ́-a/ > *-gwa* 'fall'

[22] Further studies are needed in order to determine the exact level and in which constrictions automatic penult lengthening applies in Manda.

There are exceptions to this general rule of glide formation. Two exceptions are the words in (9), which the informants pronounced with the first vowel deleted rather than forming it into a glide.[23]

(9) *u-o* > *o* /°mu-oyo/ > *móyo* 'heart'
u-o > *o* /°mu-oto/ > *móto* 'fire'

Another exceptional pattern is the variation found in the realization of a sequence consisting of a front high vowel before /a/. That is, instead of the high front vowel turning into a glide it may instead be (optionally) deleted, e.g. *kúlya ~ kúla* 'to eat' < **-lí-* 'eat', *sya wíchu ~ sa wíchu* 'good' (lit. 'of goodness') < /°*si-a wichu*/.

When the first vowel of a vowel sequence is /a/ it is typically deleted, e.g. /°*va-oha/* > *vóha* 'all', /°*ga-itu/* > *gítu* 'our' (class 6), or /°*a-i-genda*/ > *igénda* 'she is walking'.[24] Deletion also occurs in sequences of identical vowels, e.g. *yínu* < /°*yi-inu*/ 'your' (class 9) and *vána* < /°*va-ana*/ 'children'.

Vowels are also affected by vowel harmony across consonants in Manda. This is typically seen in the verbal base, where those extensions (derivational suffixes) consisting of high vowels harmonize in degree of aperture with high and mid vowels of the initial root vowel. This is exemplified in (10) below.[25]

(10) /i/ *-fifil-* /°-fif-ɪl-/ 'disappear, fade' /u/ *-dumul-* /°-dum-ʊl-/ 'cut, break'
/ɪ/ *-kɪtɪk-* /°-kɪt-ɪk-/ 'be doable' /ʊ/ *-tʊpʊl-* /°-tʊp-ʊl-/ 'uproot'
/e/ *-gendel-* /°-gend-ɪl-/ 'walk to' /o/ *-hotol-* /°-hot-ʊl-/ 'be able'

This assimilation process is not affected by additional vowels intervening between the root vowel and the vowel of the extension. An example is the intervening /a/ in *-yufwanil-* /°-yufwan-ɪl-/ 'listen to', which does not hinder the vowel /ɪ/ of the (applicative) extension from being raised from a second to a first degree high vowel in harmony with the first degree high vowel /u/ of the root.

Interestingly, it appears that vowel harmony with the root vowel occasionally affects (high) stem-final vowels in Manda as well. Compare for example the final vowels in (11) and in (12), where the difference in the realization in quality between the words appears to result from harmonization with the other stem vowels.

(11) **Subjunctive suffix *-i*:** *niholálél**e*** 'I should think' vs. *yaníhích**i*** 'I will come'

[23] Notice, however, that both the older records of Manda as well as descriptions on the surrounding languages Matengo (Yoneda 2006), Pangwa (Stirnimann 1983) and Ngoni (Ngonyani 2003) claim that these cognates are expressed with a glide analogous to the variants above.
[24] Hence, /a/ and /i/ do not coalesce into a mid-front vowel as might be expected from a Bantuistic perspective (see Hyman 2003:48). However, this specific alternation appears to be quite common in other Southern Tanzanian Bantu languages as well, e.g. in Bena (G.63; Morrison 2011:54) and Ndengeleko (P11; Ström 2013:108).
[25] An exception to this symmetrical pattern is that back vowels in the extensions do not agree with a mid-front vowel <e> of the root, e.g. *-lemʊk-* not ***-lemok-* 'stay, cease'.

(12) **Nominal suffix *-ɪ*:** *ngéne* ‘guest’ vs. *gímbɪ* ‘local brew’

This kind of vowel harmony, however, is often obscured by other phonological processes affecting the final vowel (or other final segments) of words in Manda. These processes are described in section 5.2.3.1.

5.2.2 Consonants

The consonant inventory of Manda is summarized in Table 5.1. When an orthograpic representation differs from its IPA symbol, the latter is placed in brackets. (Note that <ng’> is the grapheme used for a velar nasal [ŋ] and <ng> for the sequence of a velar nasal and an alveolar nasal, viz. [ŋg]). As seen, the consonant inventory includes plosives (stops), nasals, fricatives, only one (rare) affricate, but several approximants. The series of plosives consists of both voiced and unvoiced phonemes. The exception is the voiced palatal which lacks an unvoiced counterpart.

	Bilabial	**Labio-dental**	**Alveolar**	**Post-alveolar**	**Palatal**	**Velar**	**Glottal**
Plosive	p b		t d		ɟ	k g	
Nasal	m		n		ny [ɲ]	ng’ [ŋ]	
Fricative		f v	s	sh [ʃ]		gh [ɣ]	h
Affricate				ch [t͡ʃ]			
Approximant	w		l		y [j]		

Table 5.1.The consonant inventory of Manda

Unvoiced plosives are most often realized with aspiration in Manda, but aspiration is not contrastive. The voiced velar plosive is occasionally pronounced as a weakened fricative /ɣ/ or as an even further weakened glide. This is typically the case in a position between two vowels, where it surfaces as /y/ before fronted unrounded vowels and /a/, for example *va**g**éni ~ va**gh**éni ~va**y**éni* ‘guest’, or as /w/ before rounded back vowels, for example *ngó**g**ólo ~ ngó**gh**ólo ~ ngó**w**ólo* ‘old person’.

Nasals occur either alone or in NC sequences, i.e. in a cluster consisting of a homorganic nasal and a voiceless consonant (typically a plosive), e.g. *ndáláma* ‘money’ and *-dɪnd-* ‘close’. Some syllabic nasals in Manda stem from the deletion of the vowel of prefixes of the shape *mu-* before consonant-initial stems. These nasals surface in the class prefixes of class 1 and 3 and the object marker for the 3rd person singular.[26] They assimilate in place with the adjoined consonant, but unlike other NC clusters, these nasals do not trigger voicing of the adjoined voiceless consonant. Examples include /°*mu-tende*/ > *nténde* ‘medicine’, /°*mu-songolo/ nsóngólo* ‘boy’. The behavior of syllabic nasals is further described in sections 5.3.1.1 and 5.3.1.2.

[26]It should be noted that the noun class prefix 18 is not affected, nor is the 2nd person plural subject marker, despite both of them being morphemes of the same shape.

The labio-dental fricatives, as well as the alveolar and glottal fricatives, are common in Manda. The post-alveolar fricative and affricate are however more unusual. Often a word varies in pronunciation between other stridents and /h/, e.g. *sómba ~hómba* 'fish', *-shyovalel- ~-hyovalel-* 'get accustomed' and *li-fúndi ~li-húndi* 'cloud'.

The alveolar approximant /l/ is occasionally pronounced as a tap /ɾ/ but without any distinction in meaning. The approximants /w/, /l/ and /y/ are all fortified to voiced plosives when occurring in NC sequences, e.g. *nimbwéne* /°*ni-N-won-ile*/ 'I see her', *nindíndíla* /°ni-N-lındıl-a/ 'I am waiting for her/him', *ninjımálíla* /°*ni-N-jımalıl-a*/ 'I'm supervising her'. Notice that in all these examples the nasal originates from the 3rd person singular / class1 object marker and thus ultimately from the form /*mu*/ discussed above.

The consonant inventory of Manda can be compared to the inventory reconstructed for Proto-Bantu, as represented in (13). This specific version comes from Hyman (2003:42), in turn influenced from Meeussen (1967). See also Hinnebusch, Nurse & Mould's (1981) general account of common sound laws of Eastern Bantu languages and Nurse's (1988:102) specific account of Proto-Bantu consonant reflexes in Manda (Matumba; cf. 2.1).

(13)

*p	*t	*c	*k
*b	*d	*j	*g
*m	*n	*ɲ	

The series of unvoiced stops in Manda often corresponds to the set reconstructed for Proto-Bantu (the Proto-Bantu roots in following section have been retrieved from Bastin et al 2002). Exceptions are **c*, which has disappeared (but whose status as a plosive in Proto-Bantu is dubious; see e.g. Hyman 2003), and the cases of sound change triggered where spirantization (as further discussed below) and Dahl's law (discussed in section 5.2.2.1) have occurred. Examples of retained unvoiced plosives include *-pep-* 'smoke tobacco' <**-peep-* 'blow (as wind); winnow; smoke (tobacco)'; *-tep-* < **-tep-* 'be bent (itr.)' *-kıt-* < **-kıt-* 'do'.

The bilabial **b* surfaces as a labiodental /v/ in environments before non-1st degree high front vowels, e.g. *vá-ndu* < **ba-ndɷ* 'persons'. The approximant /w/ corresponds to **b* before low back vowels (when not the result of glide formation, as described in section 5.2.1.2 above), e.g. *-won-* < **-bón-* 'see'.

The voiceless labio-dental and alveolar fricatives in Manda can be traced to the spirantization of plosives before 1st degree high vowels, a common sound change within Bantu (see e.g. Schadeberg 1994-95; Bostoen 2008). Examples of this in Manda include **b* > *f* as in *lífu* < **-bú* 'ash', **d* > *s* as in *mwési* < **-jedi* 'month', **g* > s as in *u-lési* 'millet' < **-degi* 'sorghum, millet', and **k* > *s* as in *síngu* 'neck' < **kíngó* 'neck'. The glottal /h/ can be linked to the spirantization of stops, arguably corresponding to a later stage of the same process. Typically, this is reflected in the variation of a single word between /h/ and some other fricative, as with the aforementioned *li-fúndi ~li-húndi* 'cloud', which ultimately stems from the reconstructed stem **-dunde*. The glottal /h/ is also a reflex of Proto-Bantu **c*. An example is *mu-hávi* < **-cabi* 'witch, sorcerer'.

Reflexes of **d* and **j* respectively typically surface as /d/ and /ɟ/ in Manda when occurring after a nasal, e.g. *ndomóndo* 'hippopotamus' and *ki-gánja* 'palm of hand'. More typically, however, it is the alveolar approximant /l/ in Manda that corresponds to **d*, e.g *-lım-* 'cultivate < **-dım-* 'cultivate (especially w. hoe)'. (The status of **d* in Proto-Bantu is dubious and occasionally it is reconstructed as *l* or as *d/l*; see e.g. Schadeberg (2003b:146).) The reflex of **j* is realized variously in Manda as either /ɟ/ <j> or a more weakened /j/ <y>. Compare for example *-jımb- ~-yımb-* 'sing', *-jeng-* 'build' < **-jeng-* 'build', but *-yot-* <**-jót-* 'warm oneself'. (Note that there is no /f/ traceable to **j* in my Manda data. This stands in contrast to the claim in Nurse (1988:102), which perhaps (?) is a misprint).

As mentioned above, both of the post-alveolar consonants are rare. They are furthermore not directly traceable to Proto-Bantu (Nurse (1988) does not mention these two phonemes for Manda either). Some words with <*ch*> can be traced to Proto-Bantu roots with **j*, e.g. *má-chi* 'water' < **-jiji* 'water', while some can be traced to **k*, such as *njóchi* 'bee'< **-jókı* 'bee' (but *njʊsi* in the Matengo dialect). I have not been able to trace any words containing <*sh*> in Manda to Proto-Bantu, but the optional pronunciation with an additional glide, as in *-shyʊg- ~ -shʊg-* 'swim' and *-shyıl- ~-shıl-* 'bury, fill up a hole', suggests that this phoneme stems from the weakening of plosives before a high front vowel.

The nasals /m/ and /n/ correspond to their Proto-Bantu counterparts, e.g. *-mem-* 'be filled' < **-mem-* 'be filled' and *-nene* 'fat' < **-néne* 'big'. The palatal nasal corresponds to Proto-Bantu **ɲ* <ny>, as in *nyáma* < **nyama* 'meat' or *-nyw-* < **-nyó-* 'drink'.

5.2.2.1 Remnants of Dahl's law

Dahl's law is a dissimilatory sound change affecting unvoiced stops. It occurs in environments where two adjoined syllables contain voiceless stops, in which case the former voiceless stop gets voiced. It is a phonological phenomenon typical of the Northeastern Bantu languages where it may still be productive (see e.g. Davy & Nurse 1982; Hyman 2003). However, as pointed out by Nurse (1988), there are traces of Dahl's law in parts of, but far from in all, the vocabulary of Manda.[27] Examples of words affected by Dahl's law in Manda are given in (14).

(14) *-datu* < **tátʊ* 'three'
má-dáku < **-táko* 'buttocks'
-bıp- 'wipe arse' <**-píp-* 'wipe (excreta) from infant'
-det- 'tell lies' <**-tét-* 'speak, say, quarrel, scold, insult'
-bak- <**-pák-* 'rub, smear'

The issue of Dahl's law is brought up again in 8.4.2 in the discussion of the origins of the auxiliary verb *-bıt-*, suggested to originate from **-pít-* 'pass', and thus affected by this dissimilation at some point in time.

[27] Counter-examples include *-kıt-* 'do', *-kek-* 'breath', *-kos-* 'heap up', *-pep-* 'smoke tobacco', *-tupil-* 'be satiated' and *-pıt-* 'pass'.

5.2.3 The syllable

Syllables in Manda can be of the shapes illustrated in (15) below.

(15) CV *ya.yi.li.ho.to.le le.pa* 'it will not overpower it'
GV *wa.lu* 'floor'
CGV *ku.tya.sa.mu.la* 'to sneeze'
CVN *mun.du* 'person'
N̩ *n.ten.de* 'medicine'
V *a.ni.ga.na* 'she loves me'

The far most common syllable in Manda is an open syllable of the CV shape, i.e. with a consonant onset and a vowel as a nucleus. As pointed by Hyman (2003:44), the segmental structuring with open syllables is "reinforced" by the agglutinative morphology of Bantu languages. Manda also adheres to this pattern. Compare for example (16) which is the segmentation of the syllables and (17) which is a gloss of morpheme breaks of the same utterance.

(16) *ya.yi.li.ho.to.le* 'it will overpower'

(17) *yayilihótóle*
ya-yi-li-hotol-e
F1-SM9-OM6-overpower.SEP-F1
'it will overpower'

As indicated by the examples in this section, and in accordance with the description of the tendency to have open syllables, words in Manda end with a vowel and subsequently an open syllable. However, this final syllable is often subject to reductions and other alternations. These will be described in the next section.

5.2.3.1 Manipulations around the final syllable of a word

There are several instances in the Manda data where the final syllable or parts of the final syllable of a word are affected by different kinds of manipulation (in conflict with the vowel harmony pattern described in (11) and (12) in section 5.2.1.2 above), typically reductions of different kinds affecting the nucleus final vowel.

Firstly, final vowels have a tendency to get raised in Manda. For example, there is variation in the degree of aperture of the pronunciation of the final vowels in words such as *bámbo ~bámbu* 'mister' and *matóke ~matóki* 'banana'. In addition, the subjunctive and the perfect(ive)~past suffixes, reconstructed for Proto-Bantu as **-e* and **-ide* respectively, surface regularly in Manda as *-i* and *-ili* (but see the discussion of examples (11) and (12) in section 5.2.1.2). Even words ending with (the low) /a/ are occasionally raised to a high front vowel, e.g. the negator, which varies between the realization *lépa ~ lépi*, and the comitative *na ~ni*.

Furthermore, speakers of Manda may regularly devoice the final vowel of a word. This is exemplified in (18).

(18) *kuyúfwáŋ̣a* ‘to listen’
nalembítị̀ ‘I wrote’
magóno góhạ ‘always (lit. all days)’
lílínu nikalʊtí’ kulímạ ‘today, I went farming’

Occasionally, the final vowel is not only devoiced but totally deleted. This is typically the case with the suffix of the form *-ayi*, as illustrated in (19) and (20).

(19) *támáy*’!
tam-ayi
sit-SBJ
‘sit down!’

(20) *yanihéngáy’ lihéngu*
ya-ni-heng-ayi li-hengu
F1-SM1SG-work-F1 NCP5-work
‘I will work’

Often, the whole final syllable of a word is deleted in Manda. In (21) it is the same suffix and thus the same form as in (19) and (20) above, which undergoes further truncation. Verbs inflected with other suffixes and thus having different forms are subject to the same phenomenon, as seen in (22). Typically, though, it is verbs that are affected by this phenomenon.

(21) *nikamalá’ ápa, nilóta kung’ónda*
< *nikamaláyi ápa, nilóta kung’ónda* ‘when I have finished here, I’m going to the plot’

(22) *tukalongí’ nákʊ* < *tukalongíli nákʊ* ‘we spoke to him/her’

Deletion of the final syllable is usually restricted to words containing an approximant and/or a coronal in the onset of the final syllable.[28] This process seems at least partially to be driven by haplology, i.e. the deletion of one of two (nearly) identical syllables which happen to co-occur. (23) is arguably an example of this.

(23) *ngá’ tilóta hínu…* but: *ngáti mulóta hínu*
nga**ti ti**-lʊt-a hɪnu ngati mu-lʊt-a hɪnu
if SM1PL-go-FV now if SM2PL-go-FV now
‘if we will go now…’ ‘if you will go now…’

Note that the full form of these variants always surfaces in Manda in more careful/slow speech. This kind of deletion will continue to be marked with <’> in the rest of the thesis.

[28] Two exceptions are the verbs with the roots *-jov-* and *-kotok-*. They are also often affected by final syllable deletion. Both these verbs are arguably grammaticalized, however, the former into a quotative and the latter into a negator.

5.2.4 Tone

Proto-Bantu is reconstructed with a tonal contrast between high and low tones and Bantu languages are typically tonal languages, where difference in pitch height also expresses a difference in meaning. However, the northern Lake Nyasa area (roughly comprehending Southern Tanzania over to northern Malawi) is a well-known linguistic area consisting of Bantu languages with restrictions on their tone systems and where words have typically lost their lexical tone. As will be seen, this is also the case for Manda.

What I suggest is that, just as for several languages of this area, Manda is a language with a tone system that is both "restricted" (Voorhoeve 1973; Schadeberg 1973; Marlo 2013) and "predictable" (Odden 1988). Thus, in contrast with the claims of previous studies, Manda is not merely a stress language.[29] The tone system of Manda is so restricted that it is arguably reminiscent of an accentual system. However, it does not fulfil Hyman's (2014; see also Downing 2010) criteria of being a language with (word)-accent. That is, tone is obligatory in Manda, as (virtually) every word surfaces with a high pitch. Typically, tones also have a demarcative function in Manda as they generally surface in restricted positions close to the edge of a word. As will be discussed, however, there are exceptions to this general tendency. Moreover, tone is not culminative in Manda, as more than one high tone may surface on a word.

With regard to nominal tone, all nominals in Manda (the infinitive verb included) surface with a high tone on the ante-penult and the penult as in *linyamfusúlíla* 'dried vegetable' and *ng'olókólo* 'synodontis' or with only a high tone on the penult, as in *ligambúsi* - a traditional dance - and *kitambatámba* 'net'. An example of a single high tone on the penult of a nominal word appears to be the more common pattern in Manda. An example of a minimal pair between these two tone patterns existing in Manda is *kilólélo* 'mirror' and *kilolélo* 'dry season'.

With regard to verbal tone, Proto-Bantu has been reconstructed as having a verbal system in which verbs have a lexical contrast between a high and a low tone on the vowel of the initial syllable of the stem (Kisseberth & Odden 2003). This, however, is not the case in Manda. All verb stems in Manda are toneless. Instead, verb tone is assigned by the specific TAM conjugation. This makes Manda similar to several other languages of this area, as shown in work such as Odden (1988) and Downing (2012), and also to several other languages across

[29] The tonal system of Manda is actually referred to (briefly) in three comparative works: Guthrie (1948, 1967-71) and Nurse (1988). Peculiarly, all of these studies oppose my suggestion in different ways. In Guthrie's dissertation (1948) he claims that Manda has (grammatical) tone and differentiates degrees of remoteness (i.e. hesternal vs hodiernal past and future) only via tonal contrast (for which I have not found support in my Manda data). However, in his opus magna "Comparative Bantu" (Guthrie 1967-1971), he instead makes the claim that Manda has no tone at all (!). Nurse (1988) compares various languages of southern Tanzania, including Manda. He claims that Manda has lost tone altogether (together with vowel length contrast) and instead has penultimate stress (not clarifying which diagnostics of stress he uses). According to my data, none of these characterizations are satisfactory for the prosodic system of Manda.

the Bantu speaking area. See Marlo (2013:154) for a list of such languages without lexical (verb) tone.

Typically, the tone pattern of the verbal word in Manda consists of a high tone on the antepenult and a high tone on the penult (often falling due to penult lenghtening), as exemplified in (24). Alternatively, there is only a high tone on the penult, as exemplified in (25).

(24) *niholáléla* 'I am thinking'
(25) *nikaholalíli* 'I was thinking'

There are some minimal pairs within the TAM paradigm where this difference in tone assignment is contrastive. That is, the segmental structure is identical but a difference in function is encoded on the prosodic shape of the verbal word. The first example of such a minimal pair consists of the perfect versus the past 2 conjugation. Both are marked with the suffix *-ili*, but whereas the perfect regularly assigns a high tone on the antepenult that spreads to the penult, the past 2 is coded with a single high tone on the penult. The past 2 also requires a prefix *-a-*, whereas the perfect has no additional marking. Due to the tendency to avoid sequences of vowels (as discussed in section 5.2.1.2 above), the prefix *-a-* is often deleted if it stands in juxtaposition with a subject marker with an /a/ vowel, i.e. /C*a*-*a*-/ > /*a*/. Thus, in situations with such a subject marker, i.e. the subject markers of the 3rd person singular *a-*, the 3rd person plural *va-*, class 6 *ga-*, class 12 *ka-* and class 16 *pa-*, it is only the position of tone that differentiates between the two forms/functions of the perfect in (26) and the past 2 in (27).

(26) *alɔ́títi*
a-lɔt-iti
SM3SG-go-PRF
's/he has left'

(27) *alɔtíti*
a-a-lɔt-iti
SM3SG-P2-go-P2
's/he left (before today)'

Another example where tone assignment is minimally contrastive within the TAM paradigm is between the situative - high tone on the penult - and the itive conjugation - high tone on the stem-initial position. This can be seen in the minimal pair (28) and (29).

(28) *ukatelikáyi*
u-ka-telek-ayi
SM2SG-SIT-cook-SIT
'when you (have) cooked…'

(29) *ukatélikayi*
u-ka-telek-ayi
SM2SG-ITV-cook-SBJ
'(go and) cook…'

The insertion of object markers in the inflection of a verb stem shifts the pattern of tone assignment in peculiar ways. As seen in (30) the verb *-holalel-* 'think (about)' is inflected in the perfect and as a consequence a high tone surfaces on the antepenult and the penult. When an object marker is inserted, as in (31), there is only a high tone surfacing on the stem-initial position.[30] However, conjugations consisting of only a high tone on the penult, like the past 2, are typically left unaltered when inflected with an object marker. This is illustrated in (32) and (33).

(30) *aholálíli*
a-holalel-ili
SM3SG-think-PRF
's/he has been thinking'

(31) *akuhólalili*
a-ku-holalel-ili
SM3SG-OM2SG-think-PRF
's/he has been thinking about you'

(32) *aholalíli*
a-a-holalel-ili
SM3SG-P2-think-P2
's/he thought'

(33) *akuholalíli*
a-a-ku-holalel-ili
SM3SG-P2-OM2SG-think-P2
's/he thought about you'

The tone patterns of the verb – and the variation encountered when object markers are added – will be further addressed in the description of the various TAM conjugations of Manda in chapter 7.

5.2.5 A note on orthography

The spelling of Manda in this thesis is based on the Swahili orthography, as this is the orthography that speakers of Manda (and I) are most used to. Using this orthography also makes it easy to include non-integrated loans from Swahili. The mid-high vowels which do not exist in Swahili are instead written with the relevant IPA symbols. These are, however, the only two exceptions. All other graphemes used have been adopted from Swahili.

[30] An example of stem-initial high tone assignment with an ever longer verb and thus where the stem-initial vowel is not adjacent to the antepenult, is *a-ku-tyásamɔlili* 's/he has sneezed on you'.

High tones (whether stable or falling) are marked with an acute accent <´>, whereas low tones are left unmarked.

Data from other languages (except Swahili) occurring in this work are represented in a similar orthography to that used for Manda (unless explicitly stated otherwise). Note that other written sources cited on Manda do not mark tone or second degree vowels, and /v/ is often represented with a <w>.

5.3 Nominal morphology

This section describes the nominal morphology in Manda. Section 5.3.1 concerns the noun and its categorization within the noun class system. Section 5.3.2 discusses other constituents of the noun phrase – such as adjectives, pronouns and numerals – used either as modifiers to the (head) noun or as its substitute. This section also accounts for the inherent relationship of agreement marking that exists between the (head) noun and these other adnominal constituents. Bantu languages are in general characterized by a complex morpho-syntactic net of agreement marking, also called concord or indexation, which radiates out from the head noun and affects most other constituents throughout the clause. Manda is no exception to this, as seen in this (admittedly excessive but felicitious) example.

(34) ***ká****dége* ***ka****chóko* ***kakal****iwéne* ***li****ghólóvi* ***lí****mónga*

ka-dege	**ka**-choko	**ka-ka**-li-won-ile	**li**-ghʊlʊvi	**li**-monga
NCP12-bird	ACP12-small	REL12-SM12-OM5-see-PRF	NCP5-pig	ACP5-one

'the little bird which has seen one pig'

As seen in this example, noun agreement is also marked on the verbal word. There are three types of nominal indexation that occur on the verb: subject marking, object (including reflexive) marking and relative marking. These agreement markers will be discussed separately in section 5.4.2.

5.3.1 The noun and the noun classes

Every noun must carry a nominal class prefix (NCP) in a Bantu language.[31] Thus, a noun can be deconstructed as canonically consisting of two components: the NCP and a stem (but see further discussion in section 5.3.1.12). It is also the noun with its associated NCP that governs and triggers agreement throughout the noun phrase.[32] A system of noun classes and noun class prefixes is a salient part of what constitutes Bantu languages. It has been referred to as the "hallmark of Bantu nominal morphology" by Katamba (2003:103). The system can roughly be compared to an "extended gender system" (Corbett 1991:43), as nouns are categorized in various classes depending on which prefix they are marked with. Typically for the noun class inventory, classes 1-10 contain paired sets of singular/plural noun classes where the odd classes are singular forms and the even classes constitute their respective plural counterparts (see Katamba 2003:109).

[31] As will become apparent in the further description, there are some notable exceptions to this.
[32] It also governs the nominal indexation on the verb; see section 5.4.2.

Figure 5.3 is an outline of the inventory of various noun classes and noun class prefixes found in Manda. It includes the allomorphic variation of the NCP together with an example word demonstrating a particular alternation. (These alternations are further described in the following sections.) The figure also contains some examples demonstrating the singular-plural pairing, such as *kí-dége* ‘bird’ and *fi-dége* ‘birds’ of noun class pair 7 and 8.

Class	NCP Manda	Example	Translation	NCP Proto-Bantu
1	*mu-*	*múndu*	‘person’	**mʊ-*
	mw-	*mwána*	‘child’	
	m-	*mpáwúsi*	‘governor’	
	N-	*nsʊ́ngʊ*	‘white person’	
1a	-	*dádi*	‘father’	-
2	*va-*	*vána*	‘children’	**ba-*
3	*mu-*	*mútu*	‘head’	**mʊ-*
	mw-	*mwínyu*	‘salt’	
	m-	*mpámba*	‘knife’	
	N-	*ng’kóngo*	‘tree’	
4	*mi-*	*mikóngo*	‘trees’	**mɪ-*
	my-	*myáka*	‘years’	
5	*li-*	*litókási*	‘heifer’	**dɪ-, *lɪ-*
	ly-	*lyósi*	‘smoke’	
6	*ma-*	*máchi*	‘water’	**ma-*
	mi-	*míhu*	‘eyes’	
7	*ki-*	*kídége*	‘bird’	**kɪ-*
	ky-	*kyáka*	‘handle’	
8	*fi-*	*fídége*	‘birds’	**bi-*
	fy-	*fyákúla*	‘food’	
9	*N-*	*mbámba*	‘lightning’	**N-*
	-	*sómba*	‘fish’ (SG)	
10	*N-*	*ndóto*	‘dreams’	**N-, *(li)-N-*
	-	*sómba*	‘fish’ (PL)	
11	*lu-*	*lukónji*	‘finger nail’	**dʊ-, *lʊ-*
	lw-	*lwímbʊ*	‘song’	
12	*ka-*	*kapécha*	‘hare’	**ka-*
13	*tu-*	*tupécha*	‘hares’	**tʊ-*
14	*u-*	*utámu*	‘sickness’	**bʊ-*
	w-	*wátu*	‘canoe’	
15	*ku-*	*kumánya*	‘to know’	**kʊ-*
16	*pa-*	*pándu*	‘place’	**pa-*
17	*ku-*	*kúndu*	‘place’	**kʊ-*
18	*mu-*	*mugáti*	‘inside’	**mʊ-*
20	*gu-~ghu-*	*guyóka*	‘big snake’	**ɣʊ-*

Figure 5.3. The noun classes and noun class prefixes (NCP) of Manda in comparison with Proto-Bantu reconstructions

The prefixes reflected in Manda are compared to the reconstructed prefixes of Proto-Bantu (as cited from Maho 1999:51) in Figure 5.3. For Proto-Bantu, the noun class prefixes have been reconstructed as all low-toned (and thus not marked here) with various degrees of vowel

height. In Manda, all noun class prefixes are also underlying low-toned. Unlike Proto-Bantu reconstructions, however, prefixes containing high vowels are all pronounced with a first degree high vowel. As seen in Figure 1, Manda has 19 different noun classes. Of this fairly extensive set, Manda roughly fills "the typical pairings" of singular/plural described above and as exemplified with *kí-dége*/*fí-dége*. Some exceptions to this do occur, as will become apparent below, but these classes do alternate fairly regularly with each other in Manda. The typical pairings are 1 and 1a/2, 3/4, 5/6, 7/8, 9/10, 11/10, 12/13, 14/4 or 14/6, and 20/4.

It should be noted that Manda lacks the so called "augment" or "pre-prefix".[33] However, there exist several examples of constructions with an additive or "double" NCP (Petzell 2008: 75). An additive NCP is an additional prefix added onto a noun class prefix of another noun class which already occurs on the stem. It typically occurs with noun classes with specific derivational functions, such as the locative classes (see section 5.3.1.10). There are also examples in Manda where the noun class of a lexeme has been reanalyzed or is "petrified" as part of the stem and is transferred to another class by the imposition of that class prefix (Maho 1999:58f; Dimmendaal 2011:99).[34] Cases of additive NCP marking will be highlighted in this section when they occur.

The following paragraphs briefly go through the various noun classes of Manda, with a set of example words chosen both to reflect morphonological variation and the typical semantics of a certain class (or class pair). With regard to form, these prefixes show some interesting morphophonological alternations and combinations in Manda, conditional on the shape of the adjoined stem as well as the shape of the prefix itself. These structures and variations are described and explained through comparison with Proto-Bantu and other Bantu languages. Furthermore, some small notes about semantic traits or functions associated with a certain class will be mentioned, especially when they involve a productive derivation tactic within the noun class system. Some noun classes in Manda consist of a clearly constrained semantic content, but far from all of them. A more in-depth treatment of the rather complex connection

[33] The augment is a nominal prefix that precedes the NCP in the languages where it occurs. It has been reconstructed for Proto-Bantu (de Blois 1970) and has been characterized as denoting aspects connected to topicality and referentiality for other Tanzanian Bantu languages (cf. Morrison 2011; Petzell 2003, 2008). This feature of Manda stands in accord with the Rufiji-Ruvuma languages (cf. Nurse 1988; Odden 2003) but differentiates it from the Southern Highland languages, where it still exists (Nurse 1988). There are no traces of a pre-prefix in Manda either. This contrasts with other (Eastern) Bantu languages, where this prefix has not entirely disappeared, for instance the neighboring Mpoto (Nurse 1988) and some dialects of Swahili (Nurse & Hinnebusch 1993:399). (In both these cases retentions of the pre-prefix still surface in class 9/10.)

[34] These cases of "double prefixes" are in general created when the original prefix is a nasal (Hyman 2003:50) and in particular when it is the 9/10 nasal (Maho 1999:59). According to Maho (1999:59), this is linked to the non-syllabic character of this class prefix (as described above). A transparent example in Manda, i.e. where the original stem can be traced, is *linyáma* 'animal' (CL5) < **nyama* (9)[34] (CL1). Other examples that adhere to this characterization based on shape ("in PB verb roots did not begin with NC"; Hyman 2003:50), but where the original stem is unclear, include *lingóma* "feather" (CL5) and *king'ángo* 'ceiling' (CL7).[34] Examples with a petrified NCP that is not constituted by this prefix but by a nasal and a glide are *kamwána* 'infant' (CL12) < *mwána* 'child' (CL1) and *lumwífa* 'thorn' < **mʊ-jíba*.

between the form of the NCPs and semantic meaning is, however, beyond the scope of this research.

5.3.1.1 Classes 1/2

The singular class 1 prefix consists of an underlying *mu-* with several allomorphs. The alternating form of NCP1 reflects the general effects on (integrated) morphemes of the form /*m(u)*/ in Manda (see also section 5.3.1.2). Due to a morphophonological process that occurs when the initial segment of the stem is an obstruent (which it typically is in Manda), the prefix most frequently surfaces as a homorganic nasal, i.e. it assimilates in place with a stem-initial element. The phonological process can be accounted for as follows. First, the /u/ is deleted, turning the NCP under observation into a syllabic bilabial nasal, i.e. **mu-dala* 'woman' > *m̩-dala*. Second, this syllabic /m/ undergoes homorganic nasal assimilation (phonemically represented as /N/), which means that the place of articulation of the initial C of the root triggers regressive assimilation, i.e. *ndala* /ndala/. The process of nasal assimilation occurs regardless of whether the stem-initial consonant is voiced or voiceless. If the underlying stem-initial obstruent is voiced, it is omitted in a succeeding step, i.e. **ndala* > *nála*. Interestingly, this process does not occur when the stem-initial consonant is /ɣ/, which is not omitted but instead fortified to /g/, thus /ᵒ*mu-gh*/ > /*ng*/ [ŋg] as in *ngóghólo* /ᵒ*mu-ghogholo*/. Unlike a similar process in two other Rufiji-Ruvuma languages, Ndengeleko and Matuumbi (Ström 2013 and Odden 1996 respectively), there are no indications in the data of nasalization of the voiced obstruent and thus of nasal gemination. There is no nasal gemination of nasal-initial stems found in this class either, most notably reflected in the ethnonym *mánda* 'a Manda (person)', which is pronounced with a single /*m*/. Laterals in initial position are fortified to a voiced alveolar plosive, e.g. *ndómbʊ* 'sister', but *va-lómbʊ* 'sisters'. Other stem-initial consonants, including unvoiced obstruents, are not affected. An example of this is *nsóngólo* < ᵒ*mu-songolo* 'boy'.

There are some contexts where the reduction is blocked and the morphophonological process does not apply, thus showing the underlying form. These contexts are monosyllabic stems, e.g. *mu-twa* 'chief', and NC-initial stems, e.g. *mu-ndu* 'person', as well as vowel-initial stems, where glide formation occurs instead, e.g. *mw-ifi* 'thief'. These conditions are common in other Bantu languages with a similar assimilation process as well (cf. Hyman 2003:53). Moreover, no reduction or assimilation takes place with /h/-initial stems in Manda, e.g. *muhínja* 'girl'.[35]

The NCP2 *va-* is a regularly weakened reflex of PB /b/ **ba-*. It generally surfaces as *va-* but coalesces with vowel-initial stems (see 5.2.1.2 for a description of this).

The NC pair 1/2 is restricted to nouns referring to humans. Although the typical member of noun class 1a (discussed below) is a kinship term, several words denoting family relations are also found taking the regular noun class prefix in Manda.

[35]There is one informant who assimilates NCP1 and /h/-initial stems by fusion. The end result is a voiceless nasal and a nasalized stem vowel, e.g. /ᵒmu-hacha/ 'older brother' > *ñ̥acha*.

(36)	**CLASS 1 (sg.)**		**CLASS 2 (pl.)**
	muhácha	‘older brother’	*vahácha*
	nchókólʊ	‘grandson’	*vachókólʊ*
	ndómbʊ	‘older sister’	*valómbʊ*
	ndóngʊ	‘relative’	*valóngʊ*
	ng’kósi	‘friend’	*vakósi*

Other examples of members of this noun class are listed in (37).

(37)	**CLASS 1 (sg.)**		**CLASS 2 (pl.)**
	múhávi	‘sorcerer’	*váhávi*
	ng’ánga	‘(trad.) medicine man’	*vagánga*
	mwána	‘child’	*vána*
	ngówólo ~	‘elder’	*vaghówólo ~vaghóghólo~*
	ngóghólo		*vawówólo*
	nsóngólo	‘boy’	*vasóngólo*
	muhínja	‘girl’	*vahínja*

The 1a class consists of lexemes that lack the overt coding of a NCP1 but are indexed by class 1 agreement affixes and are always pluralized with NCP2. Members of this class also refer to humans. Typically, kinship terms are found within this category in Manda.

(38)	**CLASS 1 (sg.)**		**CLASS 2 (pl.)**
	dádi	‘father’	*vadádi*
	sónga	‘aunt (father’s sister)’	*vasónga*
	yáya	‘uncle (mother’s brother)’	*vayáya*
	mbúya	‘grandmother’	*vambúya*
	sókólʊ	‘grandfather’	*vasókólʊ*
	hísɪ	‘cousin’	*vahísɪ*

Other nouns in class 1a include *bámbu* ‘mister, gentleman’ and adapted loans from Swahili. Unlike the original nouns in Swahili, these loans are regularly pluralized with the addition of NCP2 in Manda, e.g. *polísi-vapolísi* ‘police(men)’ and *lafíki-valafíki* ‘friend(s)’. This is not an uncommon substratum tactic for Swahili loan integration in other Bantu languages as well (cf. Harjula 2004:63; Bernander 2012). In those cases where a word with a human referent starts with a nasal, it is not possible to decide whether it belongs to noun class 1a with a “zero” prefix or to the regular noun class 1 affected by degeminization. Examples include *máwu* or *nyóngólo*[36] ‘mother’, *máma* ‘older sibling’ and *nóngóna* ‘younger sibling’.

[36]According to an informant, the word *máwu* is preferred to *nyóngólo* when discussing one’s own mother (both genetically and in an extended sense), especially when she is the addressee or is present at utterance time.

5.3.1.2 Classes 3/4

The NCP of class 3 is of the same shape and exposed to the same morphophonological process as described for NCP1. NCP4 regularly has the form *mi-* (*my-* before vowel-initial stems).

This class pair is much less coherent than Class 1/2, as it covers a broad set of different semantic traits. The prototypical members are plants, or items made out of plants.

(39)

CLASS 3 (sg.)		**CLASS 4 (pl.)**
ndɒngólóngɒ	'sugar cane'	*milɒngólóngɒ*
ndéla	'root'	*miléla*
ng'kóngo[37]	'tree'	*mikóngo*

(40)

CLASS 3 (sg.)		**CLASS 4 (pl.)**
nsénjéle	'basket'	*misénjéle*
ngóyi	'rope'	*mighóyi*
mwíngíla	'dress, cloth'	*míngíla*
nténde	'(trad.) medicine'	*miténde*

Other nouns included in the class pair 3/4 are intestines such as *móyo/ myóyo* 'heart(s)' and *ntíma / mitíma* 'liver(s)', and certain tools such as *mwísi / mísi* 'pestle(s)', *mpámba* 'knife(s)' and *ng'óha* / *migóha* 'spear'. There are also examples of uncountable mass nouns in class 3, e.g. *mwási* 'blood', *ndíma* 'land, soil' and *mwínyu* 'salt'. In addition to this, NCP4 is used for pluralizing members of other classes besides class 3 (see section 5.3.1.11.

5.3.1.3 Classes 5/6

The phonemic reflex of class 5 is always a full CV-shaped prefix *li-* (or glided *ly-* before vowel-initial stems) in Manda. This stands in contrast to several other Bantu language where a part of the prefix or the whole segment has been omitted, but it is a common trait of this area (cf. Nurse 1988). The plural class 6 is regularly realized as *ma-*, except before stems with a high fronted initial vowel, with which it coalesces. As seen in (41), /a/ and /i/ do not coalesce into a mid-front vowel, as expected from a cross-Bantu perspective (cf. Hyman 2003:48). Instead the /a/ is deleted. This reflects a regular hiatus resolution in several Southern Tanzanian Bantu languages, e.g. Bena (Morrison 2011:54) and Ndengeleko (Ström 2013:108). Other class prefixes with /a/ as nucleus are affected in the same way.

(41) /°*ma-ihu*/ > *míhu* 'eyes'
/°*ma-inu*/ > *mínu* 'teeth'

[37] There are two different words for 'tree' in Manda, *ng'kóngo* and also *li-bíhɪ* of class 5/6. Often they are used interchangeably, but according to a consultant there is a semantic difference, with *ng'kóngo* referring to younger, cultivated trees whereas *li-bíhɪ* refers to old(er) trees, wildwood and dead trees.

It can be further inferred from (41) that one semantic category contained in class pair 5/6 is body parts, and especially paired ones (or ones occurring in sets). Other examples of paired body parts found in this class are summarized in (42).

(42)	**CLASS 5 (sg.)**		**CLASS 6 (pl.)**
	livéga	'shoulder'	*mavéga*
	liyúyúlu	'lung'	*mayúyúlu*
	likótʊ	'ear'	*makótʊ*
	lidáku	'buttock'	*madáku*

Additional categories included in classes 5 and with a plural in class 6 are fruits and vegetables, such as *liyáwu* 'cassava', *lilómbi* 'maize', *litóki* 'banana (of any kind)', and also *lihʊ́mbi* 'egg'. Numerous animals are also represented in this class.

(43)	**CLASS 5 (sg.)**		**CLASS 6 (pl.)**
	litóli	'calf'	*matóli*
	lilwífu	'chameleon'	*malwífu*
	lighólóvi	'pig'	*maghólóvi*
	líbwa	'dog'	*mábwa*
	lisósólo	'louse'	*masósólo*
	likéle	'termite'	*makéle*
	livémbe	'house fly'	*mavémbe*

Several loan words from Swahili are found in this class. They are often fully integrated within the Manda morphology. Hence, the prefix of noun class 5 – omitted in Swahili – is reintroduced on the noun.

(44)	**Swahili**		**Manda**	
	dirisha	>	*li-dilísha*	'window'
	koti	>	*li-kóti*	'coat'
	gali	>	*li-gáli*[38]	'car'

Finally, class 6 contains several uncountable mass nouns, particularly liquids.

(45)		
	máta	'saliva'
	makócho	'urine'
	máchi	'water'
	máfi ~ máhi	'feces'

Other mass nouns in this class include *maghéya/mayéya* 'lie(s)' and *malólélo* 'glasses'.

[38] An alternative word for 'car' is *ligeléda*.

5.3.1.4 Classes 7/8

The noun class prefix for class 7 is *ki-* (or *ky-* before vowel-initial stems). The plural form of class 8 is *fi-* (*fy-* before vowels), due to the spirantization of historical **bi* (reconstructed for Proto-Bantu with a 1st degree vowel).

Several names of utensils are found in this class (46); it also contains words for furniture and parts of the house (47).

(46)

CLASS 7 (sg.)		**CLASS 8 (pl.)**
kívígha	'pot'	*fívígha*
kihúlu ~kifúlu	'pot for water'	*fihúlu ~ kifúlu*
kíhyági	'pot for cooking vegetables'	*fíhyági*
kyáka	'handle'	*fyáka*
kitindíha	'basket of open wicker-work'	*fitindíha*

(47)

CLASS 7 (sg.)		**CLASS 8 (pl.)**
kítéyo ~ kítégho	'chair'	*fítéyo*
kindémúlu	'room'	*findémúlu*
king'ángu	'ceiling'	*fing'ángu*
kifínja	'kitchen'	*fifínja*

Class 7 is furthermore used to denote the seasons of the year, i.e. *kifúku* 'rainy season' and *kilolélo* 'dry season', and glossonyms, including *kimánda* 'Manda (language)' and *kimatúmba* 'Matumba (dialect)'. An example of an integrated Swahili loan found in classes 7/8 is *kitábu* 'book', plural *fi-tábu*.

5.3.1.5 Classes 9/10

The class prefix of NCP9/10 is a homorganic nasal *N-* in Manda, also historically (unlike NCP1 and NCP3). Thus, it assimilates in place with a stem-initial element, e.g. /*N-bawu*/ > *mbáwu* '(fire-)wood'. In turn, the nasal triggers stem-initial voiceless consonants to become voiced, e.g. /N-tembo/ > *ndémbo* 'elephant(s)'. Moreover – and just as for the nasal in NCP1 and NCP3 – stem -initial laterals are fortified to /d/, e.g. *ndóto* 'dream(s)'. (Compare this with *ku-lóta* '(to) dream' (CL15).) There are some exceptional examples in the data where stem-initial voiceless consonants have been deleted after the nasal of class 9/10, e.g. *méne* < *ºN-pene* 'goat'. Unlike in Manda, this is a productive sound rule in the Southern Highland languages (including those neighboring Manda). It occurs more often in the Matumba variety, which is in closer affinity with the Sotuhern Highland languages. Compare, for example, the reflexes of 'chicken, hen' *ºN-kókɔ*, pronounced as *ngókɔ /ŋgókɔ/* in the southern variety, but as *ng'ókɔ /ŋɔkɔ/* in Matumba (see also the discussion in 2.2).

The nasal is omitted before spirants (fricatives and affricates) in Manda. Examples include *sʊ́vi* ‘leopard’ and *fígu* ‘kidney’. This is analogous with several other Bantu languages of the area, e.g. Yao (P.21; Hyman 2003:51; Nurse 1988).

The structure of the word in this noun class pair is identical in singular class 9 and plural class 10, and differences in meaning must thus be deduced from the shape of the agreement morphology of other constituents, as exemplified below.

(48) *méne íyɪ ichóko*
mene ɪyɪ i-choko
NCP**9**.goat PROX.DEM**9** ACP**9**-small
‘this goat is small’

(49) *méne ísɪ síchóko*
méne ɪsɪ si-choko
NCP**10**.goat PROX.DEM**10** ACP**10**-small
‘these goats are small’

Just like in classes 5/6, several lexemes denoting animals are found in this class.

(50)	**CLASS 9 (sg.)**		**CLASS 10 (pl.)**
	ng’ómbi	‘cow’	*ng’ómbi*
	mbávála	‘impala’	*mbávála*
	ndomóndo	‘hippotamus’	*ndomóndo*
	njʊ́chi	‘bee’	*njʊ́chi*
	ngwáli	‘partridge’	*ngwáli*
	súwúwu	‘mosquito’	*súwúwu*

Some body parts, like *mbʊ́nʊ* ‘nose’ and *síngo* ‘neck’, as well as weather phenomena like *fúla* (alt. *húla*) ‘rain’ and *mbámba* ‘lightning, thunder’, are also found here.

Finally, words referring to speaking and communication are found in class 9/10, such as *njóvélu* ‘voice; language’ *ngóndo* ‘quarrel’ and *ndʊ́mi* ‘new(s)’, as in the common greeting in (51).

(51) *ndʊ́mi syáku?*
ndʊmi si-aku
NCP10.news ACP10-POSS.2SG
‘how are you?’ {lit. ‘(what is) your news’}

The word *ndʊ́mi* is however commonly replaced with the Swahili loan *habáli*, also in class 9/10. Other Swahili loans (there are several in this class) include *balúva* ‘letter(s), mail’, *baluvapépe* ‘e-mail’, *sufulíya* ‘pan’, *báfu* ‘bathroom’, *balabála* ‘big, main road’, *bundúki* ‘gun’ and *símu* ‘phone’. As can be inferred from these examples, these loans are typically the result of cultural borrowing (rather than borrowing into the core vocabulary) and belong to several different semantic fields. Note also that some of them are not morpho(phono)logically integrated (e.g. *balúva* and not ***mbalúva*).

5.3.1.6 Class 11

The prefix of class 11 is *lu-*, and *lw-* before vowels. The class has been reconstructed as containing "long, thin entities" and "abstracts" (Maho 1999:51; Katamba 2003:115). Examples of the former category in Manda are scarce, but tentative members are *lu-váwu* 'log of (fire)wood', *lu-píndu* 'bow' and *lu-mwífa* 'thorn'. However, many examples of the latter category of abstract nouns – and more generally uncountable nouns – are found in this class.

(52) **CLASS 11**

lwísi	'darkness'
lulangálíla	'light'
lupyúfu	'heat'
luwúlíku	'dawn'
luhóngʊ	'love'
lúlyo	'desire'
lúkáma	'milk'
lufúmbi	'dust'

The words represented in (52) have no plural form. Words of noun class 11 that are pluralized typically take their plural with NCP10, e.g. *lu-váwu* 'log of (fire)wood' above becomes *mbáwu*. Other examples include *lwímbʊ* 'song' / *nyímbʊ* 'songs' and *lútóndo* 'star' / *ndóndo* 'stars'.

5.3.1.7 Classes 12/13

Applying the NCP12 *ka-* and the plural 13 *tu-* (/*tw-*) to a noun stem is a productive way of deriving nouns into diminutives, as seen in (53). NCP12 and 13 also appears as additive markers, as is exemplified in (54), typically whe the prefix and noun stem are not easily separatable. Interestingly, as seen in these tables, the word for 'penknife' (or other small kinds of knives) appears in both of the columns, as it may be derived with both substitutive and additive tactics.

(53)

CLASS 12 (sg.)		**CLASS 13 (pl.)**		**Derived from (noun class in parenthesis)**
kábwa	'small dog'	*túbwa*	<	*líbwa* 'dog' (5/6)
katéléku	'small cooking pan'	*tutéléku*	<	*kitéléku* 'cooking pan' (7/8)
kahínja	'small girl'	*tuhínja*	<	*muhínja* 'girl' (1/2)
kapámba	'pen knife'	*tupámba*	<	*mpamba* 'knife' (3/4)

(54)

CLASS 12 (sg.)		**CLASS 13 (pl.)**		**Derived from (noun class in parenthesis)**
kamwána	'infant, small child'	*tumwána*	<	*mwána* 'child' (1/2)
káméne	'small goat'	*túméne*	<	*méne* 'goat' (9/10)
kampámba	'pen knife'	*tumpámba*	<	*mpámba* 'knife' (3/4)

Some nouns, especially referring to animals that are physically small, are inherent members of

this class. The last two examples probably originate from lexicalized additive formations with words originally belonging to noun class 9/10.

(55)

CLASS 12 (sg.)		**CLASS 13 (pl.)**
kapécha	'hare'	*tupécha*
kagológólo	'mouse'	*tugológólo*
kahúngu	'civet'	*tuhúngu*
kambyóko	'black ant'	*tumbyóko*

It is telling to compare the stem *-pecha* 'rabbit' to the stem *-bwa* 'dog'. Where NCP5 *lí-bwa* refers to a normal-sized dog and NCP12 *ká-bwa* to an exceptionally small one, NCP12 *ka-pécha* refers to a normal-sized rabbit, whereas a derivation with NCP5 *li-pécha* refers to an abnormally big hare (and *gupécha* of class 20 below refers to a grotesquely big hare).

5.3.1.8 Class 14

The noun class prefix of class 14 is *u-* or a glide *w-* in stem-initial position in Manda. It originates from PB **bu-* (CL14) > /wu/ and in most cases in Manda it has been further weakened to just /u/.

Many words of this class are abstract nouns (56) In addition, several types of food and drink regarded as uncountable mass nouns are found here (57).

(56)

CLASS 14	
uhávi	'witchcraft'
udése	'lie'

(57)

wóga	'mushroom(s)'
usípa	'sardine(s)'
ugwáli	'ugali (> food in general)'
usémbe	'flour'
ugímbɪ	'home-brewed alcohol'
ulási	'fermented bamboo sap'

Class 14 is also employed in de-adjective derivation, e.g. *uhimúhímu* 'stupidity, ignorance' < *-himu* 'stupid' (see section 5.3.2.1).

Thus, the vast bulk of the lexemes in this class have no plural equivalent. The few words in the corpus that do take a plural typically do so with a prefix from class 6, e.g. *utámu* 'disease' / *matámu* 'diseases', or class 4, e.g. *wátu* 'canoe' / *myátu* 'canoes'.

This class is unstable in Manda, which reflects a wider cross-Bantu tendency (see Schadeberg 2003b; Maho 1999:190). First, speakers tend to omit the already weakened vowel that remains as the class prefix entirely, thus *utámu* > *támu* 'sickness', *usípa* > *sípa* 'sardine' and *ugímbɪ* > *gímbɪ* 'home-brew'. Moreover, members of this class often merge with class 3 with regard to agreement, as seen in (58).

(58) *gímbı góha, tiyíta mulipípa*

gımbı	gu-oha	ti-yit-a	mu-li-pipa
NCP14.home.brew	ACP3-all	SM1SG-pour-FV	LOC18-NCP5-barrel

'all the homebrew, we pour it into a barrel'

5.3.1.9 Class 15

Noun class 15, with the prefix *ku-*[39], is productively used to create de-verbal nouns. This class contains only de-verbal nouns and nothing else in Manda. Thus, it includes no body parts in Manda, unlike other Bantu languages and as reconstructed for Proto-Bantu (see e.g. Meeussen 1967:102).

(59)

kúfwa 'to die'	*kukúmbúka* 'to remember'	*kulındálíla* 'to wait (for a long time)'
kutónda 'to be tired'	*kuhéméla* 'to buy'	*kupɔmólíla* 'to rest'
kutáma 'to sit'	*kuhótóla* 'to be able'	*kuhogóléka* 'to be born'
kutóla 'to take'		
kugíma 'to dig'		

De-verbal nouns are "Janus-faced", filling an intermediate position of having noun-like as well as verb-like qualities (cf. Croft 2003:185-186). Members of this class are also often referred to as infinitives or gerundives in the Bantu literature. One noun-like characteristic of the members of this class is that they trigger agreement, as seen in (60).

(60) *kúnywa gímbí kwananywíli gólo*

ku-nyw-a	gımbı	kwa-ni-a-nyw-ili	golo
NCP15-drink-FV	NCP14.homebrew	REL15-SM1SG-P2-drink-P2	yesterday

'the drinking of the homebrew that I did yesterday

kwanigalísi
ku-a-ni-gal-is-ili
SM15-P2-OM1SG-be.drunk-caus-P2
made me drunk'

The deverbal nouns of noun class 15 are also often used as verb complements, as illustrated in (61) and (62).

(61) *gésá' kúlya*

ges-ayi	ku-l-a
try-SBJ	NCP15~INF-eat-FV

'try to eat'

[39] Unlike nominal stems, verb stems appear to never be vowel-initial in Manda and hence there can be no glide formation of the prefix vowel. Note further the regular tone pattern where monosyllabic and disyllabic stems have a single penult tone whereas longer stems have a high tone both on the penult and the ante-penult.

(62) *ahichíti kunílóla*
a-a-hich-iti ku-ni-lol-a
SM3SG-P2-come-P2 NCP15~INF-OM1SG-see-FV
'she came to see me'

However, verbs in this form also still have several verbal characteristics, such as the ability to mark objects - as in (62) - and to be derived with extension suffixes. As will be further discussed and exemplified in 6.3.5 and at several other points in this thesis, this ambiguity of the de-verbal noun has an important role in grammaticalization processes, as it is easily reanalyzed from a verbal complement into a main verb when occurring as the second verb in double verb constructions (the first verb consequently being reanalyzed into an auxiliary).

5.3.1.10 Classes 16-18

Classes 16 *pa-*, 17 *ku-* and 18 *mu-*[40] are all locative classes. There is only one "true" inherent (i.e. substitutive) noun stem in these classes in Manda, i.e. *pá-ndu* of CL16 and *kú-ndu* of CL17. Both mean 'place'. These two inherent lexemes always trigger agreement with prefixes from their respective classes.

(63) *tikalʊtí' kúndu kwakukayí' kwá wíchu*
ti-ka-lʊt-ili ku-ndu kwa-ku-ka-y-ili kwa wichu
SM1PL-P1-go-P1 LOC17-place REL17-SM17-P1-be(come)-P1 CP17 good
'we went to a place that was nice'

Other locative formations always consist of additive double prefix constructions. As such, however, they are highly productive and may be added to any kind of noun to denote a locative (or temporal) relation of an object.

(64) *luwómba* 'wall' (CL 11) but *pa-luwómba* 'on the wall' (CL 16-11)

(65) *nyúmba* 'house, home' (CL 9) but *ku-nyúmba* 'to(wards) the house, home' (CL 17-9)

(66) *ng'ónda* 'farm' *mu-ng'ónda* (CL 3) but 'in(side) the farm' (CL18-3)

As seen in the examples above, each locative class in Manda reflects a different type of location. The division is generally quite rigidly maintained throughout Manda. Thus, whereas class 16 *pa-* typically refers to a specific and/or more proximal location, preferably at the deictic center and in contact with the speaker/addressee, class 17 *ku-* is used to refer to a more remote location and movement towards that location. Class 18 *mu-* specifically refers to location inside an object.

Interestingly, the additive locative prefixes are often trumped by the "original" noun class with regard to agreement. For example, the original noun-class belonging triggers agreement

[40] Note that the locative class 18, despite having the shape *mu-*, is not exposed to the same kind of morphophonological processes as NCP1 and NCP3. This is probably due to its more peripheral position in relation to the stem.

in possessive constructions with possessive pronouns or the connective (see sections 5.3.2.4.2 and 5.3.2.6 respectively).

(67) *ahúma kumbwáni, hínu awóya kunyúmba yáki*

a-hum-a	ku-mbwani [Sw.]	hınu	a-wɔy-a	ku-nyumba	yi-aki
SM3SG-leave-FV	LOC17-NCP9.city	now	SM3SG-return-FV	LOC17-NCP9.home	ACP9-POSS3SG

'he left the city, now he is returning to his home'

(68) *tihída kúla matóke kung'ónda wa bába*

ti-hid-a	ku-l-a	ma-toke	ku-mu-gunda	wa	baba [dadi]
SM1SG-come-FV	INF-eat-FV	NCP6-banana	LOC17-NCP3-farm	CP3	NCP1a.father

'we are coming to eat bananas at father's farm'

There is one example in Manda of what appears to be a lexicalized locative construction, *pamihu* 'face'. Structurally, it is an addition of the NCP16 *pa-* to the CL6 lexeme *mihu* 'eyes' (thus roughly 'at the eyes'), extended in meaning through synecdoche. This word, however, still triggers agreement in class 6.

(69) *pamíhu gáki*

pa-ma-ihu	ga-aki
LOC16-NCP6-eye~LOC16-face	ACP6-POSS3SG

'her face'

5.3.1.11 Class 20

The final noun class is class 20, with the NCP *gu-* (occasionally *ghu-*). It is used for augmentative derivation, but also (in extension) for derogative or pejorative derivation, encompassing senses such as 'irritating', 'mean' or 'scary'.

(70) *guméne ógɔ gunihɔmbósa sána*

gu-mene	ɔgɔ	gu-ni-hɔmbɔs-a	sana [nyamuhopi]
NCP20-goat	PROX.DEM20	SM20-OM1SG-irritate-FV	very

'this big bad goat is really troubling me'

Just like the diminutive class 12 (and 13), class 20 is a productive class. Nouns are incorporated either through attachment of the NCP20 directly to the stem, as exemplified in (71), or through an additive derivation processes as reflected in the examples in (72). Unlike class 12/13, however, there are no inherent nouns in this class.

(71)

CLASS 20		**Derived from (noun class in parenthesis)**
gudége 'big, mean bird	<	*kídége* 'bird' (7)
guyóka 'big, mean snake'	<	*liyóka* 'snake' (5)
gugánga 'big rock'	<	*ligánga* 'stone' (5)

(72) **CLASS 20** **Derived from (noun class in parenthesis)**

guméne	'big, mean goat'	<	*méne* 'goat' (9)
gung'ómbi	'big, mean cow'	<	*ng'ómbi* 'cow' (9)

Nouns of NCP20 are assigned to noun class 4 for plural, e.g. *gúdége* / *mídége*.

Kadima (1969:184, cited in Maho 1999:253) has proposed that NCP20 is historically an extension from class 3. NCP3 and NCP20 have near or similar agreement morphology (as seen in the example above) and the reconstructed augment or pre-prefix of class 3 is *gʊ-* (cf. du Blois 1970), which on syntagmatic grounds is a plausible source for NCP20. Moreover, in (Malawian) Ndali (M.301), spoken not far from Manda, noun class 3 is a productive class used for "pejorative" derivation (Botne & Schafer 2008:30). This could, in turn, explain why the pluralization of nouns from class 20 goes into noun class 4 in Manda.

5.3.1.12 Versatile noun stems

In addition to these class pairings and regular derivation patterns, there is also a restricted set of "versatile" (Harjula 2006:202) or "autonomous" (Schadeberg 2003a:82) stems in Manda, whereby a certain nominal stem may be shifted between and used in several different classes and thus with several noun class prefixes, with some reflection of the semantics connected to the relevant NCP. The canonical example of such a stem is the reconstructed **-ntʊ* 'some' (Meeussen 1967:103). In Manda, the reflex of this stem, viz. *-ndu* (*-nu* in the Matumba variety), can be used to derive the following nouns of different noun classes in Manda.

Noun class		**Meaning**	**Comment**
1	*múndu*	'(some) person'	
2	*vándu*	'(some) persons'	
4	*míndu*	'(some) big, bad persons'	plural of class 20
5	*líndu*	'(some) big, bad thing'	not humans; note semi-high vowel here
6	*mándu*	'(some) big, bad things'	not humans
7	*kíndu*	'(some-) thing'	note semi-high vowel here
8	*fíndu*	'(some) things'	
11	*lúndu*	'(not a single) thing'	used in negative constructions
12	*kándu*	'(some) small thing'	
13	*túndu*	'(some) small things'	
14	*úndu*	'mankind'	
16	*pándu*	'(some) place'	
17	*kúndu*	'(some) place'	
20	*gúndu*	'(some) big, bad person'	

Table 5.2. Reflexes of the stem *-ndu* (< Proto-Bantu **-ndʊ*) in Manda

As seen, the meanings of the various nominal derivations correspond to the broad semantic

characteristics described for these classes. Another example is the root *-*(j)óchi*, which surfaces in Manda in both the word *njóchi* 'bee(s)' (class 9/10) and *wóchi* 'honey' (class 14) (cf. Schadeberg 2003a:82; Petzell 2008:74).

5.3.2 Other noun phrase components

This section discusses the other constituents of the noun phrase, such as adjectives, numerals and other quantifiers, as well as various variants of pronouns. The forms presented here all belong to the common Bantu inventory and they have in common that they agree (either explicitly or implicitly) with a head noun taking a specific agreement class prefix (ACP)[41]. The ACPs for each noun class are presented in Table 5.3 below. As can be seen, the form of the ACP differs from the nominal class prefix of Figure 5.3 in section 5.3.1, although some classes are represented by an NCP and an ACP that are similar.[42] (Notice that ACP10 is different in the Matumba dialect, i.e. *ji-* rather than *si-*).

[41] It should be noted that a more extensive and different set of agreement prefixes has been reconstructed for Proto-Bantu by Meeussen (1967:97-98; see also Maho 1999:99). I have chosen not to refer to these categories, however, as they are not easily applicable to the categorization of synchronic Manda. With this said, the agreement patterns presented here coincide fairly well with Meeussen's category of "pronominal prefixes".

[42] Interestingly, the cases where the ACP differs from the NCP are those classes where the NCP contains a nasal.

Noun class	ACP High vowels	ACP Low vowels
1 (3SG)	*yu-*	*yʊ -*
2 (3PL)	*va-*	*va-*
3	*gu-, u-*	*gʊ-, ʊ-*
4	*yi-*	*yɪ-*
5	*li-*	*lɪ-*
6	*ga-*	*ga-*
7	*ki-*	*kɪ-*
8	*fi-*	*fɪ-*
9	*yi-, i-*	*yɪ-, ɪ-*
10	*si-, ji-*	*sɪ-, jɪ-*
11	*lu-*	*lʊ-*
12	*ka-*	*ka-*
13	*tu-*	*tʊ-*
14	*u-*	*ʊ-*
15	*ku-*	*kʊ-*
16	*pa-*	*pa-*
17	*ku-*	*kʊ-*
18	*mu-*	*mʊ-*
20	*gu-*	*gʊ-*

Table 5.3. The Agreement Class Prefixes (ACP) in Manda

As can also be seen in Table 5.3, there is also some internal variation in the formal agreement pattern within this category of adnominal forms. The major difference regards vowel height. That is, whereas some of these markers have an agreement prefix where the quality of the high vowels is of first degree, others have a prefix with a second degree vowel. Roughly, this delimitation lies between adjectives and numerals with first degree vowels and other categories with second degree vowels. However, this pattern is further obscured by two factors. Firstly, for many of these categories there are exceptional patterns with regard to agreement with referents from noun classes 1 and 2, not least given the fact that this particular class pair is a) occasionally further divided into persons, and b) exhibits certain semantic traits, arguably due to its semantic status of exclusively referring to humans. Secondly, many of the stems of the adnominal forms are vowel-initial and thus trigger glide formation of the prefix once attached. Thus, it is in those cases not possible to decide on phonological grounds whether the "underlying" prefix is pronounced with a first or a second degree vowel.

5.3.2.1 Adjectives

This section concerns the adjectives in Manda. As is typical for Bantu languages (Maho 1999:105; Nurse & Philipsson 2003: 7-10; Dixon 1982), the inventory of (synchronic) monomorphemic adjectives is slim in Manda. My collection of Manda data contains roughly 20 adjectives with (synchronically) monomorphemic stems. They cover the four typologically salient "core semantic types" of adjectives as presented by Dixon (1982, 2004), with some examples from each category. Thus, firstly, there are some representatives in the subtype of

dimension, such as *-choko* ‘small, narrow’, *-fupi* ‘short’ and *-nene* ‘thick, fat’, *-tali* ‘long, tall’. Secondly, there are some adjectives expressing age, such as *-lala* ‘old (and worn)’ and *-pya* ‘new’. Thirdly, the value subtype is filled by the antonym pair *-nofu* ‘good’ and *-vɪfu* ‘bad’, as exemplified in (73) and (73) below.

(73) *nyúmba ínófu*
nyumba i-nofu
NCP9.house ACP9-good
‘a good house’

(74) *ukímwi utámu úvífu nyamuhópi*
u-kimwi [Sw.] u-tamu u-vɪfu nyamuhopi
NCP14-AIDS NCP14-disease ACP14-bad very
‘AIDS (is) a very bad disease’

The final “core type” of adjectival concepts is color. Here, Manda has three representatives, namely *-valafu* ‘white (or more generally light)’, *-pili* / *-titu* ‘black (or more generally dark)’[43] and *-kele* ‘red’ (but also more brownish colors).[44] The Manda language also contains exemplars of two of the three additional adjectival categories, i.e. the “peripheral semantic types” discussed by Dixon (1982, 2004). It lacks representation in the category of speed (e.g. words like ‘fast’, ‘quick’, ‘slow’)[45] but there are several examples of adjectives expressing the categories of physical property and human propensity. Examples of the former include *-yʊmʊ* ‘dry’, *-vava* ‘bitter’ and *-nonono* ‘hard’, as in (75) below. Examples of the latter include *-himu* ‘stupid’, *-kata* ‘lazy’ and *-kafi* ‘rich’.

(75) *litóki ílı linónóno, lifúndí’ lépa*
li-toki ılı li-nonono li-fund-ili lepa
NCP5-banana PROX.DEM5 ACP5-hard SM5-be(come)ripe-PRF NEG
‘this banana is hard, it has not become ripe’

With regard to morpho-syntactic properties, the adjective in Manda stands in opposition to the canonical Bantu pattern as agreement is not marked with the NCP (cf. Schadeberg 2003b:149). Instead, agreement is inflected with the ACP. According to Schadeberg (2003b:149), agreement class prefixes tend to “interfere” to some extent with adjectives in Bantu. In Manda this appears to have become the norm.[46] Thus, for example, the white sweater of noun class 9 in (39) is marked with the ACP *i-* and not the nasal of the NCP.

[43] This difference reflects a dialect variation between the Southern variety (for the former) and the Matumba variety (for the latter). As is often the case, this division also reflects a bigger isogloss between the Southern Highland languages and the Rufiji-Ruvuma languages.
[44] Other color terms are borrowings from Swahili, e.g. *kijáni* ‘green’, *kimanjáno* ‘yellow’, *bulú* ‘blue’, *kisambaráwu* ‘purple’.
[45]These concepts are typically expressed with adverbials in Manda: *kanyáta* ‘fast, quickly’, *mbolímbóli* ‘slowly’.
[46] Instead there are some examples in the Manda data of the “opposite” pattern to canonical Bantu, i.e. where the nominal class prefixes “interfere” with the adjectives in Manda (or represents a rest of an earlier state?). One example is *má-chi ma-sísímu* ‘cold water’, example (12) in 9.2.

(76) *swéta yayíli iválófu*

NCP9.sweta	yi-a-y-ili	i-valafu
sweater	SM9-P2-be-P2	ACP9-white

'the sweater was white'

An exception to this rule is governed by the animacy hierarchy (Croft 2005:128; based on Silverstein 1976) with a cut-off point between humans and (non-anthropomorphized) animals and objects. In other words, when an adjective refers to members of noun classes 1 and 2 – and thus humans (see section 5.3.1.1) – the indexation of the adjective occurs with the NCP and not the ACP.[47] In both of these examples the nasal of the NCP assimilates in place of articulation with the stem-initial consonant, and in (77) it disappears, as a case of de-gemination (see section 5.3.1.1)[48]. (Note that in example (78) the adjective is additionally marked with pronominal consisting of the SM and *-a*, further discussed in section 5.3.2.4.1).

(77) *mwána óyɔ nófu*

mu-ana	ɔyɔ	mu-nofu
NCP1-child	PROX.DEM1	NCP1-good

'this child (is) good'

(78) *hɪnu ná mbáha, niyéléwa kusáli*

hɪnu	na	mu-vaha	ni-yelew[many]-a	ku-sali [Sw.]
now	SM1SG.a	ACP1-big	SM1SG-know-FV	INF-pray

'now I'm a grown up, I understand how to pray'

As can be seen in the two examples above and for several other examples in this section, an adjective functioning as predicative in a non-verbal predication construction may occur without a copula (see more in 9.4).

With regard to adjectival comparisons, this is expressed periphrastically in Manda with a verb *kulɔtálíla* 'to surpass' (see a further discussion in 8.4.2.1). Some adjectives may also be emphasized with ideophones. (79) is an example of this.[49]

(79) *fíla filátu fiváláfu hwáa*

fɪla	fi-latu	fi-valafu	hwaa
DIST.DEM8	NCP8-shoe	ACP8-white	IDPH

'these shoes (are) really white'

The origin of these adjectives appears to be from several sources. Some of them can be linked to reconstructed Proto-Bantu forms, e.g. *-nene* 'fat' < **néne* 'fat', *-tali* 'long, tall' < **tádí* 'long' (Bastin et al 2002). Some of the adjectival stems arguably originate from "verbs of quality" with a final vowel **-u* (cf. Schadeberg 2003:81, 2002). Examples include *-sisimu*

[47] In fact, it is not possible to tell whether it is NCP2 or ACP2 here, as these two prefixes are identical in shape. However, as there is a special pattern of agreement for human referents in the singular, this pattern is considered most likely to hold for humans in plurals as well.

[48] Traces of the NCP can be seen in written text, e.g. "Missa Mbalafu" (n.d.; Hymn 41) <*Yesu wenga mnofu*> 'Jesus, you (are) good'.

[49] For the other colors: *-kele pyú* '(really) red' and *-pili bíi* '(really) black'.

'cold' from *-*didim*- 'be cold', and -*valafu* 'white' from the verb -*valal*- 'shine' (this verb is further discussed in section 5.4.3.11). Some stems are polysemic. One example of this is -*vaha*, which appears to have extended from meanings of the dimension type such as 'big, large' to encompass the physical property 'heavy', and to further to denote the human propensity 'respectful'. The stem -*vaha* also surfaces in lexicalized collocations like *dádi mbáha* 'uncle (older than your father)' and *nála mbáha* 'first wife'. Finally, there are several examples of borrowings/code-switching from Swahili. One prominent example of a borrowed adjective is *sáfi* 'clean, nice' from Swahili (which in turn stems from Arabic *ṣāf(in)* 'clear, pure' (Schadeberg 2009)).[50]

Adjectives in Manda may, in turn, be the source for expressions in other word classes. For example, adjectives inflected in either class 12 or the locative classes have been extended to express adverbial concepts. An example of the latter is *patáli* or *kutáli* 'far', which consists of the adjective stem -*tali* 'long, tall' with the locative prefixes *pa*- and *ku*- respectively. (This is common in other Tanzanian Bantu languages as well, e.g. Bena (G.63) *pátaali ~hútaali* 'far' (Morrison 2011:411)).

5.3.2.2 Numerals

The numeral system of Manda is a bit complex with regard to both its constitution and its inflectional pattern. Table 5.4 summarizes the main system of cardinal numerals. (See section 5.3.2.7 for examples of other quantifiers used in Manda.)

1	*-monga*	'one'
2	*-vılı*	'two'
3	*-datu*	'three'
4	*nchéche*	'four'
5	*muhánu*	'five'
6	*ntánda*	'six'[51]
7	*muhánu na -vılı*	'seven'
8	*muhánu na -datu*	'eight'
9	*muhánu na nchéche*	'nine'
10	*kómi*	'ten'
10's	*makómi*	'-ty'

Table 5.4. Cardinal numbers in Manda

As seen, only the numerals for 'one', 'two' and 'three' are inflectional forms in Manda. The numerals in Manda that take inflection behave similarly to adjectives. That is, they agree with the ACP (of the series where high vowel are of the first degree), e.g. *myáka gívílı* 'two years', and as in (80) The exception is once again the agreement pattern of noun class 1 and 2, which takes the NCP, as illustrated in (81).

[50] Notice that *safi* is an example of an invariable adjective, both in Swahili and in Manda. Maho (1999:106-107) claims – exemplifying with this very same word – that all invariable adnominal forms in Bantu probably originate from contact-induced change.

[51] 'six' can also be expressed as *muhanu na -monga*, i.e. in analogy with 'seven', 'eight' and 'nine'.

(80) *titémí' ta vándu vadátu*
ti-tam-ili ta va-ndu va-datu
SM1PL-sit-PRF SM1PL.a NCP2-people ACP2-three
'we sit, the three of us'

(81) *ayí' múndu mónga akemelikáy' "Mánda"*
a-a-y-ili mu-ndu mu-monga a-kemel-ık-ayi "Manda"
SM3SG-P2-be-P2 NCP1-person NCP1-one SM3SG-call-NEUT-SBJ "Manda"
'it was a person (who) was being called "Manda"'

However, unlike the adjectives, the ACP1 *yu-* may be added to a numeral stem (that is, the numeral 'one'), in which case it appears to have a partitive function of singling out one member of a group, as illustrated in (82) and (83) below.

(82) *vakalékána, kíla yumónga akalʊ́ta*
va-ka-lek-an-a kila yu-monga a-ka-lʊt-a
SM3PL-CONS-leave-REC-FV every ACP1-one SM3SG -CONS-go-FV
'they left each other, every (single) one / each and everyone

kunyúmba yáki
ku-nyumba yi-aki
LOC17-NCP9-home ACP9-POSS3SG
going home'

(83) {Your Father in heaven is not willing…}
kukita yumonga wa awa wa-choko atagike
kukita yu-monga wa awa wa-choko a-tag-ik-e
COMPL ACP1-one CP1 PROX.DEM2 NCP2-little SM3SG-throw-NEUT-SBJ
'that any of these little ones should perish (lit. be thrown away)'
[NT (1937); Matthew 18:14]

The numerals 'four' to 'six' are invariables, in the sense that they do not take an agreement prefix. However, they appear to be derived with the NCP3 (and thus may be lexicalized from nouns). Interestingly, the numerals from 'seven' to 'nine' consist of a periphrastic construction based on 'five', the comitative *na* ('with, and') and one of the inflectional numerals. That is, the construction 'five and two' is used for expressing 'seven' (84), 'five and three' for 'eight' and 'five and 'four' for 'nine'.

(84) *akosamwíli muháno na sivílɪ*
a-a-kosamol-ili muhano na si-vılɪ
SM3SG-P2-cough-P2 five COM ACP10-two
'he coughed seven times' (elicited example from Dahl's (1985) questionnaire)

The numeral 'ten' is *kʊ́mi,* occasionally pronounced *kúmi* probably due to Swahili influence. Similar to what was described for the numerals below ten in the previous section, the numerals for 'eleven' to 'nineteen' are expressed with a periphrastic construction with *kʊmi* and the comitative *na*, e.g. *kʊ́mi na -monga* 'ten and one' for 'eleven', *kʊ́mi na -vılɪ* 'ten and

two’ for ‘twelve’, *kómi na muhano na -vılı* ‘seventeen’ and so forth. Tens are expressed by the pluralization of *kómi* derived with NCP6 *ma-* (see section 5.3.1.3) in collocation with another numeral expressing the appropriate amount of (multiples of) tens. The NCP6 triggers agreement with the second numeral if this numeral is not invariable. Thus, *makómi gavílı* ‘two tens’ for ‘twenty’, *ma-kómi ga-dátu* ‘thirty’, up to *makómi kómi* ‘(one) hundred’.

With this said, however, it should be noted that this numeral system seems to be disappearing, or at least declining in usage. Higher digits (roughly from ‘six’ and upwards) are more often expressed with the Swahili system in synchronic Manda, especially in more “free” or “spontaneous” speech.

With regard to origin, I am unsure about the source for *-monga* ‘one’ and *nchéche* ‘four’. Both of these numerals share some phonemic characteristics with common Bantu and reconstructed forms, however. The numerals *-vılı* ‘two’ and *-datu* ‘three’ can be connected straight-forwardly to the Proto-Bantu reconstructed forms *-*vılí* and *-*tátʊ* (Schadeberg 2003b:150), given the common sound laws of Manda, including the initial voiced consonant of the reflex of the latter, *-datu* in Manda, being a case of Dahl’s law (see section 5.2.2.1). The numeral *muhánu* ‘five’ can also be linked to either **cáano* ~ **cáanʊ*, reconstructed as variants of Bantu subgroup G, or *táano* ~ **táanʊ* of Bantu subgroup N (Bastin et al 2002).

The numeral *ntánda* ‘six’ also represents a common Bantu reflex, often varying in realization between *-tanda*~*-tandatu* (Meeussen 1969). According to Meinhof (1948:118), this stem originates from the lexicalization of complex **tátʊ na tátʊ* ‘three and three’.

Just like adjectives, numerals are also employed to denote other meanings in Manda. For example, when *-monga* ‘one’ is inflected with locative class 16 it forms the meaning ‘together’. Likewise, when *-vılı* ‘two’ is inflected with class prefix 12 *ka-*, the meaning is ‘twice’ and, in extension, ‘again’.

(85) *níyíli na ng'kósi wángu* […]
ni-y-ili na mu-kosi u-angu
SM1SG-be-PRF COM NCP1-friend ACP1-POSS1SG
‘I was with my friend

na tulóngéla pamónga; titáma pamónga gólo
na tu-longel-a pa-monga ti-tam-a pa-monga golo
COMSM1PL-converse-FV LOC16-one~together SM1PL-sit-FV LOC16-one~together yesterday
and we were talking together; we were (lit. were sitting) together yesterday’

(86) *vakwélí’ kavílı kunáni*
va-kwel-ili ka-vılı ku-nani
SM3PL-climb-PRF ACP12-two~again NCP17.top
‘they have climbed up on the top again’

These are both examples of common lexicalization patterns within the Bantu family.

5.3.2.3 Ordinals

Ordinals are formed from the usual numerals within a construction consisting of the connective particle (see section 5.3.2.6) and the numeral inflected in what appears to be the class prefix of class 12, *ka-*. Rather peculiarly, *nchéche* 'four' and *muhánu* 'five' are also inflected with an additive (?) *ka-* (87), whereas the rest of the invariable numerals remain uninflected (and are thus invariable).

(87) *ligóno la kanchéche, kapécha*

li-gono	la	ka-ncheche	ka-pecha
NCP5-day	CP5	ACP12-four	NCP12-hare

'on the fourth day, Hare

kahúngu akandéka kɔ́la

ka-hungu	a-ka-mu-lek-a	kɔla
NCP12-civet	SM3SG-CONS-OM3SG-leave-FV	DIST.DEM17

left Civet there'

An exception to this pattern is 'first', which is formed through the same construction but with the verb *-tumbul-* 'begin, start' in the infinitive form rather than with a derivation of *-monga*. This adheres to a common pattern both cross-linguistically and especially in Africa to have a "suppletive", i.e. derivationally independent form that separates the ordinal of the value one ('first') from its cardinal counterpart ('one') (cf. Stoltz & Veselinova 2005).)

(88) *ligóno la kutúmbúla la domaníka layíli lúmu lúkáli*

li-gono	la	ku-tumbul-a	la	domanika	li-a-y-ili	lu-mu	lu-kali
NCP5-day	CP5	INF-begin-FV	CP5	week	SM5-P2-be-P2	NCP11-heat	ACP11-hot

'on the first day of the week it was really hot'

Swahili adoptions (code-switching ~ borrowing) among Manda speakers are even more common for ordinals than they are for cardinals.

5.3.2.4 Pronouns

This section discusses the different pronouns used in Manda.

5.3.2.4.1 Personal pronouns

As seen in Table 5.5, the personal pronouns, also referred to as substitutives in other Bantu languages (see e.g. Meussen 1967; Devos 2008a), have different forms in the different varieties of Manda.

Person	Southern form	Matumba	Alternative form
1SG	*nénga*	*néne*	
2SG	*wénga*	*véve*	
3SG / CL1	*mwéne*	*mwéne*	*yómbi*
1PL	*ténga*	*téte*	
2PL	*mwénga*	*nyénye*	
3PL / CL2	*véne*	*véne*	*wómbi*

Table 5.5. Personal pronouns (classes 1 and 2)

As also seen in the table, there are additional alternative forms used to mark third person singular and plural, namely *yómbi* and *wómbi*. The more regular form for third person singular and plural, *mwéne* and *véne* in both varieties can be linked to a form *-ene* '(it)self' (discussed in section 5.3.2.7). (Thus, this is once again a case of class 1/2 taking NCP agreement). The personal pronouns for all other noun classes (i.e. 'it' and 'they') are also constituted by *-ene* and the respective ACP, as illustrated in (89).

(89) *yéne ipíli bíi*
yi-ene i-pili bii
PERS9~ACP9-(it)self ACP9-black IDPH
'it is really black' {referring to a computer mouse}

The personal pronoun may be employed instead of an explicit noun. It is not obligatory, however, as a sentence in Manda is felicitous with only subject marking on the verbal predicate. When the personal pronoun is used it often carries a sense of emphasis on an explicit participant, as in this example, where the speaker explains why he did not meet with a (in this case male) relative.[52]

(90) *kwa ndáva mwéne avíli*
kwa ndava mwene a-a-vy-ili
because PERS3SG SM3SG-P2-be-P2
'because HE was at work

kulihéngu, néne navíli kóni kusíka
ku-li-hengu nene ni-a-v-ili kɔni ku-sik-a
LOC17-NCP5-work PERS1SG SM1SG-P2-be-P2 here INF-bury-FV
(while) I was here, at the funeral (lit. to bury)'

Note that the overt personal pronoun may also be used together with the connective particle (discussed in section 5.3.2.6) to form a possessive construction.

[52] With this said, my impression is that the personal pronouns (especially for first and second person singular and plural) are in general used more often in Manda relative to other Bantu languages, and without any additional pragmatic flavor, but just functioning as (overt) personal pronouns. This would be an interesting topic for further research.

(91) *mwána wa nénga óyʊ*
mu-ana wa nenga ʊyʊ
NCP1-child CP1 PERS1SG PROX.DEM1
'that is my child'

More commonly, however, a possessive construction is formed with a set of pronouns. They will be presented in section 5.3.2.4.2.

Another kind of personal pronoun is a marker only used when referring to 1st and 2nd person. It consists of the subject marker and a particle *-a*.

(92) *nénga **na** ntáli* 'I (am) tall'
*wénga **wa** ntáli* 'you (are) tall'
*ténga **ta** vatáli* 'we (are) tall'
*mwénga **mwa** vatáli* 'you (are) tall (pl.)'

Most typically in Manda, it surfaces with quantifiers, including numerals and the question word 'how many'. This is exemplified in (93) to (95) below.

(93) *tachíti ta vóha panyúmba*
ti-a-hich-iti ta va-oha pa-nyumba
SM1PL-P2-come-P2 SM1PL.a ACP2-all LOC16-NCP9.home
'all of us came home'

(94) *atilékeye ta vavílɪ*
a-ti-lek-eye ta va-vɪlɪ
SM3SG-OM1PL-leave-P.I1 SM1PL.a ACP2-two
'she used to leave us two'

(95) *mwayíli mwa valínga?*
mu-a-y-ili mwa va-lɪnga
SM2PL-P2-be(come)-P2 SM2PL.a ACP2-how.many
'how many were you?'

Such a particle is rarely discussed for Bantu in general, but it appears to be common in this area (where it ocassionally is presented as a copula), see e.g. Novotná (2005:188-189) on Ndamba (G.52), Ström (2013:382) on Ndengeleko (P.11), Ebner (1939:11) on Ngoni (N.12) and Ngonyani (2011:120) on Kisi (G.67).

5.3.2.4.2 Possessive pronouns

The possessive pronouns used in Manda are summarized in Table 5.6 below.

Person	
1SG	*-angu*
2SG	*-aku*
3SG	*-aki*
1PL	*-itu*
2PL	*-in(y)u*
3PL	*-avi*

Table 5.6. Possessive pronouns

Examples (96) and (97) are illustrations of their usage. Note that the possessive occurs in a position immediately following the noun.

(96) *alʊtálíla na mwánja wáki*
a-lʊtalıl-a na mu-anja u-aki
SM3SG-continue-FV COM NCP3-trip ACP3-POSS3SG
'he continued with his trip'

(97) *nyimbo situ uyufwane*
nyimbo si-itu u-yufwan-e
NCP10.song ACP10-POSS1PL SM2SG-listen-SBJ
'listen to our songs' [Missa Mbalafu (n.d.); hymn 123]

The possessive pronouns for the first and second person singular are occasionally cliticized when used with kinship terms, e.g. *mwána wáku* > *mwáná=wu* 'your child', *nʊ́ngʊ́na wángu* > *nʊngʊn=ángu* 'my younger brother/sister'.
Peculiarly, the third person singular may alternatively be expressed with an invariable *múndu* (*múnu* in the Matumba dialect), for example *ng'kósi múndu* 'his/her friend', *mbúya múndu* 'his/her grandmother', and as in (98).

(98) *gayí' malílo kwa dádi múndu muNsúngu*
ga-a-y-ili ma-lılo kwa dadi mundu mu-Nsungu
SM6-P2-be-P2 NCP6-cry CP17 NCP1a.father POSS3SG LOC18-Nsungu
'It was a memorial for his father in Nsungu'

The demarcation of the range of usage of *múndu* is once again connected to the animacy hierarchy. That is, *múndu* may only be used as possessive pronoun when the possessed referent is a human and not an animate or an object. (Apparently *múndu* may not be used with this function even to refer to pets or domesticated animals: ***limbeléle múndu* 'his/her goat'; ***líbwa múndu* 'his/her dog'.)

It is plausible that this form stems from the homonymic *múndu* (Matumba *múnu*) 'person'. However, I do not know of any attested pathways of grammaticalization or of other Bantu languages with such a possessive form (the neighboring language Mpoto appears to be an exception). It should be noted, however, that van der Wal & Maniacky (2015) discuss the grammaticalization into a focus marker of the cognates to *múndu*, also occurring in the same

position, for several Western Bantu languages. It is possible that these developments are inter-connected to some extent. This is a topic that deserves to be further investigated.

5.3.2.4.3 Dependent pronouns

The dependent pronoun (cf. Morrison 2011:188-189) or "object pronoun" (Botne & Schafer 2008:32) is a complex form which may be analyzed as consisting of the comitative *na* 'with', the (consonant of the) ACP and what has been described as a referential marker *-o* for other Bantu languages (e.g. Kagulu G.12; Petzell 2007:159). An exception to this pattern is CL1, which is *nako* (it is not clear where this /k/ comes from). The dependent pronoun of the various noun classes are summarized in Table 5.7.

Class	
1 (3SG)	*náko*
2 (3PL)	*náwo*
3	*nágo*
4	*náyo*
5	*nálo*
6	*nágo*
7	*náko*
8	*náfo*
9	*náyo*
10	*náso*
11	*nálo*
12	*náko*
13	*náto*
14	*nágo* (?)
15-18	n.a.
20	*nágho*

Table 5.7. The dependent pronouns

This pronominal form is typically used to refer back to the syntactic object of a previous statement, as exemplified in (99) below.

(99) *tikapındá' masufulíya gála, tiwóya nágo*

ti-ka-pınd-ayi	ma-sufulya	gala	ti-wɔy-a	nago
SM1SG-SIT-carry-SIT	NCP6-pot	DIST.DEM6	SM1PL-return-FV	DEP6

'when we have taken the pot, we go back with it'

5.3.2.5 Demonstratives

There are two major sets of demonstratives in Manda, i.e. a proximal and a distal set. The Matumba dialect also has an additional medial demonstrative. All demonstratives are derived

from the ACP, but high vowels are pronounced with second degree vowel quality. The demonstratives are summarized in Table 5.8.[53]

Class	Proximal	Distal	Medial
1 (3SG)	*óyʊ*	*yóla*	*óywa*
2 (3PL)	*ava*	*vala*	*avwa*
3	*ógʊ*	*góla*	*ógwa*
4	*íyɪ*	*yíla*	*íywa*
5	*ílɪ*	*líla*	*ílwa*
6	*aga*	*gala*	*agwa*
7	*íkɪ*	*kíla*	*íkwa*
8	*ífɪ*	*fíla*	*ífwa*
9	*íyɪ*	*yíla*	*íywa*
10	*ísɪ*	*síla*	*íjwa*
11	*ólʊ*	*lóla*	*ólwa*
12	*aka*	*kala*	*akwa*
13	*ótʊ*	*tóla*	*ótwa*
14	*ówʊ*	*óla*	*ógwa*
15	*ókʊ*	*kóla*	*ókwa*
16	*apa*	*pala*	*apwa*
17	*ókʊ*	*kóla*	*ókwa*
18	*ómʊ*	*móla*	*ómwa*
20	*ógʊ*	*góla*	*ógwa*

Table 5.8. The demonstratives

As seen from the table, the proximal demonstrative has a VCV-shaped form, where both Vs and the C are constituted by the vowels and consonant of a specific ACP. The distal demonstrative is, in turn, formed with the attachment of the ACP to the stem *-la*. As implied by the labels given to them, the proximal demonstrative refers to something relatively close to both the speaker and to the addressee, e.g. *kívígha íkɪ* 'this pot', and the distal demonstrative to something relatively distal, e.g. *kívígha kíla* 'that pot'. Both the proximal and distal demonstratives may also be used for anaphoric reference in discourse, as exemplified with the distal demonstrative in (100). Demonstratives formed with the locative classes mean 'here' and 'there', as exemplified with the proximal demonstrative of class 16 in (101).

[53] Notice that the paradigm of the medial demonstratives has members that appear to break phonotactic rules of Manda, e.g. sequences of /v/ and /w/ (a sequence that is really pronounced with significant friction).

(100) *bási, máwu yóla akabákóla*
basi [Sw.] mawu yɔla a-ka-bakɔl-a
so NCP1a.mother DIST.DEM1 SM3SG-CONS-cover-FV
'…so, the mother packed

mpónga na ngókɔ yíla
mu-pónga na ngɔkɔ yıla
NCP3-rice COM NCP9.chicken DIST.DEM9
rice and that chicken'

(101) *tikwélíli Mwafríka mbáka ápa, paLudéwa*
ti-kwel-ili Mwafrika mbaka apa pa-Ludewa
SM1PL-ascend-PRF Mwafrika to PROX.DEM16 LOC16-Ludewa
'we have come with the Mwafrika (bus) up to here, Ludewa'

The third kind of demonstrative, the medial demonstrative, is only used in the Matumba dialect. It appears to be formed in a similar way to the proximal demonstrative but with a stem *-wa* instead of the second vowel being duplicated. (Note that the consonant of class 10 is *j-* and not *s-*, which is the regular reflex of the ACP in the Matumba dialect.)

The medial demonstrative is used to refer to a person or an item out of reach for the speaker, thus contrasting with the proximal demonstrative, but in reach for the addressee, thus contrasting with the distal demonstrative.

(102) *uhótó' kunípéla kalámu ıywa?*
u-hoto ku-ni-pel-a kalamu ıywa
SM2SG-POT INF-OM1SG-give-FV NCP9.pencil MED.DEM9
'can you give me that pencil (that you hold or have within reach)'?

The proximal and the distal demonstrative can be traced to demonstrative series reconstructed for Proto-Bantu (Meeussen 1967:107). The origin of the medial demonstrative is less transparent.

Lastly, there is another rather peculiar demonstrative pair in need of comment, namely *báha* or *báhápa*. The form *báha* is used together with the proximal demonstrative for additional emphasis and specificity.

(103) *lukólómbi ólɔ báha*
lu-kolombi ɔlɔ baha
NCP11-spoon PROX.DEM11 EMPH.DEM
'this (very) spoon here'

The origin of this form is not clear, but it has been noted for other Tanzanian Bantu languages such as Bena (G.63; Morrison 2011: 323) and Kagulu (G.12; Petzell 2008:89).

5.3.2.6 The connective particle

The connective particle *-a* (Meeussen 1967) or the "associative" as it is often called as well (in e.g. Katamba 2003),[54] is used to connect two nominal constituents to each other in Manda. A connective construction typically consists of the head nominal followed by the connective particle, which agrees with the head noun. In Matumba, the form with class 1 is the regular *ywa* (i.e. ACP1 + *-a*), whereas in the Southern varieties it is *wa*. The connective is, in turn, followed by a second nominal (which may be a de-verbal noun; see section 5.3.1.9). This second nominal in some way modifies the head nominal, for example in (104) where the second noun highlights that is not any kind of gruel but specifically millet gruel that the speaker had for breakfast.

(104) *nakanywí' úyi, úyi wa lési*

ni-ka-nyw-ili	u-yi [(u)-kóva]	u-yi	wa	lesi
SM1SG-P1-drink-P1	NCP14-gruel	NCP14-gruel	CP14	NCP14.millet

'I drank gruel, gruel (out) of millet'

The connective construction is also typically used to express possessive relations (105) and prepositional-like locative constructions (106).

(105) *mabóma ága gayí´ ga vajerumáni*

ma-boma [Sw.]	aga	ga-y-ili	ga	va-jerumani
NCP6-fort	PROX.DEM6	SM6-be-PRF	CP6	NCP2-German

'these forts are of the Germans'

(106) *ikayíma palísína la ng'kóngo*

i-ka-yim-a	pa-li-sina	la	mu-kongo
SM9-CONS-FV	LOC16-NCP5-tree.trunk	CP5	NCP3-tree

'it stood under the trunk of the tree'

Some connective constructions have also been lexicalized.

(107) *wakuhyúnga*

wa-ku-hyung-a
CP1-INF-hunt-FV

'huntsman' (lit. '(person) of hunting')

(108) *mwána wa kívéle*

mu-ana	wa	ki-vele
NCP1-child	CP1	NCP7-breast

'first-born child' (lit. 'child of the breast')

The connective has also been reconstructed for Proto-Bantu (Meeussen 1967:106).

[54]It is also referred to as the "connexive" by Schadeberg (2003b:150).

5.3.2.7 Miscellaneous markers

Manda also has reflexes of several other canonical Bantu nominal forms. They are used as either free-standing pronouns or to modify the head noun. All of these stems also take agreement with the ACP.

To begin with, Manda makes use of the universal quantifier *-oha*. When used with a plural referent it typically expresses 'all' (109) and with a singular referent 'whole' (110). Derived from *-oha* is also the stem *-o -oha* 'any' (110).

(109) *malupíya gála góha agakumbatíli yómbi*
ma-lupyia gala ga-oha a-a-ga-kumbat-ili yombi
NCP6-money DIST.DEM6 ACP6-all SM3SG-P2-OM6-embrace-P2 PERS3SG
'he took all that money'

(110) *umálá' ng'ónda wóha*
u-mal-ayi mu-gɔnda u-oha
SM2SG-finish-FV NCP3-plot ACP3-all
'you should finish the whole plot'

(111) *ihótó' kúya ndóngó wángu yo yóha?*
i-hoto ku-y-a ndɔngɔ u-angu yɔ-o yɔ-oha
SM9-POT INF-be-FV NCP1a.relative ACP1-POSS1SG ACP1-o ACP1-oha
'may it be any of my close friends / relatives?'

Moreover, there are two ways to express 'many' in Manda. Less commonly, the form *-ingi* (<*-*jíngí*; Bastin et al 2002) is used. More often *-(a)mahele* (of unknown origin) is employed.

(112) *uhágúsi wa mwáka ówɔ unónóno*
u-hagusi wa mu-aka ɔwɔ u-nonono
NCP14-election CP14 NCP3-year PROX.DEM3 ACP3-hard
'this year's election is hard

ndáva fyáma fíngi
ndava fi-ama fi-ingi
because NCP8-party ACP8- many
because there are so many parties'

(113) *nikómbóka lépa, myáka yimahéle yipítíli*
ni-kɔmbɔk-a lepa mi-aka yi-mahele yi-pɪt-ili
SM1SG-remember-FV NEG NCP4-year ACP4-many SM4-pass-PRF
'I don't remember, many years have passed by'

Manda also makes use of the stem *-ene*, meaning roughly '(it)self', as exemplified in (114) below.

(114) *ndındíma yéne íyí' mugáti kwa mugáti*

ndındıma	yi-ene	i-y-ili	mu-gati	kwa	mu-gati
NCP9.toilet	ACP9-(it)self	SM9-be-PRF	LOC18-middle	CP17	LOC18-middle

'the toilet itself is (placed) in the very middle (lit. the middle of the middle)'

As mentioned in section 5.3.2.4.1, this stem is also used as a personal pronoun and can substitute for a noun.

Another stem used is *-ngi* '(an)other' (<*-*ngí* 'other'; Kadima 1967, as cited in Bastin et al 2002). High ACP vowels are of the second degree of aperture when attached to this stem, as seen in example (115).

(115) *lukúmbi lóngi tikashága yémbe*

lu-kumbi	lʊ-ngi	ti-ka-shag-a	yembe
NCP11-occasion	ACP11-(an)other	SM1PL-CONS-mill-FV	NCP9.mango

'at another time we made juice out of mango'

The form *-ngi* may, just like *-ene*, be used as a free standing personal pronoun (with an anaphoric function). It appears to be used in order to contrast two participants with each other.

(116) *tikalóngéla tikamálána*;

ti-ka-longel-a	ti-ka-mal-an-a
SM1SG-CONS-converse-FV	SM1SG-CONS-finish-REC-FV

'we conversed (then) we took leave from each other;

yóngi akakwéla kóni, ténga tikasígála kóla

yʊ-ngi	a-ka-kwel-a	kʊni	tenga	ti-ka-sigal-a	kʊla
ACP1- (an)other	SM3SG-CONS-ascend-FV	here	PERS1PL	SM1PL-CONS-remain-FV	DIST.DEM17

he went here, we stayed there'

Finally, another form taking agreement with the ACP (with low vowels) is the question particle *-lınga*, as exemplified below.

(117) *vayí' vándu valínga*?

va-a-y-ili	va-ndu	va-lınga
SM3PL-P2-be-P2	NCP2-person	ACP2-how.many

'how many were they?

A: *vayí' vadátu* 'they were three'

(118) *wantovíli nhajáwu pa kalínga*?

u-a-mu-tov-ili	mu-haja=wu[55]	pa	ka-lınga
SM2SG-P2-OM3SG-hit-P2	NCP1-brother=POSS2SG	LOC16	ACP12-how.many

'how many times did you hit your brother?'

A: *nantoví' pa kadátu* 'I hit him three times'

Note that the construction with *-lınga* (and its answer) in (118) is a remnant of the ordinal construction discussed in section 5.3.2.3. The form can be connected to the Proto-Bantu reconstruction *-*ngá* 'how many' (Schadeberg 2003b:150).[56]

5.4 (Non-TAM) verbal morphology

Verbal morphology in Bantu languages is generally characterized as highly agglutinative and as being rich and complex with a multitude of grammatical information inflected on the verbal word. According to Nurse (2007a; see also Meeussen 1967), this agglutinative structure emerged already in Proto-Bantu. As will be seen in this section, Manda is not an exception to this characterization. This section describes the morphemes of the verb of Manda which does not express tense-aspect-mood (TAM), that is, derivational morphemes and inflectional morphemes marking nominal agreement. TAM morphology will instead be the sole topic of chapter 7. This section starts, however, with a general sketch of the segmental structure and the categories found operating on the verbal word in Manda in section 5.4.1. It continues with a description of marker of nominal agreement in section 5.4.2. Finally, a description on the various extensions, i.e. the set of verb-to-verb derivational suffixes found in Manda, follows in section 5.4.3.

5.4.1 Manda morphotaxis

The segmental structure of the verbal template in Manda can be represented as in Table 5.9.

<table>
<tr><td colspan="4">Verbal word</td></tr>
<tr><td></td><td colspan="3">Macrostem</td></tr>
<tr><td colspan="2"></td><td colspan="2">Stem</td></tr>
<tr><td colspan="2"></td><td>Base</td><td>TAM</td></tr>
<tr><td colspan="4">Pre-SM - TAM1 - OM - Root - Extension - TAM2</td></tr>
</table>

Table 5.9. Outline of the verbal template in Manda

This table illustrates firstly the canonical Bantu hierarchical structure of word, macrostem, stem and base, as described in e.g. Marlo (2013; see also Downing 2003, Rose et al 2002:82)

[55] This is the Matumba variant of this word which is otherwise *muhacha* (cf. section 5.3.1.1, example (36).

[56] It is possible that the initial /lɪ/ is an archaic reflex in Manda of the otherwise non-existent copula **dɪ*.

and of importance for encompassing several phonological processes (such as processes of vowel harmony and tone assignment described in section 5.2.1.2 and 5.2.4 respectively). Moreover, it implements the canonical Bantu linear "morphotaxis" sketched by Güldemann (1999:546, 2003), i.e. the agglutinative structure consisting of a considerable number of possible inflections affixed to the verb root, in a fixed set of positions or "slots" assigned for various functions (see also Meeussen 1967; Nurse 2008:32-40).[57] These slots are represented in the final row of the table (the hyphens represent morphological boundaries).

SM in this representation stands for "Subject (agreement) Marker". This slot is also commonly referred to as the "initial". The Pre-SM or pre-initial position consists of a ragbag of markers in Manda, namely relative markers and (in extension) temporal and manner markers as well as a conditional and a future tense affix. The post-initial slot, here referred to as the TAM1 slot, consists of prefixes marking various concepts of tense and aspect but also mood. OM stands for "Object (agreement) Marker". The root (or radical) slot consists of the bare lexical core. The so-called extensions found in the next to last slot of the verbal word are various morphemes used for semantic and/or functional derivations of the verbal root. The final slot, the TAM2 slot, is also used for marking tense and aspect and mood. (Unlike other Bantu languages, Manda has no post-final markers~clitics). As mentioned, the subject markers, object markers and relative markers of Manda will be the topic of the following section 5.4.2 and the extensions will be the topic of section 5.4.3, whereas the morphemes of the two TAM slots are instead accounted for in chapter 7.

A verbal word may minimally consist of a verb root and an inflectional final suffix in Manda, as is the case in a command to a single addressee, where the subject marker may (but does not have to) be omitted. (The suffix *-ayi* is the regular marker for commands in Manda; see more in 7.5.1).

(119) *líndáyi*!
lɪnd-ayi
wait-SBJ
'wait!'

In all other cases, a verb is inflected by a combination of various affixes in the various slots. In fact, all of the slots of the verbal word in Manda may be filled simultaneously. (120) is an exceptional example.

(120) *panaudɪnduláyi*
pa-ni-a-u-dɪnd-ʊl-ayi
REL16-SM1SG-P.I2-OM3-close-SEP-P.I2
'when I was opening it (the door) […]'

Examples like these are very rare in the data, however.

[57]Notice that Manda does not mark negation on the verbal word.

5.4.2 Nominal indexation

As described in section 5.3, nominals are also indexed on the verb in Manda. In Manda, the system of nominal indexation (also commonly referred to as verbal agreement or concord) consists of three different sets of markers surfacing in three designated positions in the verbal word. The subject marker is found in the initial slot, the object marker in the slot before the root and the relative marker in the pre-initial slot. They function as markers of agreement with the subject of the clause, the object of the clause or to relativize a subject or an object of the clause.

5.4.2.1 Subject markers

The subject markers (SM) occur in a dedicated position in the verbal template, the initial slot, before the post-initial TA slot. With the exception of directive constructions towards a single addressee such as (119) above, a subject marker is an obligatory marker on a finite verb. Given the general sound laws sketched in section 5.2 above, the subject markers correspond to what has been reconstructed for Proto-Bantu (e.g. in Meeussen 1967). Unlike in Proto-Bantu, however, all SM are toneless (and hence unmarked in this representation) and the high vowels are of degree one. This is seen in Table 5.10.

Class	SM	PB
1 (SG.)	(person)	
	1. *ni-*	**n-*
	2. *u-*	**ʊ-*
	3. *a-*	**á-*
2 (PL.)	(person)	
	1. *ti-, tu-*	**tʊ-*
	2. *mu-*	**mʊ-*
	3. *va-*	**bá-*
3	*u-, gu-*	**gʊ́-*
4	*yi-*	*gí-
5	*li-*	**dí-*
6	*ga-*	**gá-*
7	*ki-*	**kí-*
8	*fi-*	**bí-*
9	*yi-, i-*	**jí-*
10	*si-*[58]	**jí-*
11	*lu-*	**dʊ́-*
12	*ka-*	**ká-*
13	*tu-*	**tʊ́-*
14	*u-*	**bʊ́-*
15	*ku-*	**kʊ́-*
16	*pa-*	**pá-*
17	*ku-*	**kʊ́-*
18	*mu-*	**mʊ́-*
20	*gu-*	-

Table 5.10. Subject markers in Manda (in comparison to Proto-Bantu)

In constructions with the vowel-initial post-initial past tense formative *a-*, the SM with an /a/ or /i/ as its vowel coalesce, whereas a SM consisting of an /u/ turns into a glide /w/, as in (121).[59]

(121) *wénga wayí' ápa*
wenga u-a-y-ili apa
PERS2SG SM2SG-P2-be-P2 PROX.DEM16
'you were here'

However, vowel-initial SMs occurring with a vowel-final pre-SM prefix (all morphemes in pre-SM position consist of an open syllable with an /a/ as nucleus) remain in hiatus as

[58] Pronounced /ji/ in Matumba.
[59] There are some rare cases in the data where /i/ in these contexts optionally turns into a glide.

illustrated in (122). (The exception is the SM3SG, which coalesces with the /a/ of a pre-SM prefix as illustrated in (26) and (27) in section 5.2.4).

(122) *ng'kóngo waukayí' ná ndáfi simahéle úgwili*

mu-kongo	wa-u-ka-y-ili	na	ndafi	si-mahele	u-gw-ili
NCP3-tree	REL3-SM3-P1-be-P1	COM	NCP10.leaf	ACP10-many	SM3-fall-PRF

'the tree with many leaves has fallen'

Subject indexation is always obligatory in Manda. The exception is a construction like (119) above, a directive to a single addressee, in which case the subject marker of 2 person singular may optionally be omitted.

Manda generally does not adhere to the common agreement patterning of "general animate concord" (GAC; Maho 1999:122), i.e. that an animate – independent of class membership – always takes agreement in class 1/2. Instead, agreement tends to follow automatically from the NCP of the head noun.

(123) *kapécha kayí' mukukímbíla*

ka-pecha	ka-y-ili	mu-ku-kımbıl-a
NCP12-hare	SM12-be-PRF	LOC18-INF-run-FV

'Hare was in the middle of running'

There are some cases where a human referent triggers concordance of class 1/2 despite carrying a noun prefix from another class, though. This is occasionally the case, firstly, with anthropomorphized animals in fables (note that (123) is a counter-example to this, however). Secondly, this may occur with the set of lexicalized nouns referring to humans with disabilities, e.g. *libojili* 'blind' according to Haule (2016:74).

5.4.2.2 Object markers

The object markers occur after the TA prefix and form the macro-stem together with the rest of the members of the verbal word to the right. Only one OM per word is allowed in Manda. As with the SMs, the forms of the OMs correspond fairly well in shape to the reconstructed Proto-Bantu forms. They are summarized in Table 5.11.

Class	OM	PB
1 (SG.)	(person)	
	1. *-ni-*	**n-*
	2. *-ku-*	**ku-*
	3. °*-mu-*	**mu-*
2 (PL.)	(person)	
	1. *-ti-*	**tɔ́-*
	2. *-va-*	**mɔ́-*
	3. *-va-*	**bá-*
3	*-u-/-gu-*	**gɔ́-*
4	*-yi-*	**gí-*
5	*-li-*	**dí-*
6	*-ga-*	**gá-*
7	*-ki-*	**kí-*
8	*-fi-*	**bí-*
9	*-yi-*	**jí-*
10	*-si-*[60]	**jí-*
11	*-lu-*	**dɔ́-*
12	*-ka-*	**ká-*
13	*-tu-*	**tɔ́-*
14	*-u-*	**bɔ́-*
15	*-ku-*	**kɔ́-*
16	*-pa-*	**pá-*
17	*-ku-*	**kɔ́-*
18	*-mu-*	**mɔ́-*
20	*-gu-*	-

Table 5.11. Object markers in Manda (in comparison to Proto-Bantu)

It appears, however, that Manda has lost the Proto-Bantu reflex of the second person plural object marker and replaced it with an extended use of the 3rd person plural instead. Moreover, the 3rd person singular object marker undergoes the same assimilation process as discussed in section 5.2.2, 5.3.1.1 and 5.3.1.2, i.e. when occurring before an obstruent-initial verb stem, the underlying /u/ of OM3SG is deleted and the remaining nasal assimilates in place of articulation with the adjacent stem-initial consonant. Unlike the subject markers, an object marker is not obligatory. However, the insertion of an object marker changes the tonal pattern of the verbal word, as described in section 5.2.4.
Examples (124) - (126) are examples of the use of the object marker in Manda.

(124) *óyɔ andolakésa*
ɔyɔ a-mu-lolakes-a
PROX.DEM1SG SM3SG-OM3SG-examine-FV
'this (person) is examining him'

[60] Pronounced as /ɟi/ in the Matumba dialect.

(125) *na kutigonésa ta vándu ta vavílɪ*

na	ku-ti-gon-es-a	ta	va-ndu	ta	va-vɪlɪ
and	INF-OM1PL-sleep-CAUS-FV	SM1PL.a	NCP3PL-people	SM1PL.a	NCP3-two

'[…] and to pay accommodation for us two'

(126) *ng'ónda ógʊ, nikagumanyí' lépa*

mu-gʊnda	ʊgʊ	ni-ka-gu-many-i	lepa
NCP3-plot	PROX.DEM3	SM1SG-P1-OM3-know-P1	NEG

'this plot, I did not know about it'

The object marker is often not used in Manda. This is especially the case when it refers to an inanimate object, such as the cassava in the following example.

(127) *utúmbíka mukívígha*

u-tumbik-a	mu-ki-vɪgha
SM2SG-soak-FV	LOC18-NCP7-pot

'you soak (it) in a pot {i.e. the *mayawu* 'cassava' (CL6)}

The reflexive marker also occurs in the same slot as the object markers. In Manda its shape is *-yi-*, sometimes heard as a sharper *-ji-* and in the Matumba variety as *-ki-* (cf. the Proto-Bantu reconstructed form *-í- (Polak 1986; cited in Marlo 2013)).

(128) *muhínja ayílóla mwéne kilólélo*

mu-hínja	a-yi-lol-a	mu-ene	ki-lolelo
NCP1-girl	SM3SG-REFL-watch-FV	NCP1-self	NCP7-mirror

'the girl is watching herself in the mirror'

Tentatively, the reflexive affects the tone pattern of a TAM conjugation in the same way as the object markers, e.g. it triggers a shift of the (high) tone(s) of the perfect conjugation from antepenult-penult to stem-initial position (cf. (30) and (31) in section 5.2.4), e.g. *niholálíli* 'I am thinking' but *niyihólalili* 'I am thinking about myself'. In some cases a verb stem occurring with the reflexive has been lexicalized (i.e. has acquired a new non-compositional meaning), e.g. *-yitangatɪl-* 'urinate, defecate' (lit. 'help oneself').

5.4.2.3 Relative markers

The relative marker (REL) occurs in the pre-initial, pre-SM slot. As may be inferred from Table 5.12, it consists of the combination of a class prefix and a particle *-a* agreeing with the relativized nominal. The realization of this combination is a glide formation or a full deletion of the vowel of the noun class marker. (The relative marker occasionally surfaces with only the class prefix, i.e. without the *-a*. This adheres to a common trait of fluctuation in Manda. See e.g. 9.3.1).

Class	REL
1	*ywa-, ya-*
2	*va-*
3	*gwa-, wa-*
4	*ya-*
5	*la-*
6	*gha-, ya-*
7	*kya-, ka-*
8	*fya-, fa-*
9	*ya-*
10	*sya-*[61]
11	*lwa-*
12	*ka-*
13	*twa-*
14	*wa-*
15	*kwa-*
16	*pa-*
17	*kwa-*
18	*mwa-*
20	*gwa-*

Table 5.12. The relative markers of Manda

The relative marker may be used to relativize either the subject or the object of a clause.

(129) *wóga, waukayí' wa wíchu, umálíki*
u-oga wa-u-ka-y-ili wa wichu u-malik-iti
NCP14-oga REL14-SM14-P1-be-P1 CP14 good SM14-be.finished-PRF
'the mushroom, which was good, is finished'

(130) *mayáwu gatalımí' gála*
ma-yawu ga-ti-a-lım-ili gala
NCP6-cassava REL6-SM1PL-P2-cultivate-P2 DIST.DEM6
'the cassava that we cultivated […]'

In two cases, a relative prefix of a certain class has an extended function and is thus polyfunctional. Firstly, REL7 *k(y)a-* has extended into use as a manner adverbial (see Contini Morava 2007:612 on the general cognitive-semantic connection between this noun class and these kinds of functions in Swahili).

[61] *ja-* in the Matumba dialect.

(131) *fúla itónyi' katilóndéye*

fula	i-tony-ili	ka-ti-lond-eye
NCP9.rain	SM9-rain-PRF	REL7-SM1SG-want-P.I1

'the rain rained as we wanted'

(132) *ntúndu kavatendekésa gímbı*

mu-tundu	ka-va-tendekés-a	gımbı
NCP3-manner	REL7-SM3PL-make-FV	NCP14.local.brew

'how to make local brew'

Secondly, REL16 *pa-* has an extended use, referring not only to location but also to time ('when'), as in (133).

(133) *panahichí' mwéne anilolakísi tú*

pa-ni-a-hich-i	mu-ene	a-a-ni-lolakes-ili	tu
REL16-SM1SG-P2-come-P2	NCP1-self	SM3SG-OM1SG-P2-stare-2	just

'when I came he just looked at me'

According to Nurse (2008:289), this is a common extension route in Bantu. Fundamentally, it relies on the cross-linguistically valid cognitive process of broadening the reference of a sign from denoting space to time (Heine et al 1991b).

5.4.3 Extensions

This section offers a brief description of the verbal extensions found in Manda, with a focus on their prototypical meanings. The extensions are various kinds of verb-to-verb derivational suffixes, common throughout the Bantu languages. Most of them have also been reconstructed to Proto-Bantu and even to Proto-Niger Congo (see e.g. Voeltz 1977; Schadeberg 2003a; Hyman 2007). According to Schadeberg (2003a), all verbal bases that are longer than -CVC- in Bantu, and therefore in Manda, can be understood as being derivations (at some point in time) and thus they are typically constituted of one or several of these extensions suffixed onto a verb root. Some extensions affect the syntactic valency of a verb, i.e. the number of arguments it takes, either by increasing or decreasing the valence, whereas others may only affect the semantics of the verb.

The verbal extensions found in Manda are summarized in Table 5.13 below, together with the abbreviations used for glossed examples. The Manda extensions are also compared with the Proto-Bantu reconstructions as given in Schadeberg (2003a:72).[62]

[62] In principle, I also follow Schadeberg's terminology. The exceptions are as follows: the more common term "applicative" is used instead of his term "dative", and there are two additional extensions included. The first is the "denominative", which Schadeberg (2003a) discusses, but elsewhere and without naming it (the term "denominative" comes from Lodhi 2002). The second is the "continuative" extension, which is not discussed by him (and is specific to this area of Bantu languages?). However, as will be further described, the continuative is probably a composition of two other extensions.

EXTENSION	ABBREVIATION	FORM	Proto-Bantu
Applicative	APPL	*-ɪl-*	**-ɪl-*
Causative	CAUS	*-is-*, °*-i-* (?)	**-i-, *-ici-*
Neuter	NEUT	*-ɪk-*	**-ɪk-*
Passive	PASS	*-iw-*	**-ʊ-, *-ibʊ-*
Associative	ASS	*-an-*	**-an-*
Repetitive	REP	*-ang-*	**-ag- ~ -ang-*
Separative	SEP (itr./tr.)	*-ʊk-* (itr.), *-ʊl-* (tr.)	**-ʊk-* (itr.), **-ʊl-* (tr.)
Impositive	IMPOS	*-ɪk-*	**-ɪk-*
Positional	POSIT	*-am-*	**-am-*
Tentive	TENT	*-at-*	**-at-*
Extensive	EXT	*-al-*	**-al-*
Continuative	CONT	*-alɪl-*	< **-al-* + **-ɪl-* (?)
Denominative	DEN	*-ɪp-*	**-p-*

Table 5.13. The extensions in Manda

As seen in this table, most of the extensions in Manda adhere to the equivalent forms reconstructed for Proto-Bantu. They are typically of a CV shape. Extensions containing a high vowel are affected by shifts in vowel height. Firstly, the vowel assimilates in height with the vowel of the verbal root. Also, vowels are raised to first degree quality when occurring in conjugations containing reflexes of the imperfective suffix surfacing in the imperfective and the subjunctive conjugations (see chapter 7.4.7 and 7.5).
All extensions undergo imbrication (i.e. stem mutation) with the perfect~past suffix *-ili*, as this morphonological phenomenon affects all verbal bases that are disyllabic or longer, and consequently all extended verbs (see more in 7.4.2.1). The extensions are toneless in Manda, just as in their reconstructed forms. Notice, however, that a verb derived with the causative and the passive extension "trumphs" the grammatical tone pattern of a given conjugation. Instead, only a single high tone surfaces on the penult. This is also the case when the causative and the passive are combined, e.g. *kimemeséwa* /ºki-mem-**is**-**iw**-a/ 'it (the pot) is being filled'.

There is a continuum of productivity with regard to the different extensions. Manda adheres to canonical Bantu with productive applicative and causative derivational markers (see e.g. Good 2005). Typically for a Bantu language of this area – compare for example with Bena (G.63; Morrison 2011), Ndengeleko (P.11; Ström 2013), Matengo (N.13; van der Wal 2015) and Tumbuka (N.21; Chavula 2016) – Manda has a productive neuter. The passive is productive in the Matumba dialect but restricted in use in the Southern variety (see section 5.4.3.4 for a further description of the different tactics employed in this variety to express passive voice). A vast set of the extensions are unproductive for derivation in synchronic Manda, as will become clear in the following description. Typically, the less productive/more lexicalized suffixes occur closer to the root in verb bases that are constructed by combinations with several extensions. The extension may be combined in various ways, but three extensions appears to be the limit for a single verb in Manda, as exemplified below.

(134) *-dɪnd-ʊl-ɪl-ɪw-* '(be) opened by' [VERB + REV+ APPL + PASS]

(135) *-tang-at-ɪl-ɪw-* ‘(be) helped by’ [VERB + TENT + APPL + PASS]

As seen in these examples, the passive is typically the final extension in Manda, which is also the canonical pattern cross-Bantu (see Hyman 2002).

The rest of this section will focus on the individual extensions found in Manda. They are discussed in the same order as they appear in Table 5.13.

5.4.3.1 Applicative -ɪl-

The applicative has the underlying form *-ɪl-* but the vowel is often subject to various phonetic manipulations, as was described above. The applicative has a valence-increasing function, introducing an extra (object) argument. This argument most typically has the role of a beneficiary in Manda, which – as pointed out by Schadeberg 2003a) – is also the most common pattern cross-Bantu. This is illustrated in (136) and (137). The applicative may also be used to introduce a goal, as in (138).

(136) *lukéla nikantelékéla máchi ya kuyóga*
lu-kela ni-ka-mu-telek-el-a ma-chi ya ku-yog-a
NCP11-morning SM1SG-CONS-OM3SG-cook-APPL-FV NCP6-water CP6 INF-bath-FV
‘(this) morning, I cooked him water for bathing’

(137) *tuválóva vándu vatilímilayi*
tu-va-lʊv-a va-ndu va-ti-lɪm-ɪl-ayi
SM1PL-OM3PL-ask.for-FV NCP2-people SM3PL-OM1PL-cultivate-APPL-SBJ
‘we ask people to cultivate for us’

(138) *wóna múndu ahíjíli yábí’ kutumbúkíla*
wona mu-ndu a-hɪj-ili ya-a-bɪt-i ku-tumbuk-ɪl-a
if NCP1-person SM3SG-steal-PRF F1-SM3SG-go-F1 INF-sink-APPL-FV
‘if a person has stolen she is going to sink

mulílíndi móla
mu-li-lindi mʊla
LOC18-NCP5-hole DIST.DEM18
into that hole’

Some verbs transparently consisting of an applicative derivation have extended in meaning from their compositional sense. Examples include *-gendel-* ‘visit (someone)’ < *-gend-* ‘walk’ and *-kemel-* ‘call, refer to’ < *-kem-* ‘cry out’ (esp. of animals)’.

5.4.3.2 Causative -is- (and °-i-?)

The form of the productive causative is *-is-* in Manda. Unlike in many other Bantu languages, the spirant reflexive of the form does not show any allomorphic variation but is always pronounced with a single phoneme, namely /s/. The vowel assimilates in height with the root vowel.

The causative is a productive extension in Manda. Just like the applicative it is valence increasing, introducing a new agent-causer who "makes someone do something" or "causes something to happen", e.g. *-kumbukis-* 'remind' < *-kumbuk-* 'remember', as illustrated in (139).

(139) *dádi ang'kumbukísi muhínja*
dadi a-a-mu-kumbuk-is-ili mu-hınja
NCP1a.father SM3SG-P2-OM3SG-remember-CAUS-P2 NCP1-girl
'father reminded the daughter

kuhénga lihéngu la munyúmba
ku-henga li-hengu la mu-nyumba
INF-work-FV NCP5-work CP5 LOC18-NCP9.home
to do the domestic work'

Other examples include *-gwıs-* 'fell' < *-gw-* 'fall'[63], *-fwis-* 'kill' < *-fw-* 'die', *-hekes-* 'make laugh' < *-hek-* 'laugh' and *-memes-* 'fill' < *-mem-* 'be full'.

When used with other extensions or other longer verb bases, the causative may optionally coalesce with that extension, causing its consonant to be deleted, e.g. *-lemas-* 'hurt' /°*-lem-al-is-*/ < *-lemal-* 'get hurt' and *-kılawus-* 'return (ditr.)' /°*-kılawʊk-is-*/ < *-kılawʊk* -'return (tr.)', as illustrated in (140).[64]

(140) *nikılawúsa símu*
ni-kılawus-a simu [Sw.]
SM1SG-return.CAUS-FV NCP9.phone
'I am returning the phone'

This is not obligatory, however. For example, 'sell' derived from *-hemel-* 'buy' can either be expressed as *-hemeles-* or *-hemes-*.

There are some lexicalized (non-compositional) verbs in Manda derived with the causative extension as well, e.g. *-yıgalıs-* 'teach' < *-yıgalıl-* 'learn' (< *-yıg-* 'imitate')[65]. Another example is *-wones-* 'greet' < *-won-* 'see, meet', as illustrated in (141).

(141) *Joséph ambonisáyi Ngolibáha*
Joseph a-a-mu-won-is-ayi Ngolibaha
Joseph SM3SG-P.I2-OM3SG-see-CAUS-P.I2 Ngolibaha
'Joseph was greeting Ngolibaha'

[63] The PB form of this verb is **-gʊ́-*, which might explain why the vowel of the causative is /ı/ and not /i/ here.
[64] This phenomenon often occurs with extensions containing liquids in Manda, similar to what Besha (1985) describes for Shambala. However, as seen in example (140), Manda also allows for extensions with other consonants to coalesce with the causative.
[65] Notice that both *- yıgalıs-* and *-yıgalıl-* are considered as archaic by the speakers.

The data also include some examples where *-is-* has an "intensive" (Schadeberg 2003a:74; Lodhi 2002:6-7) meaning. In these cases, there is no shift in the valence of the verb. Instead, the extension expresses that the action is in some way more exhaustive in relation to the basic meaning. This is illustrated in (142).

(142) *ikahícha fúla ikatonyésa matofáli góha*

i-ka-hich-a	fula	i-ka-tony-is-a	ma-tofali [Sw.]	ga-oha
SM9-CONS-come-FV	NCP9.rain	SM9-CONS-rain-APPL-CAUS-FV	NCP6-brick	ACP6-all

'the rain came (and) it rained on all the bricks (i.e. so heavily that the bricks were destroyed)'

Other examples include *-kungis-* 'tie very strongly' < *-kung-* 'tie', *-fugamis-* 'be loyal to God' < *-fugam-* 'kneel', *-londes-* 'search diligently' < *-lond-* 'search' and *-pɔmʊlɪs-* 'be happy, well, peaceful' < *-pɔmʊl-* 'rest'.

The *-is-* form in Manda probably has its origin in Proto-Bantu **-ici-*, i.e. the longer of the two reconstructed causatives described in Table 5.13. According to Schadeberg (2003a, citing Bastin 1986), and as also seen in Table 5.13, there were two causative suffixes in Proto-Bantu, with **-ici-* being used for short (CV) roots and **-i-* for longer roots (causing a glide). Manda seems to have levelled out the latter form and adjusted the former to a more canonical (for an extension) -VC- shape. However, there are a few verbs in the data that are reminiscent of and might be remnants of an older and no longer productive causative derivation **-i-*, such as *-pyufy-* 'heat (up)' < *-pyup-* 'be(come) heated' and *-tɪny-* 'crack, cleave' < **-tɪn-* 'cut'.

5.4.3.3 Neuter -ɪk-

The neuter or neutro-passive (often also called the stative) has the form *-ɪk-* in Manda. Its function is valence-decreasing. The neuter turns a transitive verb into an intransitive, by removing the (logical) subject and promoting the object to subject position. Typically it marks that the "subject is potentially or factually affected by the action expressed by the verb" (Schadeberg 2003a:74). Examples in Manda include *-manyɪk-* 'be known' < *-many-* 'know', *-woneka* 'be visible' < *-won-* 'see'; *-kelek-* 'be trustworthy' < *-kel-* 'believe' and *-malɪk-* 'be finished' < *-mal-* 'finish', as illustrated in (143).

(143) *mafúta gamálíki muligeléda*

ma-futa	ga-mal-ɪk-ili	mu-li-geleda
NCP6-petrol	NCP6-finish-NEUT-PRF	LOC18-NCP5-car(archaic)

'the petrol is finished in the car'

The neuter is very productive in Manda and especially in the Southern variety, where it may also be used to express passive voice with an explicit agent, as seen in examples (144) and (145).

(144) *mwána atóvíki na dádi múndu*

mu-ana	a-tov-ɪk-ili	na	dadi	mundu
NCP1-child	SM3SG-hit-NEUT-PRF	COM	NCP1a.father	POSS3SG

'the child has been beaten by his father'

(145) *kahúngu akakamɔ́líka na ng'kóla matóki*

ka-hungu	a-ka-kamɔl-ɪk-a	na	mu-kola	ma-toki
NCP12-civet	SM3SG-CONS-catch-NEUT-FV	COM	NCP1-owner	NCP6-banana

'Civet was caught by the owner of the bananas'

This passive function of the neuter is further discussed in the following section 5.4.3.4. The semantics of the neuter is also further addressed in the discussion of the genesis of the two modal verbs *-londek-* and *-yenelek-*, which are transparently derived with this extension (see 10.4).

5.4.3.4 Passive -iw-

The passive regularly has the form *-iw-* in Manda, but the vowel assimilates in height with a high front root vowel, e.g. *-lɪmɪw-* 'be cultivated' < *-lɪm-* 'cultivate' and *-sokotew-* 'be spun' < *-sokot-* 'spin'.

The passive is valence-decreasing, making the object into the subject and the subject into an oblique agent. The agent may either be expressed in a comitative phrase, as exemplified with *-lumiw-* 'be stung (bitten)' from *-lum-* 'sting (bite)' in (146), or not expressed at all, as exemplified with *-kungiw-* 'be tied' from *-kung-* 'tie' in (147).

(146) *sónga múndu alumíwi na njɔ́chi*

songa	mundu	a-a-lum-iw-ili	na	njɔchi
NCP1a.aunt	POSS3SG	SM3SG-P2-bite-PASS-P2	COM	NCP10.bee

'her aunt was stung (lit. bitten) by bees'

(147) *ngóyi ukungíwi ng'áng'áng'á*

mu-ghoyi	u-kung-iw-ili	ng'ang'ang'a
NCP3-rope	SM3-tie-PASS-PRF	IDPH

'the rope has been tightly tied'

It should be noted, however, that there are other tactics of expressing passive voice in Manda than with the passive extension, namely through (active) sentences with subject-object inversion or with a dummy subject marker of (3rd person plural) as illustrated in (148) and (149) below.

(148) *sónga múndu sandumíti njɔ́chi*

songa	mundu	si-a-mu-lum-i-iti	na	njɔchi
NCP1a.aunt	POSS3SG	SM10-P2-om3sg-bite-PASS-P2	COM	NCP10.bee

'her aunt was stung by bees' (lit. 'her aunt, bees stung her')

(149) *ngóyi vakúngúti ng'áng'áng'á*

mu-ghoyi	va-kung-iti	ng'ang'ang'a
NCP3-rope	SM3-tie-PRF	IDPH

'the rope has been tightly tied' (lit. 'the rope, they have tied (it) tightly')

Alternatively, passive voice may be expressed with the neuter extension (as briefly mentioned in section 5.4.3.3). See van der Wal (2015) for a more elaborate account on the similar situation in neighboring Matengo.

Just as with the causative, two passive forms have been reconstructed for Proto-Bantu, viz. a longer *-*ibʊ*- and a shorter *-ʊ- (see Table 5.13). Given the shape of the passive extension in Manda and the sound law which stipulates that **b* becomes /*w*/ before back vowels, it also seems that the longer form has expanded and the shorter form has been levelled out in a similar fashion to what was described for the causative.[66]

5.4.3.5 Associative -an-

The associative of the form *-an-* has, just like the neuter, a valence-decreasing function. Typically in Manda, it is used to express a mutual or reciprocal denotation by turning an object into a joint co-referential subject. For example, *-ganan-* 'love each other' < *-gan-* 'love', *-tovan-* 'fight each other' < *-tov-* 'fight', *-kamʊlan-* 'be connected together' < *-kamʊl-* 'seize'. Example (150) illustrates its use with two verbs occurring in complex combination with the associative and other extensions.

(150) *vangóni, vanyása na vakísi… Vawonángána kuyingilílána*

va-ngoni	va-nyasa	na	va-kisi	va-won-ang-an-a	ku-yingil-ıl-an-a
NCP2-ngoni	NCP2-nyasa	COM	NCP2-kisi	SM3PL-see-REP-ASS-FV	INF-go.in-APPL-ASS-FV

'the Ngoni, the Nyasa and the Kisi… They are meeting to cohabit,

ndo ihogólíki lúgha ya kimánda

ndo	i-hogol-ık-ili	lugha [njóvélu]	ya	ki-manda
EMPH	SM9-give.birth-NEUT-PRF	NCP9.language	CP9	NCP7-manda

indeed, the Manda language is born'

As seen in the example verbs in (150) and also in other verbs such as *-kumbat**an***- 'hug each other' < *-kumb**at***- 'hugh', the associative is typically placed relatively late when combined with other extensions in Manda (which is also common cross-Bantu; see Hyman 2002).

A verb derived with the associative may also occur with a single subject referent. In such cases, the whole construction is typically still co-referential; the verb derived with the associative surfaces in a discontinuous construction where a second, less prominent participant, being "robbed of subjecthood and agentivity" (Bostoen et al 2015), has been moved into a prepositional clause with the comitative *na ~ni*. This is illustrated in (151), where the one fighting and arguing is the 'child'.

[66] There are some examples of verbs derived with the short passive form in the historical sources, e.g. *-sengw-* 'be calmed' < *-seng-* 'be blessed'.

(151) *mwána yɔ́la alóndéye kujovángána*

mu-ana	yɔla	a-lond-eye	ku-jov-ang-an-a
NCP1-child	DIST.DEM1	1SM3SG-like-P.I1	INF-say-REP-ASS-FV

'that child loved to argue

na kukómána na dádi múndu

na	ku-kom-an-a	na	dadi	mundu
COM	INF-beat-ASS-FV	COM	NCP1a.father	POSS3SG

and fight with his father'

However, there are also some Manda examples with verbs consisting of the associative extension and a single first participant without any marking of plurality of participants. For example, in example (152), the verb *-dumulan-* < *-dumul-* 'cut' denotes plurality of events rather than a plurality of participants. According to Bostoen et al (2015), this is a typical meaning extension of this marker in several Bantu languages.

(152) *wítóla kísu, wíwánja kudumúlána*

u-i-tol-a	ki-su	[mu-pamba	u-i-wanj-a	ku-dumul-an-a
SM2SG-PRS-take-FV	NCP7-knife	NCP3-knife]	SM2SG-PRS-begin-FV	INF-cut-ASS-FV

'so, you take a knife, you start to cut (it)

fipándi fipándi

fi-pandi	fi-pandi
NCP8-piece	NCP8-piece

into small small pieces'

Although the associative most probably is inherited in Manda, it should be noted that Schladt (1998) has actually reconstructed the associative extension as originating from the (univerbation with) the comitative *na* in constructions similar to (151) above.

5.4.3.6 Repetitive -ang-

According to Harries (1950), the repetitive extension indicates that an action occurs repeatedly and, in extension, excessively. There are some examples in the data (although there are not many examples at all) where *-ang-* arguably has this function in Manda. These are *-kekang-* 'pant' < *-kek-* 'breath', *-valang-* 'count' < **-bad-*[67] count' and, together with other extensions, *-tamanganil-* 'stay forever' < *-tam-* 'sit, stay' and *-sesanganek-* (~*chechanganek-*) 'spread, scatter' (the latter from a root of an unknown source).

The repetitive does not seem to be productive. Most often it co-occurs in tandem with the associative *-an-*, as seen in the last two examples above, and also exemplified with *-wonangan-* 'meet (each other)' < *-won-* 'see' in (150) and *-jovangan-* 'argue'

[67]The whole base *-valang-* is reconstructed for zones N and P (i.e. Rufiji-Ruvuma) as **-bad-ang-*, i.e. the Proto-Bantu root **-bad-* 'count' plus the extension *-ang-* (Bastin et al 2002).

from *-jov-* ‘say’ in (151) in section 5.4.3.5.[68] In these cases, the meaning can typically be seen as compositional, where *-an-* adds an associative/reciprocal reading to the action encoded in the verb, whereas the function of *-ang-* appears to be to highlight the plurality of either participants or of events. In extension, it may also indicate intensity, as illustrated in (153) with the derivation of the verb *-many-* ‘know’.

(153) *patamá’ ápa takamanyangíni sána*

pa-a-tam-ayi	apa	ti-ka-many-ang-an-ili	sana [nyamuhopi]
LOC16-SM3SG-P.I2-sit-P.I2	PROX.DEM16	SM1PL-P1-know-REP-ASS-P1	very

‘when he was living here we really got to know each other’

It should be noticed that the repetitive is claimed to originate from the same Proto-Bantu source morpheme – reconstructed as **-ang-* ~**-ag-* (Nurse & Philippson 2006; Schadeberg 2003a) – as the ‘imperfective’ suffix discussed in 7.3. It is common for two reflexes of this source to occur in a single language, semantically split between a more derivational and a more aspectual (imperfective) function. What supposedly happened is that the ‘imperfective’ lost the /n/ and extended into the inflectional and aspectual domain in Manda (or more probably in some earlier proto-stage).

5.4.3.7 Separative -ʊl- (transitive) and -ʊk- (intransitive)

There are two kinds of separative extensions, the transitive *-ʊl-* and the intransitive *-ʊk-*, both reconstructed for Proto-Bantu as prototypically encompassing “movement out of some original position” (Schadeberg 2003a:77).[69] An example of this in Manda is the basic root *-dɪnd-* ‘close’, which can be derived with both *-ʊl-* and *-ʊk-* for the reverse meanings ‘open’ and ‘be open(ed)’, respectively.

(154) *-dɪnd-* ‘close’ > *-dɪndʊl-* ‘open’
-dɪndʊk- ‘be open(ed)’

There are also some other examples from the Manda data where this extension denotes a reversive meaning, especially with the transitive *-ʊl-*. Examples are *-nyanyʊl-* ‘lift (out)’ < *-nyany-* ‘pierce’ and *-wopol-* ‘untie’ < *-wop-* ‘tie’. An example where the transitive separative combines with another extensions is *-yanʊl-* ‘take in (from rain)’, which commutes with **-jánɪk-* ‘spread to dry in the sun; to spread out’ (Bastin et al 2002). However, the intransitive separative in Manda often does not have any clear reversive meaning. As pointed out by Dom (2016), in these cases *-ʊk-* seems to have a function more similar to a marker of middle voice. One example is the non-transitional motion verb *-gʊlʊk-* ‘fly’ <**-gʊd-ʊk-* ‘fly’, as illustrated in (155).

[68] The meaning appears to always be associative/reciprocal in Manda and to refer to a plurality of participants, marked either by a plural subject marker or by a discontinuous construction with the comitative. This contrasts with what has been described by Dom et al (2015) for Ciluba (L.31a), where the same extension compound has developed into an antipassive marker.

[69] Often in Bantu studies it is referred to with the alternative name “reversive”, as the result of the “movement out of some original position” occassionally render in that the semantics encoded in the basic verb root are reversed.

(155) *muhávi agólóka munáni*

mu-havi	a-gʊlʊk-a	mu-nani
NCP1-sorcerer	SM3SG-fly.SEP-FV	LOC18-sky

'the sorcerer is flying (hovering) in the sky'

Other examples of this use of the intransitive separative in Manda include *-tʊtʊmʊk-* 'boil up/over' < **-tʊtʊm-ʊk-* 'boil up/over', *-sisim-uk-* 'wake up' < **-titim-ʊk-* 'be startled, wake up', *-hɪmbʊk-* 'rise (of moon)' and *-sinduk-* 'be (up-)lifted'.

5.4.3.8 Impositive -ɪk-

The impositive is homophonous with the neuter but carries a different (transitive) meaning. The core meaning both cross-Bantu and in Manda is "put [something] into some position" (Schadeberg 2003a:72), e.g. *-fwatɪk-* 'dress' from *-fwat-* 'wear', as illustrated in (156).

(156) *amfwátíka mwána*

a-mu-fwat-ɪk-a	mu-ana
SM3SG-OM3SG-dress-IMPOS-FV	NCP1-child

's/he is dressing the child'

The impositive is not productive in Manda and there are few examples in my data. Two examples are *-gonek-* 'put to sleep, lay' and *-lol**ek**-* 'illuminate' < *-lol-* 'watch, see'.

There are also some verbs that seem to fit semantically and morphologically with the impositive, but where no underived roots have been detected, for example *-mulik-* 'enlighten', *-ginik-* 'respect (s.o)' and *-tumbik-* 'soak', as illustrated in (157).

(157) *nála atumbíki ngúwo mumáchi*

mu-dala	a-a-tumbik-ili	nguwo	mu-ma-chi
NCP1-woman	SM3SG-P2-soak-P2	NCP10.clothes	LOC18-NCP6-water

'the woman soaked the clothes in the water'

A final example is the common Manda verb *-telek-* 'cook', which originates from a verb that has been reconstructed with this extension, namely **-téd-ɪk-* 'put (pot) on the fire; stand (something) on end' (Bastin et al 2002).

5.4.3.9 Positional -am-

The positional *-am-* has been characterized by Schadeberg (2003:75) as prototypically expressing that something takes a static (intransitive) position. This appears to also be the case in Manda. It is not a productive extension in Manda and there are seldom corresponding non-extended verbs in my data. One example, however, is *-govam-* 'be(come) bent, crooked' < *-gov-* 'bend, crook'. In addition, some basic verb roots have been reconstructed for Proto-Bantu, including *-gov-* < **-gob-* 'bend, crook' but also e.g. *-fíy**am**-* 'hide, kulk' < **-píc-* 'hide, cover' (cf. Bastin et al 2002). Two examples of verb bases reconstructed with the positional

with reflexes in Manda are *-fugam-* ‘kneel’ < *-*kúk-am-* ‘kneel’ and *-yegam-* ‘lean (intr.)’ < *-*jeg-am-* ‘lean against (intr.)’ (cf. *-*(j)eg-ek-* ‘lean against (tr.)’) (cf. Schadeberg 2003a:75).

5.4.3.10 Tentive -at-

There are few reflexes of the tentive extension, which has the form *-at-*, in the Manda data. It does not appear to be productive and does not often occur without additional extensions. The examples that exist coincide fairly well with Schadeberg’s (2003a:77) conceptualization of this extension as marking “actively making firm contact”, as illustrated in (158).

(158) *nála ǒyʊ ampágíti mwána*

mu-dala	ʊyʊ	a-mu-pagat-ili	mu-ana
NCP1-woman	PROX.DEM1	SM3SG-OM3SG-put.TENT-PRF	NCP1-child

‘the woman has put the child in her lap’

Other examples include *-lɪvatɪl-* ‘step on’ and *-kumbatɪl-* ‘hug (someone)’, cf. *-*kumb-* ‘enclose’ (Bastin et al 2002). A final example is *-tangatɪl-* ‘help’ (also *-tangatan-* ‘help one another’); cf. *-tang-* ‘help’ in the G.60 languages, e.g. Pangwa (G.64; Stirnimann 1983).

5.4.3.11 The extensive -al-

The extensive verbal extension has the form *-al-* in Manda, as also reflected in the reconstructed form in Table 5.13. The extensive is not productive in Manda (but see the discussion on the continuative in section 5.4.3.12 below). The examples found adhere fairly well to the Proto-Bantu reconstructions with the meaning “to be in a spread-out position” and, in extension, “being ill and suffering” (Schadeberg 2003a:77, 1994). Examples of the former include *-kʊval-* ‘stumble (on)’, *-valal-* ‘burst (of sunlight)’ (cf. *-*bád-* ‘shine’) and *-sigal-* ‘remain’ (cf. *-*tíg-al-* ‘remain’ < *-*tig-* ‘leave behind’ (cf. Schadeberg 2003a:77), as in (159) below.

(159) *vangerésa ndíyo vasígála pála*

va-(i)ngeresa	ndiyo	va-sigal-a	pala
NCP2-english	EMPH	SM3PL-remain-FV	PROX.DEM16

‘the Englishmen remain there

na kuvíka libóma lyávi

na	ku-vɪk-a	li-boma [Sw.]	li-avi
COM	INF-put-FV	NCP5-fort	ACP5-POSS3PL

and put up their fort’

Examples in Manda for the latter meaning of “being ill and suffering” include *-lemal-* ‘get hurt’ and *-lwal-* ‘be ill’ < *-*dǒ-al-* ‘be ill’ (cf. Schadeberg 2003a:77).

Finally, it should be noted that Schadeberg (1994) has reconstructed the extensive as ultimately originating from the verb *-*jal-* ‘to spread’, but probably as early as before Proto-Bantu.

5.4.3.12 Continuative -alɪl-

The continuative has the shape *-alɪl-* and is thus longer than the other markers. Despite the interference of the initial /al/, the vowel of the final /ɪl/ still assimilates with the root vowel, as seen in (160)[70].

(160) *niholáléla kukíta yanimpéleke wɔ́li*

ni-hol-alɪl-a	kukɪta	ya-ni-mu-pelek-i	wɔli
SM1SG-think-CONT-FV	COMP	F1-SM1SG-OM3SG-bring-F1	how

'I'm thinking about how I will bring

mwána kushúli

mu-ana	ku-shuli
NCP1-child	LOC17-NCP9.school

(my) child to school'

The term "continuative" comes from Ngonyani (2003), who describes a similar marker for neighboring Ngoni (N.12). According to him it indicates that an action is "done over a long period of time" (Ngonyani 2003:65). This fits well with the Manda data, as illustrated in (161), where the derived form of *-yit-* 'pour' (< **-jit-* 'pour') indicates a continuing event. Furthermore, watering requires a fair amount of recurrent pouring.

(161) *kila ligóno vabíta kuyitálíla máchi*

kila [Sw.]	li-gono	va-bɪt-a	ku-yit-alɪl-a	ma-chi
every	NCP5-day	SM3PL-go-FV	INF-pour-CONT-FV	NCP6-water

'every day they went to water

kudási kɔ́la

kudasi	kɔla
LOC17.wilderness	DIST.DEM17

in the wilderness there'

The continuative appears to be productive in Manda and there are quite a lot of verbs derived with this marker. Other examples include *-longalel-* 'narrate, retell' < *-long-* 'speak' and *-komalel-* 'nail' < *-kom-* 'beat'. In some cases, a root derived with this extension has developed specific denotations relative to the compositional meaning. Examples include *-kungalil-* 'tie up animals on the grass for grazing over the day' < *-kung-* 'tie' and *-yɪmalɪl-* 'supervise, watch over someone' (also a euphemism for 'urinate') < *-yɪm-* 'stand'.

The continuative is not reconstructed from Proto-Bantu. Its long form suggests that it is composed of two extensions, arguably the extensive *-al-* (5.4.3.11and the applicative *-ɪl-* (discussed in section 5.4.3.1). This also makes sense from a semantic point of view, given the

[70] The first vowel of this extension often fluctuates in its realization between /a/ and a high front vowel when the root vowel is also of high front quality, e.g. *-holalel-* ~ *-holelel-* 'think (about)'.

fact that the extensive is often extended in use cross-Bantu from expressing extension in space to extension in time as well (see Schadeberg 1994, 2003a:76).

5.4.3.13 Denominative -ɪp-

The denominative (Lodhi 2002), also called the "stative attribute" by Botne (2009), forms (inchoative) verbs from adjectives. It has the form *-ɪp-* in Manda. It is not particularly common and does not seem to be productive in Manda. Examples include *-talɪp-* 'be(come) tall' < *-tali* 'tall'; *-nenep-* 'be(come) fat' < *-nene* 'fat' and *-vɪp-* 'be(come) bad' < *-vɪfu* 'bad' (cf. **bɪɪ* 'bad'). Verbs with this extension that stand in the perfect denote the result of a progress, as seen in (162).

(162) *anénípi*
a-nen-ɪp-ili
SM3SG-be(come).fat-DEN-PRF
'she is fat (lit. she has become fat)'

Schadeberg (2003a) does not discuss the denominative as an example of an extension (as it is technically not a verb-to-verb derivational marker). However, in a later discussion on nominal-to-verb markers he mentions a suffix **-p-* with this function as existing already in Proto-Bantu.

5.4.3.14 Other tactics of verb derivation

There are two additional tactics used to derive verbs with new functions in Manda, briefly described here. They are reduplication and derivations from ideophones. Reduplication of the verbal base appears to be fairly productive in Manda. It is used to express notions such as repetition, pluractionality, frequency and intensity. Thus, functionally it adheres to the typical characterization of reduplication as being "semantically iconic" (Downing & Inkelas 2015), This can be illustrated with two examples consisting of the reduplication of the same verb *-lol-* 'watch, see', but with two slightly different meanings. In (163), the reduplication of the verb indicates that there were several different dances being watched. In example (164), *-lol-* is reduplicated to stress that the action must be implemented intensively.

(163) *tihí' ápa kusáli, kulolálóla*

ti-hid-a	apa	ku-sali [Sw.]	ku-lolalola
SM1PL-come-FV	PROX.DEM16	INF-pray	INF-see.RED

'we come here to pray, to see

ng'óma ápa: mugánda, kihóda…

ng'oma	apa	muganda	kihoda
NCP10.drum	PROX.DEM16	muganda	kihoda

the traditional dances here: muganda, kihoda…'

(164) *wé' mwána, lolalóláyi mpónga sikotó' kúla ngóko*
wenga mu-ana lolalol-ayi mu-pɔnga si-koto ku-l-a ngɔkɔ
PERS2SG NCP1-child see.RED-SBJ NCP3-rice SM10-NEG2 INF-eat-FV NCP10.hen
'you child, watch the rice (carefully) so that it does not get eaten by the hens'
{of rice lying in the outside to dry in the sun}

Verbs can also be derived from ideophones in Manda. This is illustrated in (165), where the derived verb co-occurs with its ideophonic source.

(165) *mbóna udígída dígidígí?*
mbona u-digid-a digidigi
why SM2SG-shiver-FV IDPH
'why are you shivering so?'

nidígída ndáva ya mbépu yikulúmba
ni-digid-a ndava ya mbepu yi-kulumba
SM1SG-shiver-FV NCP9.reason CP9 NCP9.wind ACP10-strong
'I'm shivering because of the strong wind'

In some cases, it is doubtful whether a verb is derived by (partial) reduplication of the verb stem or by derivation from an ideophone, as in the case of *-pupuluk-* 'flap wings' (cf. Schadeberg 2003a:79).

PART II THE WIDER TAM DOMAIN IN MANDA – GRAMMAR AND GRAMMATICALIZATION

6 Approach

6.1 Introduction

This second part of the thesis accounts for the encoding and development of the interrelated grammatical concepts of tense, aspect, mood (TAM), modality and negation in Manda. Thus, the focus is on a broad linguistic domain which I am referring to as the "wider" TAM domain. These chapters are primarily divided after meaning. However, they are also divided based on form. Thus, whereas chapters 8 to 11 mainly discusses periphrastic constructions, chapter 7 addresses simplex, that is, single word TAM conjugations and affixes surfacing in Manda. This division also has some implication for the approach (and subsequently) the discussion in this chapter, in the sense that whereas most periphrastic construction can be linked to more recent innovations of grammaticalization of lexical material, many affixes in Manda are traceable to morphemes reconstructed as grammatical markers for Proto-Bantu with related meanings.

The main concern of the analysis in part II is the reconstruction of diachronic sources and pathways of change of the grammatical forms and constructions found in today's Manda. The chapters of this part aim at both setting out what is to be considered retentions from Proto-Bantu, or from some putative earlier ancestral stage, as well as what is to be considered new innovations based on grammaticalization within this domain, whether from lexical or already grammatical material. These reconstructions are, in turn, used to account for why this domain appears as it does.

This chapter presents the approach that will guide the analysis of the following chapters of this thesis. Fundamentally, the approach is typological-functional, being based on cross-linguistic and intra-genetic comparison, both with regard to universal traits as well as specific Bantu or Niger-Congo characteristics. As the main focus of the chapters of part II is on grammaticalization, this study is specifically influenced by the assumptions and methods developed within the grammaticalization framework. Following Lehmann (2004), I assume that given the fact that there are typological principles determining the structure of grammar, there also exist principles of linguistic change that produce such a grammar.

As pointed out in work like Heine et al (1991b:chapter 9), Heine (1993), Kuteva (2001) and Anderson (2006), the study of grammaticalization requires a panchronic perspective. This panchronic perspective entails considering language as a dynamic entity without any discrete demarcation between synchrony, diachrony and ongoing variation. As a language is the product of change and is also constantly undergoing change, the grammaticalization framework can explain these processes and how they tend to proceed. A prerequisite for such an approach, however, is that not only innovation and change but also retentions and inherent material in the language is cated for. The aim of this approach is thus to offer a deeper description of Manda through the two-pronged yet interrelated attempt at, firstly, linking synchronic grammatical items in Manda to their earlier instantiations and, secondly, accounting for ongoing change today. This means that the objective is not only to account for the form and function of a grammatical element or a construction but also to the diachronic

forces that shaped it, by describing its genesis, i.e. its semasiological and formal background and its possible further development.

Thus, this chapter sets out to describe this approach more thoroughly. Before embarking on the issue of grammatical change, section 6.2 addresses the issue of tracing inherited grammar. Section 6.3 introduces the phenomenon of grammaticalization – the main focus of the following chapters - and the conceptual framework developed in order to capture and account for this phenomenon. The section presents and dissects different topics around grammaticalization, focusing on the mechanism of change involved and the direction of change. It also describes the characteristics of grammaticalization within the Bantu language family. Section 6.4 more specifically accounts for how this conceptual framework has been applied to the Manda data. The section addresses question on how to reconstruct grammatical markers as well as how to analyze variation and reconstruct change in the wider TAM domain.

6.2 On inherited grammar

6.2.1 Introduction

As explained in the previous section, the main focus of this chapter is on the conceptualization of grammaticalization and how it is applied in reconstructing grammar and grammatical change in the Manda data. This reflects the fact that grammaticalization is the main factor investigated with regard to the wider TAM domain in the following chapters. This is especially the case in chapter 8 to 11, but grammaticalization is also an important issue in chapter 7. However, just as important as investigating which grammatical expressions can be considered as being the product of innovations of change, is it to detect which grammatical markers can be considered as being inherited to Manda. This is especially so as many TAM affixes found in Manda are analyzable as cognates of morphemes reconstructed for Proto-Bantu (and/or which have a wide distribution throughout the Bantu language family). This means, firstly, that there are TAM markers inherited in Manda as grammatical elements. This also means, that the division between TAM markers which are traceable to a Proto-Bantu inventory and those which are not, partially intersects with the division between synthetic and periphrastic constructions in Manda. Noting which part of the TAM inventory that consists of inherited markers is also a prerequisite for understanding which parts stem from innovations, as one excludes the other. An additional motivation for taking these inherited markers into account is the fact that they constitute an important part of the TAM domain, and that they are naturally involved as building blocks in the processes leading to the formation of grammaticalized expressions.

Thus, before embarking on the topic of grammaticalization, this section will offer a general introduction to Proto-Bantu TAM morphology reconstruction and how corresponding morphemes in a synchronic Bantu language can be identified as a Proto-Bantu cognate and thus assumed to be inherited. The more particular methods employed for tracing Manda TAM morphemes to corresponding Proto-Bantu material is developed in section 6.4.2.1.

6.2.2 Tracing reflexes of Proto-Bantu morphology

The reconstruction of TAM morphology in Proto-Bantu – a variety assumed to have emerged roughly 2000-3000 B.C. (Nurse 20008:226-228) – is (at least in later years) most profoundly connected to the work of Nurse, i.e. in Nurse & Philippson (2006), Nurse (2007a, 2008:chapter6). These reconstructions are based on the comparison of roughly 200 Bantu languages (see Nurse 2007b), of which 100 – with representative languages from all Guthrie zones – have been selected for quantitative analysis (see e.g. Nurse 2007a). Nurse (2007b, 2008:chapter 6) reconstructs Proto-Bantu TAM morphology on the joint parameters of high frequency, wide distribution and connection to other related Niger-Congo families. Much of the analysis and conclusions are established on the foundation of earlier reconstruction work, including Botne (1999), Guthrie (1967-1971), Meeussen (1967) and Sebasoni (1967). In addition, the sample has been used by other authors for cross-Bantu grammatical generalizations (Devos & Van Olmen 2013, Devos & van der Auwera 2013).

Nurse (2007a) characterizes Proto-Bantu as constituted by a relatively limited set of TAM morphemes, consisting of tense (and discourse function) prefixes and aspect and mood suffixes. In some cases, cognates in a synchronic Bantu language can be traced to these Proto-Bantu morphemes rather straight-forwardly, as reflecting a direct phonological correspondence. That is, they may surface synchronically with their (reconstructed) meaning, in their reconstructed position and even in their reconstructed (phonemic) form. An example is the (distal) future prefix *-la-* in Bena (G.63), reconstructed as *-*laa*- for (at least "near") Proto-Bantu as well (Nurse & Philipsson 2006).

(1) *ndi-**lá**-gona*
SM1SG-**FUT**-sleep
'I will sleep' [Bena (G.63); Morrison (2011:263)]

Alternatively, there is a difference in form which can be accounted for as a phonologically motivated shift due to general sound laws characterizing a language. For example, in Pangwa (G.64), the suffix *-ak-* as in *ndi-chov-**ak**-a* 'I am always talking' (Stirnimann 1983:105) can be attested as a reflex of the for Proto-Bantu reconstructed 'imperfective' *-*a(n)g*-, as /k/ regularly corresponds to **g* elsewhere in this language.

However, as pointed out by Nurse (2008:229) it is not always the case in Bantu - or elsewhere in the world for that matter (Koch 2015) - that phonological change of grammatical elements follows regular lexical changes. Other cases of advanced morphophonological change can have affected a language, leading e.g. to allomorphy, shifts of underlying tones or fusion over morpheme boundaries. In these cases, a more sophisticated method is needed in order to unravel the connection to proto-cognates. The methods employed in this study - referred to as internal and external comparison - is explained in section 6.4. In addition, irregular shifts in form are most often also accompanied with a shift in meaning relative to the reconstructed etymon in the direction and in manners characteristic of grammaticalization. Thus, although it will be argued that many of the TAM affixes surfacing in Manda are cognate to Proto-Bantu material (or at least to material at some earlier ancestral stage), many of these affixes and the constructions they surface in have also shifted along the pathway of grammaticalization and consequently, they may be reconstructed in a similar way. The technique employed in tracing

such cases of change affecting an inherently grammatical marker will be further discussed in 6.4.2.1, that is, after the conceptualization and framework of grammaticalization - the subject of the following section - has been presented.

6.3 Grammaticalization

6.3.1 Background and introduction

This section discusses the concept of grammaticalization, the main topic of part II and in particular chapter 8 to 11. Grammaticalization is here used in two ways. Firstly, it refers to the linguistic phenomenon itself, (very) broadly defined by Croft (2006:366; cited in Traugott 2010a) as the process through which grammar is created. It also refers to the research framework developed in order to capture and account for this phenomenon. The term "grammaticalization" (occasionally "grammaticization") is traced to Meillet (1912) – and secondly to Kuryłowicz (1965) – by most authors on this topic (e.g. Lehmann 2015:1; Hopper & Traugott 2003:19; Hopper 1991). Notice, however, that Heine et al (1991a:6-11) and Heine (2003) claim that many of the basic ideas characteristic of grammaticalization are to be found in studies from much further back in time. In spite of this fact, however, a strong field of research around the topic of grammaticalization started to develop in earnest during the past 30 years. Significant literature from this time includes Lehmann (1985, 2015 [1995, 2002]), Heine et al (1991a), Bybee et al (1994), Hopper & Traugott (2003 [1993]), and Heine & Kuteva (2002, 2005, 2007). One of the pioneering works on grammaticalization is Heine & Reh (1984; see also Heine & Reh 1982). This study specifically addresses grammaticalization with reference to (a vast set of) African languages, including several representatives from the Bantu family. Heine (2010), in turn, traces his own interest in studying the evolution of grammar to the seminal paper by Givón (1971), which ends with the classical aphorism "if today's bound morphemes are yesterday's lexical words, then today's morphotactics is yesterday's syntax" (Givón 2015 [1971]: 21). Many of the conclusions drawn in Givón's paper are, in turn, taken from data of African languages in general and especially Bantu languages. Thus, the study of grammaticalization from an Africanistic and subsequently a Bantuist perspective not only has a strong tradition but it has also served as one of the foundations and as a driving force in the development of this field of research in general.

The concept of grammaticalization has been defined in varied and inconsistent ways. The definition with regard to the concept of grammaticalization assumed in this thesis, is given by Hopper & Traugott (2003):

> "[Grammaticalization is] the change whereby lexical items and constructions come in certain linguistic contexts to serve grammatical functions, and once grammaticalized, continue to develop new grammatical functions" (Hopper & Traugott 2003 [1993]:18).

This single-sentence definition manages to pinpoint the most important and crucial issues with regard to grammaticalization. These issues are introduced here and discussed further in the following subsections.

First and foremost, Hopper & Traugott's definition establishes that grammaticalization is a process of change, typically composed of both conceptual (pragmatic-semantic) and formal

(morpho-syntactic and phonological) mechanisms, which leads to the distinction of the grammatical expression from its lexical (or less grammaticalized) source. The compositional mechanisms of change typically involved in grammaticalization are presented in section 6.3.2.

Furthermore, this definition stresses – *contra* other/older definitions found for instance in Meillet (1912) and Kuryłowicz (1965) – that it is not only a single item per se that undergoes grammaticalization.[71] That is, grammaticalization occurs in a linguistic context, i.e. a certain syntactic (syntagmatic) environment. However, "linguistic context" can also be taken as referring to the implications or inferences that a linguistic utterance can give rise to in a certain context, which may eventually lead to the emergence of new grammatical meanings – the fundamental trigger for grammaticalization (Heine 1993:97; Traugott 2010a). The issue of context-induced reinterpretation is discussed in section 6.3.2.1. Furthermore, the definition implies that the change of an expression progresses in a certain direction, i.e. from lexical to a grammaticalized status. Thus, grammaticalization is "prototypically unidirectional" (Hopper & Traugott 2003:99) and characterized by specific stages of change. The issue of unidirectional change with regard to grammaticalization and how this pathway of change can be schematized will be addressed in section 6.3.3. Notice that the definition also mentions that an already grammaticalized marker may grammaticalize even further. This topic of "secondary grammaticalization" (Breban 2014, 2015; Kuryłowicz 1965) will also be mentioned in section 6.3.3.

After this introductory note follows a more comprehensive discussion of the different issues concerning grammaticalization as introduced above, and how they, in turn, feed into a conceptual framework with regard to the capturing and reconstruction of grammatical change. Thus, the discussion starts in section 6.3.2 with describing the composite change affecting a linguistic expression undergoing grammaticalization. It continues in section 6.3.3 with a discussion of the direction of change and how this can be understood as a cline. Finally, section 6.3.4 explains how grammaticalization can be understood as the constructional change into a new form-meaning pair, whereas section 6.3.5 deals more specifically with how grammaticalization in the wider TAM domain tends to proceed in Bantu languages.

6.3.2 The different facets of change within grammaticalization: conceptual and formal change

This section discusses the composite process of change that characterizes grammaticalization. Fundamentally, grammaticalization is seen as a linguistic change consisting of both conceptual (i.e. pragmatic and semantic) as well as formal modifications, shifting the status of an expression from lexical (or less grammatical) to grammatical. That is, grammaticalization is seen as a change in meaning which also tends to affect the structure of an expression. This

[71] Heine & Kuteva (2002:2 and elsewhere) arguably also miss this aspect in their definition of grammaticalization: "the development from lexical to grammatical forms and from grammatical to even more grammatical forms". Notice, however, that in the very next sentence they continue: "Since the development of grammatical forms is not independent of the constructions to which they belong, the study of grammaticalization is also concerned with *constructions* and with *even larger discourse segments* [my emphasis]".

major division between conceptual and formal change will serve as the overarching point of departure for this presentation and for the discussion in the subsequent sub-sections.

However, for a more fine-grained division, I will make use of Heine's conceptualization of grammaticalization as consisting of four "parameters" or "mechanisms" of change, developed by Heine in various works with several co-authors (Heine 1993:54-58, Heine & Kuteva 2002, 2005, 2007, 2011:697, Heine & Dunham 2010:33-34, Heine & Narrog 2009). Figure 6.**1** presents these parameters, while simultaneously attempting to capture how they interact with the wider conceptualization of grammar and change. As seen in this figure, grammaticalization is seen in this framework as involving four parameters or mechanisms of change. These parameters are extension, desemanticalization, decategorialization and erosion.

	Parameters	**Linguistic domain**	**Type of change**	**Direction**
1.	Extension	Pragmatics	Conceptual change	
2.	Desemanticalization	Semantics		
3.	Decategorialization	Morpho-syntax	Formal change	
4.	Erosion	Phonetics		

Figure 6.1. The parameters of grammaticalization

The first parameter – extension – refers to the fact that it is the extension of usage of a certain expression into a certain context which triggers the reinterpretation of a new grammatical meaning. As a result, the expression undergoes desemanticalization. This second parameter of change refers to the fact that the original (typically lexical) meaning of the expression is lost or "bleached" (Sweetser 1988), as a result of its extension into functional usage. As will be apparent in the next section, the choice of terms such as "desemanticalization" and "bleaching" are a bit problematic, however, as the loss or "bleaching" of a typically more referential meaning on the one hand is also accompanied by the acquisition of a typically more general functional - relational and formulaic or "procedural" (Traugott & Trousdale 2013) - meaning on the other.

According to this model, it is reconceptualization in terms of extension and desemanticalization of an expression that triggers further formal change. Thus, decategorialization – the third parameter – refers to the loss of morpho-syntactic characteristics of the original source expression.[72] The fourth and final parameter is erosion. This refers to the loss of phonetic substance of the grammaticalized expression in comparison to its source.

As inferred from this brief presentation, the different parameters can be roughly linked to different parts of the linguistic system. Thus, extension is a pragmatic mechanism, whereas desemanticalization relates to semantics, decategorialization to morpho-syntax and erosion to phonetics. As mentioned, these parameters can also crop up as representing a larger bifocal

[72] This term might actually also be a bit unfortunate on the same grounds as for "desemanticalization". As pointed out by Lehman (2004), it might be more appropriate to refer to this mechanism as "recategorialization", as the recruitment of an item into a grammatical class involves not only a loss of previous morpho-syntactic status but also the gaining of a more rigid structural status (cf. Croft's (2000) notion of "rigidification").

set of types of change: conceptual – i.e. pragmatic-semantic – mechanisms of change, and formal – i.e. morphosyntactic and phonetic – processes of change. This larger division is represented in the next to last column of the figure and with the dotted line which separates these two categories.

Finally, the arrow in the rightmost column of the figure is added, indicating, to begin with, that grammaticalization is understood as being a unidirectional process of change and that the process of change tends to occur in this specific order. The arrow also indicates that these mechanisms of change do not work in a discrete manner. The figure instead symbolizes a continuum or a chain-like change where these different mechanisms represent intermediate steps of grammaticalization. This also means that, although a canonical case of grammaticalization contains all these steps or stages of change, they are not all a prerequisite for an expression to be grammaticalized, as grammaticalization is characterized as an ongoing and gradual process. The direction of change is further discussed in section 6.3.3. Before discussing the direction of grammaticalization, however, the following two subsections will address the mechanisms of change more extensively, as encompassed within the broader type of conceptual and formal change.

These parameters are presented here because together they provide a convenient and intelligible overview of the process of grammaticalization. The individual parameters also represent focal points for the various micro-processes involved in the bigger composite change of the conceptual and formal reanalysis of a source item or construction. Notice, however, that while these parameters form an excellent point of reference, they are not totally unproblematic or sufficient in accounting for the full processes of change that are characteristic of grammaticalization. Consequently, the remainder of section 6.3 also offers attempts to problematize and to reinforce this conceptualization.

6.3.2.1 Conceptual change

Heine & Kuteva (2007: 16) - among many other scholars - argue that (synchronic) language is the product of past processes of social and linguistic interaction and also that linguistic change, including grammaticalization, is an unintentional by-product of this practice. Fundamentally, grammaticalization, whether triggered by the creativeness of the speaker or by the mismatch in the interpretation of the hearer, goes back to a more general tactic in the human conceptualization of the "exploitation of old means for novel functions" (Heine 1993:150). Crucially, the recruitment of a more referential lexical item for use as a more schematic and formulaic grammatical marker is the result of using linguistic material referring to a more concrete content in order to express a more abstract notion, as pointed out by Heine & Kuteva (2007:45; see also Traugott 1980). Although this tactic of extension from concrete to abstract at first appears to be more reminiscent of a metaphorical transition, the fine-grained analysis of the micro-steps of conceptual change within grammaticalization has been proven to be more metonymic in character (see Traugott & Dasher 2002; Traugott & Hopper 2003, chapter 4; Traugott & Trousdale 2013:74-75; Heine 2002).

More specifically, this metonymic alteration is described as involving a pragmatic shift where invited inferences (implications) that arise in connection to an expression in a certain context

undergo strengthening and conventionalization over time and eventually acquire a meaning of their own. That is, there is a shift in the semantic range of an expression, causing a polysemic split (Heine & Reh 1982) between the old lexical (or less grammatical) variant and this new more grammatical variant of the expression (see also Kuteva 2001:17, chapter 4). One important pragmatic-semantic driving force in grammaticalization is subjectification, i.e. the reinterpretation of an expression as conveying the speaker's personal attitude rather than a more objective notion (see e.g. the contributions in Davidse et al 2010). Subjectification appears specifically to be an important factor at play in the grammaticalization of modal verbs in Manda. Consequently, it is discussed in more detail in chapter 10 in this thesis, which addresses modal verbs.

According to Heine (2002), this shift in meaning, eventually leading to a polysemic split and the rise of a new grammatical marker, can be schematized as a scenario of gradual extension in usage – i.e. the first parameter of Figure 6.1 in the previous section – which takes place before its new meaning gets conventionalized. Heine (2002; see also Heine & Dunham 2010) proposes that an expression extends through two contexts and thus through two stages of pragmatic-semantic development, viz. "Bridging contexts" and "Switch contexts". Bridging contexts – similar to Diewald's (1999, 2002) concept of "critical contexts"– refer to the kinds of contexts that give rise to new associations, making an expression ambiguous between its original reading and a new secondary one. As described by Heine & Narrog (2009), the expression of *(be) going to* in example (2) in English is, for instance, ambiguous between the concrete, physical reading of motion (with a purpose) of the lexical verb, and the grammatical future tense reading of the prediction of an event that will occur in a later temporal setting.

(2) *Mary **is going to** buy vegetables* [Heine & Narrog (2009:412)]

Switch contexts – similar to Diewald's (1999, 2002) "isolating contexts" – refer to contexts where the expression may occur with its new target meaning but where a reading with the original source meaning would be infelicitous. Thus, in example (3) the lexical source meaning of motion away from the deictic center can be ruled out, as such a reading would be incompatible with the semantics of motion towards the deictic center as expressed in the second verb 'come' (see also Kuteva 2001:20).

(3) *Mary **is going to** come soon* [Heine & Narrog (2009:412)]

Switch contexts thus represent a later stage of development, where the source meaning has undergone desemanticalization – i.e. the second parameter of Figure 6.**1** – as some semantic traits of the original expression have unambiguously been lost and thus a new expression has arisen. This possibility of the grammaticalized expression occurring in an extended set of contexts also means that the pragmatic-semantic range has extended in comparison with the original expression, as pointed out by Traugott & Hopper (2003:82-83). That is, the bleaching of the original meaning coincides with the possibility for the expression to expand into new contexts and broaden in collocational range. Or, to use the terminology of Bybee (2003), it has expanded in type frequency. Thus, as pointed out by Traugott (2015), these pragmatic-semantic changes of expansion connected to grammaticalization should not only be referred to as a case of semantic reduction, as terms like "desemanticalization" or "bleaching" imply.

Rather, grammaticalization has to be seen as consisting of a process of conceptual "loss-and-gain" or "reduction" and "expansion" (Traugott & Trousdale 2013), as the loss of the original semantics with a more formulaic use also simultaneously entails that the grammaticalized expression is allowed to occur in more contexts and in collocations not possible for its lexical counterpart. This phenomenon has been referred to variedly as the relaxation of selectional restrictions (see e.g. Brinton 1991; Bybee et al 1994:6; Grossmann & Polis 2014) and as expansion (Himmelmann 2004). In addition to collocation with a verb of directly opposite semantics, as in example (3) above, there are other examples in the literature of a relaxation or expansion of *(be) going to* in English. They include the extension of collocational range from activity verbs only to also include stative verbs and experiential verbs like 'like' and 'hear' (Hopper & Traugott 2003:89; Traugott 2015), and the possibility of occurring with an expletive subject (Hopper & Dasher 2002:84).

In addition to this, some senses of the original semantics typically do not disappear either, but are retained in the new expression. This is what Hopper (1991) has referred to as "persistence". This "remnant flavor" (Bybee et al 1994:15-19) may still impose some restrictions or have some influence on the contexts in which the new expression may appear. For example, according to Hopper & Traugott (2003:3; see also Bybee & Pagliuca 1987), the original purposive reading of the lexical verb *go* in the *(be) going to* construction in English still constrains its use as an auxiliary, but also makes it possible for it to occur in constructions where other future tense markers such as 'will' cannot occur. This is illustrated in (4).

(4) a. *If interest rates **are going to** climb, we'll have to change our plans*
b. ***If interest rates will climb, we'll have to change our plans* [Hopper & Traugott (2003:3)]

Crucially, the source meaning affects and to some extent even determines the outcome of the grammatical marker, i.e. which grammatical concept the new expression may end up marking. For example, Bybee et al (1994:18) claim that a lexical source like 'finish' may end up as a TAM marker expressing completive or perfective aspect, but not progressive or future. Likewise, Kuteva (2001:22) points out that although a construction 'come to' has often been grammaticalized into a future marker cross-linguistically, a construction 'come from' never has. As will be further discussed in section 6.4.1.1, the concept of persistence also forms an important analytical tool when attempting to link a grammatical marker with its etymon.

The conceptual change described here, i.e. the reinterpretation induced by context (Heine 1991, 2002) and the semantic split of an expression from a less to a more grammatical marker, also implies a syntactic re-bracketing. For example, Hopper & Traugott (2003:3, 51, 69) show that English *(be) going to* is reanalyzed from main verb + infinitival adjunct to auxiliary + main verb, e.g. *[I am going [to marry Bill]]* to *[I [am going to] marry Bill]*. This syntactic shift may also be further conventionalized formally. These formal indications are what we will turn our attention to in the following section.

6.3.2.2 Formal change

As described in the previous section, the conceptual shift of an expression and the subsequent acquisition of a new grammatical meaning entails that this expression extends in frequency in discourse. In addition, works like Heine (1993:180, 1994:267-268), Givón (2000) and Croft

(2000:118) argue that the conceptual shift creates asymmetry in the language in the form of a polysemous pattern, instead of the isomorphic one-to-one representation of form and meaning of the original expression. As a consequence, there is both an economic and an iconic impetus to mark the shift in meaning of the grammaticalized expression with additional formal change, in order to reduce the effort of uttering a constantly recurring expression (Bybee 2006) and also to mark the functional difference between the new expression and its source.

This shift in meaning may be marked both in the morpho-syntax and phonetically. Typically, this marking of the new expression as autonomous from its etymon involves reductions of different kinds in relation to a previous lexical (or less grammatical) status, thus conforming to the third and the fourth parameters of decategorialization and erosion (see Figure 6.1). With regard to morpho-syntactic change, a grammaticalized expression loses or neutralizes properties characteristic of the original status which are of no relevance for the new expression, as work like Hopper (1991) and Heine & Narrog (2009:407) shows. Moreover, as pointed out by Lehmann (2015:167), the newly grammaticalized expression tends to become more bounded, i.e. marked by a stronger cohesion and dependence on other constituents and by being more fixed in a single syntagmatic position.[73]

The new functional meaning may also be marked by phonetic reduction, i.e. the parameter of erosion (occasionally also referred to as "attrition" or "loss in phonological integrity", following Lehmann (2015:134)). Heine & Narrog (2009:407-408) list four typical cases of erosion:

> i) Loss of phonetic segments, including loss of full syllables.
>
> ii) Loss of suprasegmental properties, such as stress, tone or intonation.
>
> iii) Loss of phonetic autonomy and adaptation to adjacent phonetic units. [= "coalescence", in Lehmann's (2015:165, 174) terms]
>
> iv) Phonetic simplification.

Ultimately, this reduction can be connected to the extension of usage described in the preceding section 6.3.2.1, both with regard to the extension in collocational range and, as a consequence, with regard to more general utterance frequency. As shown in Bybee (2006), this extension in usage typically triggers effects of routinization, such as overlap in articulation and reduction in form. An example of these processes of formal change is once again provided by the English future *going to* and, more specifically, its alternative formal instantiation as *gonna* in more colloquial varieties. Note that, in this "compressed" and "unsegmentable" form (Bybee et al 1994:6), the expression is no longer ambiguous between a lexical and a grammatical meaning. As pointed out e.g. by Heine & Narrog (2009:424) and Heine (1993:52), in its eroded form *gonna*, the expression can only be interpreted as expressing a grammaticalized meaning and not the original lexical meaning of motion. As a

[73] This is at least the case for the grammatical markers discussed in this thesis. It is more problematic in relation to discourse markers, however. See e.g. Haselow (2015) for a critique of this "narrow" view on grammar and consequently grammaticalization.

consequence it may no longer occur with a locative phrase adjunct, like 'college' in example (5). Thus, *gonna* not only represents phonetic loss but it also more explicitly manifests its auxiliary status as a constituent dependent on the second (now main) verb.

(5) ***Bill's gonna college after all* [Hopper & Traugott (2003:1)]

As pointed out by Traugott (2015:69), this re-wiring of both the semantic as well as the formal character of the original expression represents a more complete dissociation from the source expression and more explicitly marks the full development into a new and autonomous grammatical form-meaning pair. This approach of grammatical constructionalization (Traugott & Trousdale 2013, Traugott 2015) is further touched upon in section 6.3.4. The next section discusses the assumption that grammaticalization is a unidirectional process of change.

6.3.3 Direction of change

An important idea and a foundational hypothesis with regard to the concept of grammaticalization is that it constitutes a unidirectional process of change, whereby a linguistic item or construction moves from being less to more grammatical (along the parameters of conceptual and formal change described in Figure 6.**1**). Consequently, unidirectionality is also part of the general characterization of grammaticalization by Hopper & Traugott (2003). The idea of unidirectional change further entails that there are predictable patterns of change with regard to the process of grammaticalization.[74]

As described above, the grammaticalization framework encompasses the evolution of grammar as a non-discrete, continuous process of change. This "evolutionary continuum" (Heine & Reh 1984:14) has been described with slightly different terms, e.g. as a "route" (Givón 2001), a "scale" (Lehman 2015) or a "channel" (Heine & Reh 1984). Heine & Kuteva (2002) refer to it as a "chain" to emphasize the link-like overlap of bridging contexts and polysemic patterns, as described in the previous section. Here, I will use the term "cline", following Hopper & Traugott (2003).

As pointed out by Traugott (2006:110; also Traugott & Dasher 2002:86), regardless of the specific term used, all of these terms are metaphors for a similar "macro-schema", encompassing the continuum of conceptual and formal changes described in section 6.3.2 that lead from a lesser to a greater grammaticalized status of an expression. It accounts for the focal points of historical change, reflected synchronically in more or less grammaticalized variants of a linguistic item or construction. It is conceptualized as moving from left to right,

[74] The issue of grammaticalization as unidirectional is hotly debated and counter-examples to this tendency have been presented (i.e. "de-grammaticalization"; see for example Norde 2009). Without getting too mixed up in this debate, I believe it suffices to mention here that, as has been pointed out e.g. by Traugott (2010), the directionality of change presented in section 6.3.3 does not constitute any absolute, deterministic universal; this is true of most of the so-called "universals" induced from typological research (see also Croft 2003:51-52). Thus, the unidirectionality of grammaticalization is to be seen as representing a "robust tendency" (Hopper & Traugott 2003:313), that may serve as a probabilistic tool and as a heuristic guiding the study of grammatical change (see also Hopper & Traugott 2003:17, chapter 5; Traugott 2010a).

where a focal point to the left constitutes an earlier stage of an expression. The cline represented in (6) is adapted from Hopper & Traugott (2003:7).

(6) content item > grammatical word > clitic > inflectional affix

Although this can be treated as the canonical cline of unidirectional change within grammaticalization theory, some alternatives have been proposed. For instance, Kuteva (2001:6; see also Lehmann 2015:15-16) proposes the alternative cline illustrated in (7), which captures the more typical overarching change of a whole construction being subjugated to grammaticalization.

(7) collocation > syntactization > morphologization

In addition, the cline in (6) can be modified or fine-tuned by adding two further categories, viz. a "flexional" or "fused" form[75] and "zero" at the right edge. Givón (1979:209; 2001; see also Lehmann 2015:15-16) has pointed out that at a more grammaticalized stage, an affix can be marked by further erosion such as assimilation, coalescence or other morphonological shifts. At a final stage, the marker may even disappear totally from the segmental surface. This may mean that it still has a linguistic function but surfaces as an extra-segmental marker (e.g. as a tone). Güldemann (2003) suggests that the difference between the "nominal in citation" and an "identificational clause" in Holoholo (Bantu D.28) illustrate such a scenario.

(8) *baanǐ* (< **baáni*) vs. *baánǐ* (< * *ní baáni*)
'who?' 'who are they?'
[Holoholo (D.28); Güldemann (2003:190; citing Spaandock 1973:98)]

This can also mean that a former grammatical marker gets totally levelled out and disappears from the language. In that case, it tends to be replaced by some alternative, segmentally more substantive, construction to express the same function. This construction may, in turn, develop further along these pathways (and eventually be replaced by something else as well). Thus, Givón (1979; 2009:43) concludes that although grammaticalization is portrayed as a unidirectional pathway, it may essentially be seen as a cyclic process.[76] Notice, however, that this continuation within the pathway of grammaticalization is not to be mistaken as being deterministic. As Traugott (2006, 2010a) explicitly stresses, change does not have to happen in a language. And if it does, nothing prevents it from stopping somewhere along the pathway. Connected to this is also the question of "secondary grammaticalization" (Breban 2014, 2015) or "re-grammaticalization" (a term used by Croft 2000). Secondary grammaticalization refers to the fact that a grammatical item or construction may be re-

[75] Note that Givón (2001:367) refers to this category as an "inflection". To avoid misunderstandings, I have decided not to use this term, since "inflection" commonly has a broader referential range than just referring to fusional morphology.
[76] Examples of grammaticalization processes presented as cycles rather than pathways of change include Jespersen's Cycle (see van der Auwera 2009) affecting standard negation (see 11.2.3 for a description of this phenomenon and how it has affected the Manda language). Other cycles include the "Negative Existential Cycle" (Croft 1991; van Gelderen 2008; Veselinova 2013), and recently, a "Quotative cycle" proposed for Bantu by Nicolle (2016).

interpreted and acquire new semantic meanings and/or formal characteristics, and thus transform and diverge into another grammatical marker. Thus, secondary grammaticalization can be seen as representing a movement further along the cline in (6). As implied in Hopper & Traugott's (2003:18) definition of grammaticalization, the ultimate origin is a lexical item or construction (i.e. which has undergone primary grammaticalization). As pointed out by Breban (2014, 2015), however, several cases of "secondary grammaticalization" discussed in the literature, can arguably be seen as starting from the reconceptualization of an originally grammatical rather than lexical source.

The cline in (6) can also be adapted to account for specific word class development schemas, i.e. for how items of a certain lexical type tend to develop into expressing grammatical functions. The specific cline most crucial for our study is the so-called "verb-to-TAM chain", as presented in Heine (1993:54-66; see also Hopper & Traugott 2003:111; Bybee & Dahl 1989). A simplified schematization of this chain is illustrated in (9).

(9) lexical verb > auxiliary > affix

As the name implies, this chain accounts for the prototypical route of a lexical verb evolving into a TAM affix, via a state of being an auxiliary. Specifically, it is an element-based description of the development of an auxiliary as a linguistic item with a status somewhere between the endpoints of being a lexical verb and an affix. Thus, the category "auxiliary" comes to represent several ambiguous states, mostly similar to the categories of "grammatical word" and "clitic" found in the cline in (6). As discussed further in section 6.4.2.2, this characterization of an auxiliary as an element originating from a verb and with verb-like behaviors, yet with functional and formal features which differentiates it from a lexical verb, can also be employed to extract and define elements of auxiliary status in Manda.

As shown in work like Heine (1993), the grammaticalization route of a lexical verb becoming an affix typically starts in a construction where this verb takes an uninflected (nominalized or infinitive) second verb as a complement. As a result of the mechanism of grammaticalization described in Figure 6.1, the status of the first verb in the construction may shift rightwards along the cline in (9), first to an auxiliary and eventually to an affix. The shift of the English *(be) going to* described in the previous section clearly represents the initial shift from a lexical verb to the status of a grammatical auxiliary. In Heine & Kuteva (2002:161), there is an example from Zulu (Bantu S.42) of the grammaticalization of a source verb with a similar meaning, namely *-ya* 'go', which also results in the evolution of a marker of similar function, namely future tense. However, as shown in (10), this grammaticalization process has moved further along the chain from a periphrastic construction to univerbation with the incorporation of the auxiliary verb as an inflectional morpheme into the verbal word. Thus, in (10), *-ya* is an inflected lexical verb and in (10) it is a fused prefix expressing the grammatical function of (distal) future tense. (The infinitive marker in this example is still formally retained but it has - more or less - lost its function.)

(10) a. *ba-**ya*** *e-Goli*
SM3SG-**go** LOC-Goli
'they are going to Johannesburg (eGoli)'

b. *ba-**ya**-ku-fika*
SM3SG-**FUT**-INF-arrive
'they will arrive'
[Zulu (S.42); Mkatshwa (1991:97), cited in Heine & Kuteva (2002:161)]

As argued by Lehmann (1985:310), an important feature of the grammaticalization cline - in all of its various representations - is that it accounts for both synchronic variation and diachronic change. To begin with, it accounts for how a grammatical expression develops historically, e.g. the evolution of *(be) going to* from Middle English to Modern English. In addition, however, it serves as a schema for ordering subcategories of variation encountered in a specific expression synchronically, as is the case for both *(be) going to ~ gonna* in English and *-ya* 'go' ~ *-ya-* FUT in Zulu. That is, variants of the same expression may surface simultaneously at different focal points in the cline, reflecting the different possibilities a speaker has to express a certain concept. These variations can be either conceptual and formal, differing either semantically or structurally, or both, at the same time.

The synchronic variation or gradience in the representation of an expression like the one we see in (10) serves, in addition, as an indication of the gradual changes it has been subjected to historically. As pointed out by Brinton & Traugott (2005) and Traugott & Trousdale (2010), synchronic gradience in this sense implies a gradual change historically, in this case due to the mechanism of grammaticalization. This synchronic variation, reflecting more or less grammaticalized stages of an expression, is referred to as "layering" (e.g. by Hopper & Traugott 2003:49) and as "layers" (e.g. by Heine & Kuteva 2007). These terms are often ascribed to the seminal paper by Hopper (1991). What Hopper originally seems to have meant with layering was the fact that different linguistic items or constructions may compete to express a single function in a language; for instance, English *going to* competes with *will* and *shall* for expressing future tense. In later literature on grammaticalization, however, layering has come to refer more explicitly to the existence of different instantiations of the same expression as a result of diachronic processes, like *going to* and *gonna* (see Fischer 2007:150; Beijering 2012:44). This is also how I have chosen to use this term in this thesis.

6.3.4 Grammaticalization as grammatical constructionalization

Recent years have witnessed an increase in the intersection of theories on grammaticalization with the theoretical framework of construction grammar. This has been most notably advanced in Traugott & Trousdale (2013) and Traugott (2015).

Construction grammar stresses that language consists of constructions, i.e. symbolic pairings unifying form – i.e. syntactic, morphological and phonological features - with meaning – i.e. semantic and pragmatic features and discourse function, arranged in conceptual networks (Traugott & Trousdale 2013: 3, Croft 2013). These constructions may vary in size, ranging

from complex clauses to affixes, and in their level of schematicity, i.e. if they are substantive and item-specific or abstract and underspecified (Traugott & Trousdale 2013:13).

Crucially for the discussion here, a more lexical ("contentful") form-meaning pair may shift into a new more grammatical ("procedural") form-meaning pair through incremental stages of change. That is, it might undergo grammatical constructionalization. As argued by Traugott (2015), this process takes place via step-wise micro-changes of the various features of the form and meaning of a construction, typically by shifts on the meaning side rendering in a semantic-syntax mismatch which, in turn, trigger also a formal reconceptualization. The "minimal" condition of grammatical constructionalization is the reanalysis ("neoanalysis") of both meaning and form, as this is the point where a new form-meaning pair has been created (Traugott & Trousdale 2013:22).[77] However, additional changes may continue to take place also after constructionalization. As argued by Traugott (2015; Traugott & Trousdale 2013:113-122), grammatical constructionalization leads to an increase in schematicity and a decrease in compositionality – i.e. a shift to a more abstract, less substantive construction, in turn manifested in the decreased transparency of the original content meaning. This process also leads to an increase in productivity, that is, an increase in collocational range.

As Traugott (2015) concludes (see also Traugott & Trousdale 2013:28), this approach encompasses much of what has been discussed in the previous grammaticalization literature and as summarized in the previous sections (at least with regard to the grammaticalization at the "micro-level" of individual construction, which is the focus of this study). Thus, increase in schematicity can be linked to the recruitment of more concrete linguistic material to be used to express a more abstract notion. Increase in productivity can be linked to expansion in usage and decrease in compositionality can, in turn, be compared to both semantic bleaching and arguably also to erosion. Furthermore, the conceptualization of grammatical constructionalization as the definite split into a new form-meaning pair is "approximately similar to Heine's switch context" (Traugott 2015:73). However, an important contribution of this approach is the more thorough focus on both the functional and formal implications of grammatical change and the links between them. As Traugott (2015) points out, earlier frameworks developed to capture grammaticalization have typically prioritized one of these notions on the behalf of the other. This is for example manifested in the clines cited in section 6.3.3, which give the appearance of solely focusing on formal change. Applying this specific framework to the grammaticalization of *going (to)* in English, for example, Traugott (2015) shows that several micro-steps of semantic change (i.e. various changes of the various features) started almost 100 years before the structural reanalysis took place and thus the forming of a new form-meaning pair expressing future tense. This study is influenced by this approach most explicitly in the sense that it attempts to capture cases of grammaticalization as both a conceptual and formal change, i.e. as the change of an expression into a new form-meaning pair.

[77] This focus on both form and function can also be compared to another recent approach to grammaticalization, namely Norde and Beijering's (2014) "clustering approach", treating grammaticalization as a specific composite change where the "main mechanisms" and thus compulsory appliances are formal reanalysis and semantic reinterpretation.

6.3.5 Grammaticalization in Bantu

Before turning our attention more specifically to the reconstruction of grammaticalization of verbal markers in Manda, it is necessary to offer a description of the specific typological characteristics of Bantu languages that more generally constrain the grammaticalization pathways of verbal markers.

To begin with, Bantu languages generally have a Subject-Verb-Object word order and, importantly, they are agglutinative. Nurse (2008:21) characterizes them as verb-centered, having a rich set of grammatical information encoded as affixes on the main verb (Nurse 2008, chapter 2). (See 5.4.1 for a further description of the "morphotaxis" of the verb, i.e. the multitude of positions and internal categorizations of the various affixes in Bantu and Manda.) Verbs are often also recruited as function words for expressing a rich variety of grammatical concepts on the main predicate verb (Nurse 2008:29-31, 59). Given the fact that Bantu languages tend both to encode a high number of grammatical functions directly on the verb and to derive function words from verbs it comes a no surprise that the canonical grammaticalization path within the Bantu family is a verb-to-verb compound resulting in auxiliation and subsequently affixation, as illustrated in the Zulu example (10) in section 6.3.3.

As pointed out in several works – both specifically from a Bantuist perspective like Nurse (2008:25), Anderson (2011) and Güldemann (2003), but also in cross-linguistic studies and studies on other language families, like Bybee et al (1994:115-21) and Mithun (1991; see also Fischer (2007:66) – there is a typological coherence between agglutinative languages and a tendency toward rapid and frequent formal grammaticalization on the verb. That is, a synthetic, large and complex predicate verb form or morphotaxis typically more easily attracts and fuses with previously free-standing linguistic items. According to Nurse (2008:25), periphrastic constructions cross-Bantu tend to fuse quickly in comparison to other more isolating language families but also to (traditionally) more synthetic families like Germanic and Romance. Thus, there are, and have been, constant changes in the structure and semantic categorization of the formatives within the verbal word relative to Proto-Bantu (Nurse 2007a) but also language-internally (Nurse 2008:25).

As noted e.g. by Nurse (2008:61), the tendency toward fusion is further spurred on by the syntagmatic context, as Bantu languages tend to have both preposed auxiliaries, that is, auxiliaries occurring before the main verb complex, and prefixes and thus formatives expressing the range of inflective functions, also occur before the lexical stem. (11) is a schematization of this typical pathway of grammaticalization. Notice that this schema repeats the steps of (9) but takes the whole construction in to account.

(11) i. Verb – complement
ii. Preposed auxiliary – full verb
iii. Prefix – stem

Example (12), adapted from Heine (1993:64-65; see also Heine & Reh 1984, Heine 2010, Givón 1973), is a (schematic) reconstruction of the grammaticalization of 'want' + infinitive to a future tense marker in Swahili (G.42) illustrating this development.

(12) i.	*a-**taka** # ku-ja*	's/he wants to come'
	SM3SG.PRS-**want** # INF-come	
i. ~ii.	*a-**taka** # ku-ja*	's/he wants to come' ~ 's/he will come'
iii.	*a-**ta**-kuja*	's/he will come'

[Swahili (G.42); adapted from Heine (1993:64-65)]

As seen in (12), the future prefix *ta-* in Swahili is argued to originate from the source verb *-taka* 'want' (i.e. a verb with the same lexical meaning as the source of the English future *(wi)ll*), in collocation with an infinitive verb complement at stage (i). Stages (i~ii) represent the bridging context and the ambiguous status between the original lexical and a future auxiliary *-taka*. At stage iii, the former verb *-taka* has become a prefix. It not only has an unambiguous status as marking future tense meaning, it has also eroded into *ta-* and fused with *kuja* 'come'. The infinitive marker *ku-* is only retained as an "empty morph" to support monosyllabic verb stems like *kuja* in this construction, otherwise it is fully dropped. The technique of internal reconstruction employed here will be further described in section 6.4.1.1.

As pointed out by Güldemann (2003), the reconstruction of grammatical change is also facilitated by the fact that the Bantu language family is a large family consisting of closely related languages[78], which means that there is a high chance that a grammaticalization process that occurs in one Bantu language often resurfaces with the same source cognates – in a similar or another stage – in another language. This possibility of comparison further entails that despite a general lack of extensive diachronic data for Bantu languages – with written material rarely dating back further than to missionary-produced material from the 19th Century (KiKongo and Swahili being two notable exceptions) – it is possible to reconstruct grammaticalization processes reflected as layers in the synchronic variation in related languages. This method is further discussed in section 6.4.1.2.

As exemplified with Zulu in example (10), as well as with the Swahili one in (12), the typical auxiliation path – i.e. the gradual grammaticalization of a lexical verb into an affix as schematized in (9) and (11) – occurs in constructions where the verb stands in collocation with a second verb in a non-finite form. As also seen in these examples of Bantu languages, the infinitive form of this second complement verb is typically the noun class prefix 15 *ku-*, specifically used for marking de-verbal nouns (cf. 5.3.1.9). However, as pointed out in work such as Meinhof (1948:110-111), Nurse (2000, 2008:29, 59) and Güldemann (1999, 2003), it is also common in Bantu languages for auxiliary constructions to originate from serial verb

[78]Bostoen (2004:132) has compared the position of the Bantu branch – estimated to consist of somewhere between 300-600 languages (Nurse & Philippson 2003:167) – within the Niger-Congo phylum to the relation of West Scandinavian or Frisian to Indo-European.

constructions where the two verbs are inflected with the same subject marker,[79] i.e. constructions of a verb and an "equi-subject complement" (Givón 2001:264). This grammaticalization scenario can be illustrated with Botne's (1998) reconstruction of future markers, who uses comparison of synchronic variation with a set of related Bantu languages as a tool for reconstruction. In this example from Maãiha (P.25), the original meaning of the (defective) verb *-či* has already bleached to a future marker, i.e. it has already moved from stage (i) to stage (ii) of the schema in (11), but we still find a verb construction consisting of two verbs, both inflected for the same subject.

(13) *a-**či*** *a-hen-e*
SM3SGj-(**do/say>)FUT** SM3SGj-go-SBJ
's/he will go' [Maãiha (P.25); Botne (1998:210)]

As pointed out by Güldemann (2003:186), a typically formal effect of such constructions when they undergo grammaticalization is that the first subject marker is dropped and subsequently coalesces with the main verb stem. This is seen in the cognate construction of the neighboring language Mwera (P.22), as Botne (1998) shows. As illustrated in (14), the subject marker has not only disappeared but the future marker has also fused with the predicate verb,[80] thus representing the shift to a prefix, i.e. to stage (iii) of the schema in (11).

(14) ***ci**-ni-end-e* *malaŵi*
FUT-SM1SG-go-SBJ tomorrow
'I will go tomorrow' [Mwera (P.22); Harries (1950:98), cf. Botne (1998:211)]

Heine & Reh (1984:114; see also Anderson 2011:125) refer to these two types of construction resulting in auxiliation as two different kinds of "periphrasis": a) "nominal periphrasis", referring to the construction in (12) with an auxiliary verb and a second verb with de-verbal (infinitive) morphology, and b) "serial periphrasis", referring to the construction in (13) consisting of an auxiliary verb and a second verb inflected for the same subject.

According to Heine & Reh (1984:115), the grammaticalization of periphrasis types a) and b) often leads to the same "results", by which they mean that similar grammatical concepts are expressed. Structurally, however, there is a difference at the stage of affixation, as Botne (1998) and Güldemann (1999, 2003) have demonstrated. That is, whereas a) tends to end up post-initially in the verbal "morphotaxis" (as seen in (10) and (12) above), b) tends to end up pre-initially, as seen in (14) above. These two different paths of verbal grammaticalization are schematized and contrasted in (15) below.

[79] It should be noticed that Güldemann (2003:180) also discusses what he calls "non-finite predicators" such as the invariable copula **ni* '(it) is' (see example (8)) as possible items to fuse with the predicate verb in these kinds of construction (see also Nurse 2008:288-289).
[80] That fusion has occurred can often be derived from prosodic clues, such as alternation in tone and/or other accentual patterns. See e.g. Muzale (1998:42) for a nice illustration on how grammaticalization shift the stress pattern of the future in Swahili, i.e. from two individually stressed verbs to one verbal word with a single (penultimate) stress.

(15) a. i. Verb – complement — SM-$VERB_1$ # ku-$VERB_2$
ii. Preposed auxiliary – full verb — SM-AUX # (ku)-$VERB_2$
iii. Prefix – stem — SM-prefix-$VERB_2$

b. i. Verb – complement — SMj-$VERB_1$ # SMj-$VERB_2$
ii. Preposed auxiliary – full verb — SMj-AUX # (SMj)-$VERB_2$
iii. Prefix – stem — SM-prefix-$VERB_2$

6.4 Assumptions and methods for reconstruction

From the conceptual framework presented in the previous section follows a set of assumptions and methodological tools to be used in order to account for the (emerging) grammar encountered in the Manda data. The method employed is reminiscent of what Comrie (2002:49) has referred to as "generalized internal reconstruction" (see also Givón 2000). This means trying to reconstruct not only (morpho-)phonemic change in a language, which is what "internal reconstruction" traditionally refers to and what is partly employed also in this study in order to trace grammatical material in Manda to Proto-Bantu, as described in section 6.2. Also bigger chunks of formal and also conceptual change will be reconstructed. As a technique, this means going "upwards" along the conceptual and formal parameters described in section 6.3.2, Figure 1, as well as "leftwards" along the clines in (5) and (8), discussed in section 6.3.3, governed by the underlying assumption that grammaticalization tends to be an unidirectional process. Crucially, this method of analysis relies on the cross-linguistic and cross-Bantu generalizations explained above, and it is motivated by the approach developed by Kuteva & Heine (2007) and Givón (2000) that languages reveal in their present structure layers of past change along the grammaticalization pathway. Thus, present-day linguistic alternations can be reconstructed to earlier states without that alternation/variation, together with the pathway that lead to this change. Alternatively, there is no alternation, in which case a grammatical expression instead can be hypothesized to be inherited in the language.

In what remains in this chapter we will turn our attention to how I have chosen to organize this kind of internal reconstruction with regard to the wider TAM domain in Manda. This section starts out by describing how comparison, both with regard to internal and external variation, helps to strengthen the reconstructions presented in Manda. It also presents the various sources used. Furthermore, it explains how reconstruction at different stages of the grammaticalization cline also requires different methods to be used, also with regard to those cases where grammatical markers arguably have not evolved from process of grammaticalization but can be accounted for as inherited proto-variants.

6.4.1 Internal and external comparison

There is a lack of extensive historical records in Manda to explicitly provide evidence for diachronic processes of grammatical change. Instead, the establishment of both proto-cognates and the pathways of change described in this thesis must necessarily be seen as reconstructions and thus as hypotheses. With this said, it is my aim to make these hypotheses as robust as possible. There are several different methods employed in order to strengthen the hypotheses of change (and preservation) deduced from the linguistic data of Manda. These methods of analysis will be discussed here. Fundamentally, they can be regarded as consisting

of comparison at different levels. These comparisons can, in turn, be subsumed under two core categories, viz. “internal comparison” and “external comparison”.

6.4.1.1 Internal comparison

With internal comparison, I refer to the analysis of variations in the synchronic data of Manda, that is, the conceptual and formal versatility of a grammatical marker found in data principally collected through fieldwork.[81] Besides the necessity of including the variation encountered in Manda in an adequate description of this language, this data also provides important clues for historical reconstruction, as variation can be seen as layers indicative of chronological change (see section 6.3.3). Thus, as will be shown in the subsequent chapters, the lexical (or less grammatical) source typically still exists together with its grammaticalized counterpart in Manda (i.e. “divergence” (Hopper 1991)), while at the same time lexical and referential (or less grammatical) meanings typically persist in the more functional and schematic expressions of the grammaticalized target expression (i.e. “persistence” (Hopper 1991)). This etymological continuity makes it possible to trace and relate a specific grammatical marker back to its lexical (or less grammatical) etymon synchronically as well. Furthermore, it allows us to pinpoint the differences that have evolved between the original and the grammaticalized expression: for instance, a grammaticalized marker may have expanded in collocational range, on the one hand, but on the other has lost morpho-syntactic properties in relation to its etymon.

One important kind of synchronic evidence for investigating grammaticalization paths as well as earlier instantiations of grammatical markers including loss of morphological complexity, is archaisms. As shown in general work such as Bybee et al (1994), Bybee (2006), Koch (1996, 2015) and Givón (2000:121), as well as in work specifically addressing African/Bantu languages, such as Dimmendaal (2011), Heine & Dunham (2010:40), archaisms provide an insight into earlier productive structures in a language. Structurally, archaisms are often retained in more marked and thus less frequent and dynamic clauses, such as dependent and negated clauses, as pointed out by Dimmendaal (2011:100, 148; see also Koch 1996:219, 2015).[82] An example of this is the future prefix *ta-* in Swahili, discussed in example (12) in section 6.3.5, which still surfaces with the full phonemic shape of the etymon in relative constructions, as illustrated in (16).

(16) *a-**taka**-ye-kuja*
SM3SG-**FUT**-REL3SG-come
‘s/he who will come’ [Heine (1993:51)]

Archaisms are also typically retained in more ritualized discourse genres. Dimmendaal (2011:101) mentions specifically “idiomatic constructions, proverbs, ritualized language and ancient songs”. For this reason, as described in 4.3.2, I have tried to include these genres within my general text collection.

[81] See chapter 4 for a description of field methods used for collecting this data.
[82] Notice that, as described for instance in Bybee (2006) and Hopper & Traugott (2003:128), it is also typically the case that the irregularities in the most frequent expressions are kept from being levelled out as well.

Finally, this study also includes comparisons to the diachronic data that do exist for Manda, namely the New Testament (*Kilagano kya hino kya bambo witu nu njokosi witu Yesu Kristo*), published by the Foreign Bible Society in 1937, and a collection of hymns entitled *Missa mbalafu* (n.d.), published at Likoma Mission Press.[83] They are generally seen as being of high quality and as representing accurate Manda among its speakers (Anderson et al 2003). The translation of the New Testament was performed under the supervision of the Anglican missionary W.P. Johnson until he passed away in 1928, when the work was taken over and finished by his successor T.H. Hicks.[84] The actual translation was accomplished by Manda speakers from Ilela (and thus speaking the southern variety of Manda).[85] It is supposedly inspired by Steere's (1891) translation of the Bible into Swahili (Stanley Kolimba pers. comm. 18-06-15; cf. Pawliková-Vilhanová 2006).[86] This would explain the similarities in the orthography of these two texts and some similarities in terminology, which can ultimately be traced to influences from Arabic-Muslim liturgy (e.g. *shetani* 'Satan' < Arabic *šayṭān* 'devil' (cf. Schadeberg 2009)).[87]

Information about the second text, *Missa Mbalafu*, is unfortunately limited. It consists of roughly 50 pages of hymns.[88] Except for the title and the details of the publishing house, there is no further information about the year of publication or other metadata, including whether the text consists of translations of original Anglican hymns from either English or another language and – if that was the case – who translated them. However, my consultants date this text back to roughly the same time as the New Testament and it is likely that the same people are responsible for the hymnbook as well.

Although admittedly meager in quantity and chronological range, these diachronic sources still provide additional information with regard to the grammatical evolution of Manda.[89]

6.4.1.2 External comparison

Although typologically-induced – and thus intra-genetic – generalizations with regard to grammatical change serve as the more general guidance for this study, the comparative - and thus inter-genetic – method is better able to trace corresponding proto-morphology as well as capture the more fine-grained development connected to the grammaticalization processes.

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[83] Notice that these texts do not mark tone. Moreover, they only mark five vowels, despite Manda having a seven-vowel system (cf. 5.2.1). Furthermore, both the fricative /v/ and the glide /w/ are marked orthographically as <w>.

[84] The Four Gospels (*Maevangel ncheche*) were initially published in 1928.

[85] According to Stanley Kolimba (pers. comm. 18-06-15), the main Manda translators were the following: Petro Nyamavina aka Alfani, Boniface Haule aka Baraka, Shadruck Chale aka Shame and Edwardi Kinyakanyaka Haule aka Salama.

[86] According to Pawliková-Vilhanová (2006:83; see also Sundkler & Steed 2000), Steere's Bible translation was influential and served as a reference book for further Bible translations in the whole of East Africa. This Bible translation most probably influenced Johnson as well, as he travelled to Africa with UMCA under Steere (Anderson-Morshead & Blood 1955:264-65).

[87] According to Barness (1933:195-196), Johnson also had knowledge in both Hebrew and - at least to some extent - Arabic, reportedly to make "Muhammadens" more confident but also to keep his "intellect bright somehow".

[88] I thank Cecilia Haule for the translation of these hymns from Manda to Swahili.

[89] See 2.3 for an outline of recent sources containing Manda language as well as comparative work containing linguistic information on Manda.

Following Dimmendaal (2011:143; also Fox 1995:197), I also believe that internal reconstructions should be used in combination with comparative evidence, as this provides an extra control mechanism for these reconstructions. Consequently, the hypotheses of traces of ancestral material from Proto-Bantu and processes of grammaticalization with regard to Manda will be further strengthened through a finer-grained comparison with its closest neighbors (and occasionally also with other Bantu languages) as well. More generally, the Manda data is linked to what is considered common or canonical Bantu and/or what has been reconstructed for Proto-Bantu, both with regard to inherited material but also with regard to processes of change.

I refer to the fine-grained comparison between Manda and its neighbors as "micro-comparison". This alludes both to the fact that Manda is compared to a small set of languages, and also to the fact that this approach allows for a more careful investigation and corroboration of shared retentions and innovations as well as the "micro"-steps of change, which surface as micro-variations between the different neighbors. (See also Marten & Kula (2012:249), who suggest that micro-variation between Bantu languages can be understood as reflecting different stages of change.) In this way, both formal and functional similarities together with differences in the realization of shared expressions both due to primary as well as secondary grammaticalization, may be detected. The data from the neighboring languages comes from a variety of sources, including secondary material such as grammatical descriptions and dictionaries, consultations with experts and/or native speakers of these languages as well as, to some extent, from field notes collected by me. The different sources consulted for the different languages are listed in Table 6.1 below. Not included here are comparative works such as Johnston (1919-1922), Guthrie (1948, 1967-71) and Nurse (2008). It should be noted that despite my efforts to collect as much information and data as possible on these languages, it remains the case that all these languages, albeit to various degrees, suffer from a shortage of linguistic descriptions and collected language data.

Language	Code	Sources
Pangwa	G.64	Nurse & Philippson (1975); Stirnimann (1983); Cyprian Mwasanga (pers. comm.)
Kisi	G.67	Gray (forthcom., pers. comm.); Ngonyani (2011)
Nyakyusa	M.31	Nurse (1979); Felberg (1996); Persohn (2016; pers. comm.); Amani Lusekelo (pers. comm.); Jeffy Mwakalinga (pers. comm.)
Ngoni	N.12	Spiss (1904)[90]; Ebner (1939, 1953); Nurse & Philippson (1975); Moser (1983); Ngonyani (2003, 2013a,b); Gastor Mapunda (2016, pers. comm.); Grace Lwena (pers. comm.)
Matengo	N.13	Nurse & Philippson (1975); Yoneda (2000, 2006, 2016, pers. comm.); Häflinger (1909), Zimmler (n.d.); Samuel Dennis Kayuni (pers. comm.)
Mpoto	N.14	Nurse & Philippson (1975); Nurse (2007b); Robert Botne (pers. comm.); John Oswald Makwaya (pers. comm.)

Table 6.1. List of linguistic sources for languages neighboring Manda

As discussed in 2.2 and 3.2, the exact genetic heritage of Manda is ambiguous with regard to whether it is originally a Southern Highland language, i.e. most closely related to the G.60 languages of this table, or a Rufiji-Ruvuma language, i.e. most closely related to the N.10 languages. Nyakyusa is also included in the correspondence set because it is a regionally influential language which has had a strong impact on Manda (see 3.2.2.2). In any case, it can be assumed that areal diffusion has been extremely influential also on a structural level in Manda due to intimate contact and mutual social exchange (see Nurse 1988; Parker 1988). As a consequence, the more fine-grained "micro"-comparison includes all of the languages surrounding Manda. Note that this is also in adherence to the notion of a "grammaticalization area" (Heine & Kuteva 2005:182, 2011), i.e. an inclusive approach of regarding contact-induced change and internal innovation of grammaticalization as being able of mutually affecting the spread of grammatical structures in this area. This is also discussed in 3.2.3.

The results of this local comparison are, in turn, also compared with a more general comparison with canonical (widespread) and/or reconstructed Bantu. This study relies on several historical-comparative works presenting reconstructions made for Proto-Bantu. See section 6.2.2 for the works considered with regard to inflectional morphemes of the verbal word. Comparisons relating to lexical roots (as possible sources) were mainly made through the database Bantu Lexical Reconstruction 3 (BLR3) (Bastin et al 2002). This database contains reconstructed roots from several sources, most notably Guthrie (1967-71) and Meeussen (1980). See Schadeberg (2002; see also Bostoen & Bastin 2016, Fleisch 2008) for a

[90] Note that Spiss (1904) is included under the works on Ngoni (N.12) as it contains a dictionary and some additional comments on the variety of "Sutu" or "Neu-kingoni", which arguably became the Ngoni of today. However, his main grammar sketch rather concerns "Alt-kingoni" or "True Ngoni", i.e. an Nguni (S.40) variety. See 3.2.2.1 for the background to this situation.

more elaborate description and problematization of these reconstructions, especially with regard to inadeaquate reconstructions of meaning and meaning (change). As pointed out by Bostoen & Bastin (2016) with regard to BLR3: "The French and English translation fields reflect the present-day cross-linguistic polysemy of an etymon rather than its reconstructed meaning".

Finally, there are situations of contact (i.e. going beyond immediate areal diffusion described above) that have affected and are continuing to affect Manda. The socio-historical circumstances and their influence on the linguistic structure of Manda are topics further described in chapter 3, where also the techniques employed to reconstruct borrowings are discussed. From a linguistic point of view, the most notable influence in Manda comes from Swahili, especially since Tanzanian independence and the subsequent promotion of Swahili from the 1960s onwards. However, the socio-historical impact of the South African Nguni invasion in the 19th Century also affected the language structure of synchronic Manda. The possibilities that grammatical markers in Manda stem from or have been affected by either of these two languages have been taken into account during the analysis of the data as well.

6.4.2 Reconstruction of affixes vs. periphrastic constructions

Part II of this thesis will concentrate on the description of the grammatical markers of the wide TAM domain and account for their origins and further development. These markers can be roughly divided into two major sets, namely synthetic morphemes, in other words affixes, which form an obligatory and fixed part of the verbal word – discussed in chapter 4, and periphrastic markers, typically consisting of auxiliaries but also other free-standing material – discussed in the residuary chapters.[91] There is typically a difference in the historical background connected to this diversity. That is, the affixes are often - but not always - shown to be function morphemes retained from Proto-Bantu (as discussed in section 6.2), whereas the periphrastic markers can be shown to have been derived via grammaticalization from lexical sources (6.3). In those cases an affix origin from a grammaticalization process, the affix and the periphrastic marker can be seen as forming two disparate sets, representing two focal points of the grammaticalization cline as outlined in (6) and (9) in section 6.3.3 above. As a consequence of this, the analysis of these disparate markers also demands slightly different techniques. These different techniques are briefly touched upon in the following two subsections.

6.4.2.1 Reconstructing affixes

As stated in section 6.2, it is often the case that TAM affixes of Manda can be linked to functional morphemes reconstructed already for Proto-Bantu. In such cases, a more "traditional" technique of internal morphological reconstruction is fruitful. For this study, this technique involves reconstructing a morphological form on the basis of (regular) phonetic

[91] Note that there are some additional grammaticalization procedures detected in Manda and accounted for in the following chapters that do not really fit into these two broad sets of formatives versus auxiliary verbs described in this section. Instead, they comprise more of a combination of old formatives and a new periphrasis and/or involve non-verbal material. One example is the evolution of the standard negator discussed in chapter 11.2.3. More complex developments such as these are more thoroughly discussed in the relevant chapters. I consider them as being based on and interrelated with the more general tendencies treated here.

alternations in relation to diachronic sources, the neighboring languages and the proto-form with regard to its phonemic shape and position in the morphotaxis (see Dimmendaal (2011:chapter 6), Fox (1995:185-189) and Koch (1996, 2015).

However, in other cases, TAM affixes (and conjugations) can be understood as originating from grammaticalization processes, more particularly "secondary grammaticalization", as discussed in section 6.3.3. According to Breban (2015a), the concept of secondary grammaticalization has two variants. It may either refer merely to a semantic change where a grammatical marker extends in functional range or it may refer to the total reconfiguration of both form and function of the grammatical marker in question.

Thus, to begin, secondary grammaticalization can be said to have occurred when an affix has extended its semantic range as compared to its reconstructed meaning, i.e. it has been the subject of conceptual change only. Typically, this new meaning stems from a "secondary meaning" inherent in the functional morpheme (Dahl 1985:10-16). In other words, an implicature or inference (Hopper & Traugott 2003:82) gets reinterpreted as the more prominent meaning and may eventually replace the original meaning. Related to this, the reflex of an originally morphologically complex construction, consisting of the combination of several affixes, may be neutralized and no longer analyzable individually (Koch 2015). Such changes may, however, mean that the original meaning(s) may still surface in archaism or other specific contexts (see Hopper & Traugott 2003: 82 and section 6.4.1.1 above). A typical example in Bantu (and elsewhere) of such a secondary grammaticalization is the extension of the present tense conjugation into a future marker. According to Nurse (2008:298), Gogo (G.11) is an example of a language where this has occurred. Here, the present tense marker *-ku-* has extended to a future tense marker, followed by the subsequent loss of the present reading.

(17) *ci-**ku**-gula*
SM1PL-**(PRS>)FUT**-buy
'we will buy' [Gogo (G.11); Nurse (2008:298)]

Alternatively, both functional and formal changes have occurred. Thus, Nurse (2008:298) ultimately traces the formative *-ku-* in Gogo to a grammaticalized periphrastic construction with a progressive aspectual function. It should be noticed, that both functional and formal change may affect synthetic constructions as well. An example is the suffix *-irege* in Rutooro (JE.12) expressing "simple" past, which Botne (2010) reconstructs as originating from the joint reanalysis and fusion of an imperfective morpheme *-ag-* (the same reflex as discussed for Pangwa in 6.2.2) and a perfective morpheme *-ire*.

It should be stressed here, however, that given the mature character of the affixes, i.e. their relatively limited phonological shape and their boundedness, it is harder to trace a potential etymon and reconstruct more fine-grained grammaticalization pathways, as compared to periphrastic items. Still, the conceptualization of grammaticalization can be employed as a useful heuristic for connecting morphemes with plausible Proto-Bantu etymons on both functional and formal grounds, when a direct correspondence is lacking.

Whether the presence in Manda of a TAM affix stems from inherited morphemes or grammaticalization or both (i.e. the grammaticalization of inherited morphemes), the combination of internal and external comparison described in section 6.4.1 is yet again considered a fruitful approach for the reconstruction of affixes and simple word conjugations. External comparison allows us to search for shared retentions, in this case inflectional morphology inherited from Proto-Bantu, and shared innovations with the closely related~neighboring languages (cf. Fox 1995:197). Furthermore, it allows us to posit the direction of possible change of an inflectional category given the distribution of different stages in form-meaning development as reflected in the other languages (Koch 2015). It is also fruitful to look internally for archaisms or diachronic data indicative of earlier forms or meanings that more readily allow the linking of a single affix or a morphologically complex single-word construction to an etymon reconstructed for Proto-Bantu. This is the specific topic of the subsequent chapter 7, which discusses the single word TAM constructions in Manda.

6.4.2.2 Reconstructing periphrastic constructions

In contrast to the more fused formatives discussed above, the periphrastic grammatical markers instead consist of items with a lexical source. Typically, their etymon also surfaces synchronically, and the grammaticalization processes under scrutiny tend to involve the shift of such lexical verbs into auxiliaries, i.e. the initial stage of the cline in (6) and (9). Thus, the focus of such a reconstruction is to account for the polysemic split and the formation of a new form-meaning pair from a referential entity into a more procedural and formulaic grammatical marker. Consequently, these reconstructions typically involve primary grammaticalization. The approach here is therefore to trace the relevant lexical source verb and then to look at the interface between lexical verb ~ auxiliary constructions and the ambiguous contexts in which they occur, as well as the unambiguous cut-off points between a lexical and a functional use of a linguistic unit. These cut-off points are traced through internal and external indications of a conceptual and/or a formal split between the auxiliary and its etymon. From there, it is considered possible to explain the conceptual linkage synchronically and to offer a hypothesis on what might be the diachronic process of development and shift from lexical verb to auxiliary (and possible further developments along the grammaticalization cline).

Note that this panchronic approach furthermore overrides the problem of deciding on the exact characteristics of an auxiliary and where the exact cut-off points between a lexical verb and an auxiliary should be. (See chapter 1 in Heine (1993) for an overview of this controversy.) What is stressed is rather the intermediate position of an auxiliary in the verb-to-affix cline (9) described in section 6.3.3 above. Thus, what is interesting is the *process* of change, in which the ambiguous cut-off points are seen as stages of development. As a consequence, I follow Anderson (2011:2) in considering an auxiliary verb as "a verbal element on a diachronic form-function continuum standing between a fully lexical verb and a bound grammatical affix". Or, to put it another way: "Auxiliaries can be described roughly as desemanticized and decategorialized lexical verbs" (Heine & Narrog 2009:41; see also definitions by Heine 1993:69, 87; Kuteva 2001:2). Auxiliaries as well as other free-standing element along with the construction they are a part, are the topic of chapters 8 to 11.

6.5 Summary and point of departure

This chapter has described the underlying conceptualization governing the description and analysis of the wider TAM domain in Manda that will be explored in the following chapters of this thesis. It has presented the general typological-functional and panchronic approach to language and linguistic analysis that guides this work. In particular it has presented the phenomenon of grammaticalization and the conceptual framework around how grammar in general, and verbal markers in particular, are shaped by diachronic forces, both with regard to cross-linguistic and to more typically Bantu traits. The final section of this chapter described how this conceptual framework can serve as the basis of the development of a methodology of general internal reconstruction in order to account for historical and ongoing cases of grammaticalization in Manda. In addition, this section explained how grammatical markers inherited from Proto-Bantu have been detected.

In the following chapters I apply the conceptual underpinning, methodological tools and assumptions presented in this chapter to account for the forms, functions, etymology and chronological development, together with the synchronic formal and functional variation of markers employed in Manda to express TAM, along with related notions such as modality and negation. Thus, through variation as reflected in synchronic and diachronic data of Manda and in the comparative data, I attempt to reconstruct the semasiological and formal background and the relative chronology of these grammatical markers.

The motivation for also including the categories of modality and negation here is twofold. Firstly, the notions of modality and negation form fundamental parts of the structuring of the verb, whether by periphrasis or as an inflected part of the verbal word. In addition, as I will show, these categories are often grammaticalized from verbs, and they also tend to be grammaticalized further, denoting tense and aspect and/or coalescing with the verbal predicate. Secondly, despite these facts, both the category of negation – at least non-standard and non-inflected negation – and especially modality have often been neglected in earlier studies of Bantu languages. There is thus a further incentive to pay additional attention to these aspects of Bantu grammar.

The following chapters are structured in the following way. In chapter 7, I will turn my attention to the TAM affixes found within the verbal word, i.e. the simplex TAM constructions, in Manda. As will be apparent in the chapter, many of these affixes and the conjugations they are a part of can be linked to Proto-Bantu reconstructions. Yet, several cases of formal and functional change are also detected with regard to these markers. Furthermore, some of these markers are ultimately traced as originating from periphrastic constructions. Chapters 8 and 9 encompass periphrastic constructions expressing TAM: chapter 8 focuses on TAM auxiliaries and thus explicitly on processes of auxiliation, while chapter 9 focuses on the copulas and copula constructions found in Manda, as these constitute a significant proportion of the periphrastic TAM constructions. The focus on auxiliation processes continues in chapter 10, which accounts for the modal domain and especially the modal verbs. In this chapter, an additional mechanism of conceptual change – namely subjectification – is also presented, together with an account of how it interacts with

grammaticalization in affecting the development patterns of the modal verbs. Finally, in chapter 11, the domain of negation in Manda is explored. In this chapter, it is argued that the system of standard negation is the result of a cyclical grammaticalization process. Other grammaticalization processes are also accounted for, most notably another auxiliation process which has resulted in the genesis of a negator from a lexical verb.

7 Simplex TAM conjugations

7.1 Introduction

This chapter offers an overview of the basic simplex (i.e. inflectional single-word) constructions, here called conjugations, marking Tense-Aspect-Mood (TAM) in Manda. The chapter accounts for the form and function of these conjugations. Furthermore, it aims to situate the affixes which define the conjugations in a wider historical context, by offering a hypothesis about their diachronic origin. The main purpose of this chapter is to link the TAM constructions found in Manda to similar constructions in the neighboring languages, as well as to morphemes signaling TAM reconstructed for Proto-Bantu and the possible pathways of grammatical change as reflected in different stages of form-meaning development. This is done in order to get a wider understanding of why the simplex TAM paradigm appears and functions as it does.

The agglutinative structure of the verbal word in Manda - including synthetic marking of TAM at various positions, or "slots" - reflects a general attribute of the Bantu languages and has been reconstructed for Proto-Bantu (Meeussen 1967; Nurse 2008: chapter 2). Table 7.1 is a (linear) representation of the basic verbal template and its various functional positions ("slots") as they surface in Manda.[92] This representation, including the abbreviations used, will serve as the basis for describing the syntagmatic properties of the various conjugations.

Pre-SM-	**SM-**	**-TAM1-**	**-OM-**	**-B-**	**-TAM2**
Prefix with different functions standing before SM	Subject Marker	Tense-Aspect-Mood prefix	Object Marker	Base = verb root and extensions	Tense-Aspect-Mood suffix

Table 7.1. The verbal template in Manda

A simplex TAM construction in Bantu typically consists of the combination of a relatively small set of morphemes in the two different slots designated for TAM. Together with a

[92]See also the introduction to the verb template and the description of the other affixes of the verbal word in 5.4.1. Note that the terminology used to refer to the different positions or "slots" of the morphotaxis differs slightly from the ones used in e.g. Meeussen (1967), Güldemann (2003) or Nurse (2003, 2008), in order to adapt more faithfully to the *de facto* structuring of the Manda verb. This is most explicitly seen with regard to the TAM1 and TAM2 slots. TAM1 adheres to Nurse's (2003) T/A (Tense/Aspect) slot and Güldemann's (1999, 2003) post-initial slot (which, in turn, is a fusion of Meeussen's (1967) formative and limitative slots). The addition of an 'M' as in "mood" is justified as the future obligative conjugation consists of a morpheme in this position in Manda. As will be argued, the TAM2 slot in Manda, in turn, represents the fusion of two (diachronic) slots, Meeussen's (1967) and Güldemann's (1999, 2003) "pre-final" and "final" position. (This is further discussed in section 7.3). Referring to these two slots with the same label also highlights the fact that a TAM construction most often is constituted by the combination of affixes in both of these slots and it is the whole template, not only a single TAM form which is used to define a conjugation in Manda.

specific tone pattern they indicate the particulars of an event as coded in the lexical verbal base (cf. Nurse & Devos forthcom.). By varying the combinations of morphemes and tone patterns a vast set of TAM constructions - i.e. semi-schematic units of form-meaning - may be formed. In addition, the inventory of TAM conjugations is typically (constantly) extended by the inclusion of new markers originating from the grammaticalization of complex constructions (as described in 6.3.5). Indeed, Bantu languages are typologically renowned for their extensive number of TAM distinctions, including the marking of multiple degrees of tense scaling (see e.g. Nurse 2008:88-90; Dahl 1985:121). Manda arguably adheres to this general Bantu pattern, albeit not to any great extreme.[93] This can be deduced from Table 7.2 below, which is a list of the in total 15 simplex (i.e. single-word) TAM conjugations attested in Manda, which will serve as the topic of the discussions in this chapter. The labels of each of these constructions roughly encompass their main functions within the TAM paradigm, as well as their relationship to other conjugations with similar functions.

[93] This conclusion can be drawn for example from the fact that if the (dialectal) Matumba future is excluded, Manda adheres to the canonical Bantu pattern of having two past markers and one future marker (cf. Nurse & Devos forthcom.).

	Conjugation	Pre-SM	SM	TAM1	(OM)	BASE	TAM2	Tone pattern	Tone pattern OM
Tense-Aspect									
	Present		SM			B	*-a*	APU-PU	APU-PU
	Present (dialectal)		SM	*-i-*		B	*-a*	APU-PU	APU-PU
	Perfect		SM			B	*-ili*	APU-PU	SI
	Past 1		SM	*-ka-*		B	*-ili*	PU	PU
	Past 2		SM	*-a-*		B	*-ili*	PU	PU
	Future 1	*ya-*	SM			B	*-i ~ -ayi*	APU-PU	SI
	Future 2 (dialectal)		SM	*-(a)la-*		B	*-a*	SI	SI
	Past imperfective 1		SM			B	*-eye*	APU-PU	SI
	Past imperfective 2		SM	*-a-*		B	*-ayi*	PU	PU
Mood									
	Subjunctive		SM			B	*-i ~-ayi*	APU-PU	SI
	Future obligative		SM	*-a-*		B	*-ayi*	SI	SI
	Itive		SM	*-ka-*		B	*-ayi*	SI	SI
Other functions									
	Consecutive		SM	*-ka-*		B	*-a*	APU-PU	APU-PU
	Situative		SM	*-ka-*		B	*-a ~-ayi*	APU-PU~ PU	APU-PU~PU
	Conditional	*nga-* (*~ya-*)	SM			B	*-ili*	APU-PU	SI

Table 7.2. List of simplex TAM constructions in Manda

This table is presented here to show how the different TAM conjugations of Manda are constituted by combinations of different affixes (or "formatives") at different positions, filling different slots of the verbal template. The tone patterns of the respective conjugation are also presented as they too form an important part of their formal characteristics.[94] As can be deduced from this table, the different TAM morphemes may and most often do co-occur in different slots in Manda, not only in the designated post-initial TAM1 slot and the final TAM2

[94] Note that the Object Marker (OM) slot is in parenthesis and not marked in the conjugations to indicate that object-marking is an optional component. (Similarly, the relative markers are not represented here as they only surface in relative constructions). Note further, that the root and extension slots are fused to a "base" slot (following Schadeberg 2003a; sometimes referred to as the "derivational stem", e.g. by Marlo 2013), as they both are lexical and/or derivational rather than inflectional categories. Consequently, the base is of less interest here.

slot but also in the pre-SM slot, as is the case with the future 1 construction as well as the conditional construction.

As can be further deduced from this table, the different TAM constructions in Manda are formed by the combination of a relatively small set of affixes and tonal patterns. Thus, there are several conjugations where morphemes of the shape *-a-* and *-ka-* surface in the TAM1 position and several instances of where *-a*, *-ili* and *-ayi* surface in the TAM2 position. Similarly, tones only fall on either both the ante-penult and the penult (APU-PU), only on the penult (PU) or stem-initially (SI), that is, on the first syllable of the verbal base. (Note that the tone pattern shifts with the inclusion of an object marker). What this suggests is that the same prefix combines with different suffixes and - *vice versa* - that the same suffix combine with different prefixes, which together with a specific tone pattern form the contrasting pairings of form and function expressing TAM in Manda. For example, the combination of prefix *-a-* in the TAM1 position with *-ili* in the TAM2 position renders in a past (perfective) reading (past 2), whereas the combination with prefix *-a-* in the TAM1 position with the suffix *-ayi* in TAM2 position instead renders in a past imperfective reading (past imperfective 2). Similarly, if the suffix *-ili*, instead of combining with the prefix *-a-* in the TAM1 slot, combines with *-ka-*, the resultant meaning is past 1 rather than past 2.

Interestingly, as will be argued throughout this chapter, most of these prefixes and suffixes found in the TAM1 and TAM2 slot of Manda are also reflexes of morphemes reconstructed with similar meanings for Proto-Bantu. This means that Manda actually has few TAM morphemes originating from primary grammaticalization, i.e. from originally lexical material, in contrast to the cross-Bantu generalization discussed in 6.3.5. At the same time, secondary grammaticalization i.e. shifts in function or in both form and function of a marker, has arguably had a strong effect on the TAM paradigm in Manda. Furthermore, more regular phonological processes have also altered the shape of some of the inherited morphemes. These processes of change have, on the one hand, resulted in that what appears to be morphemes of different shapes and functions can ultimately be traced to the same source. Thus, it will be seen that the suffixes of the form *-ayi-* ~ *-eye* surfacing in several disparate TAM construction are (partly) interrelated formally and functionally, but have evolved into different functions and forms through different (complex) processes of reanalysis. On the other hand, the shift in form and meaning has also resulted in that several identical morphemes are homophonous rather than polysemous in Manda. For example, as can be seen in Table 7.2, there are an abundance of different prefixes of the shape *-ka-* surfacing in different constructions in Manda. As will be argued in the following, it is not the case that all of these prefixes are cognates. Instead, they are most likely reflexes of two disparate morphemes, as reconstructed for Proto-Bantu.

After this brief introduction to the different simplex TAM conjugations in Manda, this chapter will continue as follows: Section 7.2 is an introduction to the general conceptualization of tense, aspect and mood governing this study. This section is followed by section 7.3, which serves as introduction to those TAM morphemes – both prefixes and suffixes - reconstructed for Proto-Bantu surfacing in Manda. This section will function as a point of departure for the further discussion and reconstruction of the various simplex TAM conjugations in Manda.

This section will then be followed by an account of each synthetic TAM construction in Manda. Each subsection is devoted to a certain conjugation (or pair of conjugations) and contains an account of its specific synchronic formal constitution (including tone pattern)[95] and functional range, the latter based on a typological-functional approach. These constructions are compared to single affixes and constructions in neighboring Bantu languages and in Proto-Bantu in an attempt to offer a reconstruction of the morphemes involved and to gain further insights into their (sometimes polyfunctional) use. The conjugations will be discussed in the order they occur in Table 7.2 above. Accordingly, this chapter will start with a discussion of the various tense-aspect conjugations in section 7.4 and then continue with an account of the various constructions expressing mood in section 7.5. Finally, a set of dependent synthetic constructions will be discussed in section 7.6. Before embarking on this analysis, however, it should be stressed that many concepts – not least in Manda – are also expressed by complex constructions, typically double verb constructions. These additional markers of the wider TAM domain, including markers of modality and negation, will be accounted for in the residing chapters of part II.

7.2 Definition of tense, aspect and mood

This section describes the functional prerequisites and conceptualization governing the description and analysis of the TAM markers in Manda, starting with the concepts of tense and aspect and continuing with a discussion on the expression of mood. Classic definitions of tense and aspect are given by Comrie (1976, 1985) and have also been applied and developed specifically for Bantu (e.g. in Nurse 2003, 2007a, 2008:chapter 1). In this conceptualization, tense is viewed as expressing a "grammaticalized" representation of location in time with regard to an event, typically taking as a point of departure the present moment of speech (Comrie 1985:9). Aspect, on the other hand, is viewed as expressing the internal constituency of an event (Comrie 1976:3). Consequently, tense and aspect often interact in an expression, tense setting out the temporal frame and aspect coding the procedure of the event (cf. Nurse & Devos forthcom.). Although these definitions serve as a good point of departure and fundamental heuristic in covering and categorizing TA markers and paradigms, it should be noted that their applicability has been problematized, not least with regard to Bantu languages. Most notable is the critique against the conceptualization of tense, as given above, in relation to the multiple tense markers typical of Bantu languages. According to Botne (2006, 2012, 2013, Botne & Kershner 2008), the traditional way of looking at tense as two-dimensional and linear with a temporal distance relative to the present as implied in Comrie's definition above is not "satisfactory". That is, tense can only partly be seen as being organized in a linear fashion, as different tense (and aspect)-markers in a certain language typically overlap in temporal reference. Instead, these temporal notions must be seen as intermingling with other concepts such as the time scale involved, i.e. days, seasons, years, as well as the time span, i.e. if the event occurs in proximity or in distance from the speaker, also spatially (Botne 2012, 2013). Furthermore, different tenses are used to mark different "mental worlds", connected to the speaker's subjective perception towards the event at the time of utterance

[95] As described in 5.2.4, and more elaborated on in this chapter, in some circumstances tone is even contrastive with regard to verb inflection in Manda.

(Botne & Kershner 2008:151-154). As will be seen, this is also the case with regard to the tense markers of Manda, and consequently these additional notions need to be taken into account in the following functional analysis.

With regard to mood, this study follows Nurse & Devos (forthcom.), who in turn follow Hengeveld (2004), in dividing mood into a broad category encompassing both "illocution" (optative and directive speech acts) and modality (conceptualized as the expressions of necessity and possibility). Whereas the latter subcategory will be the topic of chapter 7, the former subcategory will be dealt with in this chapter. In addition, the use of the subjunctive in subordinate clauses will be addressed here.

7.3 The Manda TAM markers compared to Proto-Bantu reconstructions – an introduction and point of departure

This section sets out to provide an initial presentation of how the TAM markers found in Manda relate etymologically to Proto-Bantu. This is done to serve as a background and point of departure for the further discussions on reconstruction in this chapter. As seen in this section and as will become more apparent throughout this chapter, almost all the TAM affixes found in Manda can actually be hypothesized as originating from morphemes inherited from Proto-Bantu. This means that a brief introduction to the reconstructed Proto-Bantu TAM affixes and how they relate in shape, position and meaning to the simplex TAM constructions in Manda, serves as a good point of departure for the further discussion of this chapter. Presenting the Manda TAM affixes in relation to their etymons provides an initial understanding on why some of them occur in several constructions in Manda, why some appear before the verbal stem and some after, as well as the reason behind some of the paradigmatic oppositions found in the language.

According to Nurse (2007a), an array of different TAM constructions with different meanings have been formed cross-Bantu by the combination of just a few reflexes of morphemes reconstructed for Proto-Bantu.[96] As pointed out in section 7.1 above, this appears to also be the case in Manda. Table 7.3 is a summary of the TAM morphemes reconstructed for Proto-Bantu argued as surfacing in Manda.

[96] Indeed, despite the fact that the *syntagmatic* complexity of the verbal template can be reconstructed to a proto-stage, the *paradigmatic* complexity reflected synchronically in Bantu languages appears to be of relatively recent origin. For example, according to Nurse (2007a), Proto-Bantu was characterized by a simple tense system, maybe even with only a past-non past distinction. Thus, the characteristic category of tense granularity– i.e. multiple past and future tenses – found in modern Bantu is not reconstructable for Proto-Bantu.

Prefixes = TAM1		**Suffixes = TAM2**	
*-*a*- (~-*á*-)	'past'	*-*a*	'neutral, default'
*-*ka*-	'itive, narrative, (far) future, (far) past'	*-*ide* (~*-*ile*)	'perfect [anterior], past'
*-*laa*-	'future'[97]	*-*é*	'subjunctive'
*-*k*V- (-*kí*- ~ -*kya*- ~ -*ka*-)	'persistive, situative'	*-*a(n)g*-	'imperfective' (in "pre-final" position)

Table 7.3. Reconstructed Proto-Bantu TAM affixes surfacing in Manda

The labels used here are taken from Nurse & Philippson (2006) and Nurse (2008: chapter 6). To this set of morphemes, Nurse (2008:236-237) also argues for a "null present", i.e. the explicit lack of a prefix in the post-initial TAM1-slot. As apparent from this table, the TAM morphemes of Proto-Bantu have been reconstructed as single elements with regard to meaning and their relative position rather than as morphologically complex constructions.[98] This stands in opposition to the stance taken in this study which treats the whole morphologically complex construction (including its prosodic properties) as providing a particular TAM function. Yet, these reconstructions serve as useful heuristics, as their etymologies facilitate the understanding of the constructions as a whole.

In relation to these reconstructions some important issues may be noticed, before turning the attention to the suggested role of these elements in the Manda TAM constructions. Firstly, these reconstructions suggest a division of labor within the verbal morphotaxis where the prefixes marked tense and the suffixes contributed with aspectual and modal notions (see also Nurse 2003, 2007b). Furthermore, the suffix *-*a* is treated as a 'neutral' or 'default' suffix. This designation stems from the fact that it is often found in many various conjugations throughout the inflectional paradigm and also in the infinitive. In this study, it is also referred to with the neutral term the "final vowel" (and glossed FV). Finally, it should be noticed that the reconstructed 'imperfective' *-*a(n)g*- is understood as standing in a "pre-final" position preceding and combining with the other final suffixes.

Table 7.4 is a representation of how the various TAM conjugations in Manda can be linked to these reconstructed morphemes in Table 7.3, also with regard to relative position within the morphotaxis (a question mark signals a less assertive case). That is, the simplex conjugations of Manda can in most cases be hypothesized as consisting of combinations of reflexes of these reconstructed affixes in the TAM1 and TAM2 slot.

[97] This prefix is marked as having a "medium" degree of reliability as a reconstruction for Proto-Bantu (Nurse 2008:257). However, it is widespread in a large part of the eastern Bantu area (Nurse 2008:85).
[98] Two exceptions are the reconstructions of the imperative and subjunctive as complete conjugations by Meeussen (2014, 1967; see also Devos & Van Olmen 2013, Nurse & Devos forthcom.). Meeussen (1967:113) also discusses some additional conjugations ("formulae"), which he presents as "guesses" rather than proper reconstructions for Proto-Bantu (see also Guthrie (1971:145)). Nurse (2007a, 2008.277) also present some combinations "reasonably assumed" for Proto-Bantu.

Label	**Conjugation**	**Suggested origin & position**					
		Preposed item #	**PB Morphological slots**				
			SM	**TAM1**	**BASE**	**TAM2**	
						pre-final	**final**
Present	SM-B-*a*		SM		B		**-a*
Present (dialectal)	SM-i-B-a	n.a.[99]					
Perfect	SM-B-*ili*		SM		B		**-ide*
Past 1	SM-*ka*-B-*ili*		SM	?	B		**-ide*
Past 2	SM-*a*-B-*ili*		SM	**-a-*	B		**-ide*
Future 1	*ya*-SM-B-*i*	?**-b-*	SM		B		**-é*
	ya-SM-B-*ayi*	?**-b-*	SM		B	**-a(n)g-*	**-é*
Future 2 (dialectal)	SM-*la*-B-*a*		SM	**-laa-*	B		**-a*
Past Imperfective 1	SM-B-*eye*		SM		B	**-a(n)g-*	**-ide*
Past Imperfective 2	SM-a-B-*ayi*		SM	**-a-*	B	**-a(n)g-*	**-a*
Subjunctive	SM-B-*i*		SM		B		**-é*
	(SM)-B-*ayi*		SM		B	**-a(n)g-*	**-é*
					B	**-a(n)g-*	**-a*
Future obligative	SM-*a*-B-*ayi*		SM	?	B	**-a(n)g-*	**-e*
Itive	SM-*ka*-B-*ayi*		SM	**-ka-*	B	**-a(n)g-*	**-é*
				**-ka-*	B	**-a(n)g-*	**-a*
Consecutive	SM-*ka*-B-*a*		SM	**-ka-*	B		**-a*
Situative	SM-*ka*-B-*a*		SM	**-k*V-	B		
	SM-*ka*-B-*ayi*		SM	**-k*V-	B	**-a(n)g-*	**-a*
Conditional	*nga*-SM-B-*ili*	**nga*	SM		B		**-ide*
	ya-SM-B-*ili*	?**-b-*	SM		B		**-ide*

Table 7.4. List of TAM simplex constructions in Manda and suggested Proto-Bantu origin of participating morphemes

[99] The origin of the Matumba present tense cannot be accounted for within this table as it is considered to be derived from the grammaticalization of a double verb construction consisting of an auxiliary and a de-verbal – and consequently uninflected – second verb. (See more in section 7.4.1.3).

As seen in Table 7.4, most Manda conjugations are suggested as consisting of combinations of morphemes derived from the Proto-Bantu reflexes introduced in Table 7.3. Indeed, the origins of some of these morphemes are more apparent whereas the form and function of others are more opaque. However, as will be shown throughout this chapter, most of them can be reconstructed with the help of the joint techniques of internal and external comparison (as described in 6.4.1). With this said, however, it should be noted that the table contains some question marks, i.e. less assertive reconstructions. Thus, it is not clear whether past 1 *-ka-* stems from *-*ka*- or from *-k*V*- (or perhaps even something else), what the exact origin and pathway of change that resulted in *ya-* surfacing in future 1 and the conditional is, or what the origin of the prefix *-a-* of the future obligative is.[100]

As can be seen in the table, the 'past' prefix *-*a*- surfaces as a prefix in past conjugations and the 'future' *-*laa*- in a future conjugation in Manda. Similarly, the perfect/past suffix *-*ide* surfaces in perfect and past conjugations and the 'subjunctive' *-é* surfaces in the subjuctive and other mood categories but also the future 1. The 'neutral, default' *-*a* surfaces in several disparate conjugations. Furthermore, what this table suggests is that the prefixes of the shape *-ka-* surfacing in the TAM1 position in several different conjugations in Manda are not all cognates but stem from the two different formatives represented as *-*ka*- and *-*k*V- in Table 7.3.

A specific case worth of extra attention is the 'imperfective' morpheme *-*a(n)g*- (Nurse & Philipson 2006). As seen in the table, the TAM2 slot is split up into two where *-*a(n)g*- surfaces in an additional slot, arguably not present in synchronic Manda and consequently not represented in the sketch of the the verbal template in Table 7.1. This slot has been called the "pre-final" slot (Meeussen 1967, Güldemann 1999), i.e. the slot before the final suffixes *-*a*, *-*e* and *-*ide*, next to the verbal base. It has been argued that this anomalous position of the 'imperfective' marker *-*a(n)g*- stems from that it initially was an extension which at a proto-level was reanalyzed into a TAM morpheme (Nurse & Philippson 2006, Meeussen 1967).[101] Crucially, what the insertion of this slot in the TAM template brings to light is that the suffix of the form *-ayi ~ -eye*, surfacing in several constructions in Manda, can be understood as deriving from a bimorphemic concatenation of this pre-final morpheme (with an originally imperfective meaning) and the different final suffixes, as represented with the permeated delineation in the table. Furthermore, it can be seen that it is suggested that some *-ayi* suffixes stem from a historical bimorphemic construction of *-*a(n)g*- and the final 'subjunctive' *-e* but, interestingly, also the 'neutral, default' final vowel *-a*.

Finally, it should be noted that the etymon of the pre-initial morpheme *ya-* of the future tense 1 conjugation is placed as an item in the "pre-posed" non-synthetic position in this table, as

[100] These problems are further discussed under the subsections dealing with the respective conjugations.
[101] Indeed, Schadeberg (2003a; see also Nurse 2008:262-264) hypothesizes that this marker originally may have started out as a repetitive derivational marker (cf. the discussion on the repetitive extension *-ang-* in Manda, in 5.4.3.6).

this marker cannot be linked to a Proto-Bantu affix, but to a grammaticalized (and fused) auxiliary verb *-*b*- 'become'.

In sum, it appears that the vast bulk of the morphemes engaged in forming the simplex TAM conjugations in Manda originates in prefixes and suffixes from Proto-Bantu. In addition, Manda shares many constructions with its neighbors. The relationship of Manda's simplex TAM constructions with both its neighbors and Proto-Bantu will be discussed more in the following subsections, which starts with an account of those constructions expressing tense and aspect.

7.4 Tense-Aspect conjugations

This section consists of a description of the form, function and suggested origin of the various simplex constructions expressing tense and aspect in Manda. Often in Manda, these two concepts intersect in a single construction and consequently they are treated jointly here. Table 7.5 presents the set of tense-aspect conjugations found in Manda and discussed in the following sub-sections, together with their respective interlinear glosses.

Section	Label	Tone pattern	Tone pattern with OM	Gloss of TAM affixes
7.4.1	Present	APU-PU	APU-PU	-FV
	Present (dialectal)	APU-PU	APU-PU	-PRS- -FV
7.4.2	Perfect	APU-PU	SI	-PRF
7.4.3	Past 1	PU	PU	-P1- -P1
7.4.4	Past 2	PU	PU	-P2- -P2
7.4.5	Future 1	APU-PU	SI	-F1- -F1
7.4.6	Future 2 (dialectal)	SI	SI	-F2- -FV
7.4.7	Past imperfective 1	APU-PU	SI	-P.I1
	Past imperfective 2	PU	PU	-P.I2- -P.I2

Table 7.5. (Simplex) tense-aspect conjugations in Manda

As seen, Manda is characterized by having several past and future tense categories. In addition, there is a paradigmatic opposition between perfective and imperfective in the past domain. However, this section will begin with an account of the two conjugations typically expressing relevance to the present moment, namely the present – with several aspectual functions – in section 7.4.1 and the perfect in section 7.4.2. The latter sub-section will also describe the morphophonological peculiarities of the suffix *-ili* surfacing in the perfect conjugation but also in other conjugations in Manda (all argued as being reflexes of the same *-*ide*). The section on tense-aspect constructions continues with an account of the past (perfective) conjugations in section 7.4.3 and 7.4.4 and the future conjugations in section 7.4.5 and 7.4.6. Finally, this section addresses the two past imperfective conjugations together in section 7.4.7, arguing that the suffixal constitution of these conjugations may both be linked to the 'imperfective' affix *-*a(n)g*-.

7.4.1 The present SM-B-*a*

7.4.1.1 Form

The present tense conjugation in Manda can be considered as not being marked by any distinctive affixes. That is, it merely consists of suffixation with the 'neutral' final vowel *-a*, here glossed as FV, which also surfaces in several other conjugations including the infinitive, as shown in example (1). Typically, the construction is unmarked in the post-initial TA slot and the tone pattern consists of a high tone on both the antepenult and the penult.

(1) *nitúmbúla kutéléka gwáli na kúlya*

ni-tumbul-a	ku-telek-a	gwali	na	ku-ly-a
SM1SG-begin-FV	INF-cook-FV	NCP14.*ugali*	COM	INF-eat-FV

'I begin to cook food (lit. *ugali*) and eat (it)'

However, there are some formal variations in need of mentioning. To begin with, the APU-PU tone pattern appears to be restricted to the (inflectional) stem, i.e. the verb base and the final vowel in the TAM2 slot (cf. the hierarchical structure of the verbal template in Table 5.9). That is, a high tone is only assigned to the antepenult if it falls within the stem. With shorter stems, as e.g. the disyllabic verbs *-gan-a* 'love' in (2), there is only a penult high tone.

(2) *nénga, nigána vána vángu*

nenga	ni-gan-a	va-ana	va-angu
PERS1SG	SM1SG-love-FV	NCP2-child	ACP2-POSS3SG

'me, I love my children'

There is also formal variation between the southern and northern varieties with regard to the form of this construction, where speakers of the northern Matumba dialect insert an *-i-* in the TAM1 slot, as illustrated in (3). The insertion of an object marker also triggers an allomorphic shift in this dialect where *-i-* is replaced with a *-ku-* (occasionally *-ka-*); cf. (3) vs. (4).

(3) *ibíta kuLudéwa*

a-i-bɪt-a	ku-Ludewa
SM3SG-PRS-go-FV	LOC17-Ludewa

'she is going to Ludewa'

(4) *akunifwáta*

a-ku-ni-fwat-a
SM1SG-PRS-OM1SG-follow-FV
's/he is following me'

Moreover, verb stems (i.e. verbal base + FV-a) with a coronal consonant as the final onset optionally undergo deletion of the final syllable. This is illustrated with *-bɪt-a* 'go' in (5).

(5) *nibí' kung'kóka*
ni-bɪt-a ku-mu-kɔka
SM1SG-go-FV LOC17-NCP3-river
'I'm going to the river'

See section 5.2.3.1 for a further discussion of the phenomenon of reduction around the final syllable of words in Manda.

7.4.1.2 Function

With regard to the function of the present tense construction, it is used in Manda in a way that corresponds to what Nurse (2008:88) calls the "vast present" of "general, frequent or generic situations". Crucially, it denotes that an event or action takes place in (close) relation to the here and now of the moment of speech, i.e. the deictic center.

(6) *niliwóna lipusi*
ni-li-won-a li-pusi
SM1SG-OM5-see-FV NCP5-cat
'I see the cat'

(7) *hínu ápa apíta na lisándúku na libóksi*
hɪnu apa a-pɪt-a na li-sanduku [Sw.] na li-boksi
now PROX.DEM16 SM3SG-pass-FV COM NCP5-box COM NCP5-box
'now, here, he is passing with the trunk and the box'

As pointed out by Bybee et al (1994:140), "situations that are simultaneous with the moment of speech, and thus present, may be of several different aspectual types", which is also the case here. In Manda, the present tense conjugation encompasses a wide range of other functions within its scope, especially imperfective actions of habitual and progressive aspect, as illustrated in (8) and (9) respectively.

(8) *kwa ndíngu nísóma ligaséti*
kwa ndingu ni-som-a li-gaseti [Sw.]
CP17 NCP9.habit SM1SG-read-FV NCP5-newspaper
'usually, I read the paper'

(9) *hínu tigíma linyínja*
hɪnu ti-gim-a li-nyinja
now SM1PL-dig-FV NCP5-grave
'we are digging a grave now'

The present conjugation also makes reference to generic or gnomic situations, as defined by Bybee et al (1994:141) and Dahl (1985:98-100), i.e. where the event encoded in the verb is expressed as holding throughout time (and consequently also at the moment of speech).

(10) *mapolísi véne valónda swíndla,*
ma-polisi [Sw.] va-ene va-lond-a swindla [Sw.]
NCP6-police ACP2-self SM3PL-want-FV NCP10.bribe
'the police want bribes,

mahákáma ilónda swíndla,
mahakama [Sw.] i-lond-a swindla [Sw.]
NCP9.court SM9-want-FV NCP10.bribe
the court wants bribes,

kusipítáli valónda swíndla
kusipítáli va-lond-a swindla [Sw.]
NCP6-hospital SM3PL-want-FV NCP10.bribe
at the hospital they want bribes'

(11) *alóngéla kimátúmba*
a-longel-a ki-matumba
SM3SG-speak-FV NCP7-matumba
'she speaks Matumba (dialect)'

This generic sense is reflected in the use of the present construction in "true" or "proper" riddles (see Gowlett 1979), as exemplified in (12) and in proverbs or sayings, as in (13).

(12) *ng'únda wángu ukulúmba nyamuhópi*
mu-gunda u-angu u-kulumba nyamuhopi
NCP3-plot ACP3-POSS1SG ACP3-big very
'my plot is very big,

kóma nibéna pakigánji
koma ni-ben-a pa-ki-ganja
but SM1SG-harvest-FV LOC16-NCP7-hand
but I harvest in the palm of my hand' [Answer: hair]

(13) *máwu alónda, kóma dádi abéla*
mawu a-lond-a koma dadi a-bel-a
NCP1.mother SM1SG-want-FV but NCP1a.father SM1SG-refuse-FV
'a woman wants, but a man refuses'

Moreover, the present conjugation may in extension be used to describe actions or events as taking place both in the future and in the past. Firstly, in future contexts it expresses a high degree of certainty that the event referred to will take place, similar to what has been described e.g. by Kershner (2002:192, 107-108) for Chisukwa (M.301), spoken on the other side of Lake Nyasa.

(14) *nihícha alhamísi, nikílawʊ́ka domaníka*
ni-hich-a alhamisi [Sw.] ni-kɪlawʊk-a domanika
SM1SG-come-FV Thursday SM1SG-return-FV Sunday
'I will come on Thursday and return on Sunday'

(15) *chang'káka, sáa náni niwʊ́ka*
chang'kaka saa nane [Sw.] ni-wʊk-a
truly clock eight SM1SG-depart-FV
'truly, at two I will depart'

Secondly, the present conjugation is often used in narratives in a way similar to a "historical present". For example, in (16) below, the speaker retells a story which took place in his childhood.

(16) *kusisámúka, nimbóna lépe múndu,*
ku-sisamuk-a ni-mu-won-a lepe mu-ndu
INF-wake.up-FV SM1SG-OM3SG-see-FV NEG NCP1-person
'waking up, I'm not seeing anyone,

nitúmbúla kukeméléla "dádi, dádi!"
ni-tumbul-a ku-kemel-el-a dadi dadi
SM1SG-begin-FV INF-call-APPL-FV NCP1a.father NCP1a.father
I begin to shout out "father, father!"'

I will return to the discussion of the functions of the present tense conjugation in 9.2.2, where its role in periphrastic copula constructions is described.

7.4.1.3 Origin

A present tense construction of the form SM-B-*a* is extremely common cross-Bantu. Nurse (2007a, 2008:236-237) has reconstructed it to Proto-Bantu and even plausibly to Proto-Niger-Congo. Consequently, it is highly likely that Manda inherited this construction from Proto-Bantu. Hewson et al (2000) suggest that such a construction is an iconic reflection of the cognitive conceptualization underlying the basic deictic function(s) of this tense. This is also reflected in the Manda examples above. At the same time, the apparently dialectically based variation with a prefix *-i-*, illustrated in Table 7.6 is striking because it represents a genealogical division between the Southern Highland or G.60-languages, arguably together with Nyakyusa,[102] and the Rufiji-Ruvuma languages (N.10), except for Ngoni. (Recall from 3.2.2 that the position of Manda within this genealogical division is ambiguous.)

[102] Note that in certain phonetic contexts a change in the vowel quality of the subject marker suggests an earlier form **-ikʊ-* (Persohn & Bernander submitted).

Language	Code		Sources
Pangwa	G.64	SM-**i**-B-**a**	Stirnimann (1983:91)
Kisi	G.67	SM-**i**-B-**a**	Ngonyani (2011:98)
Nyakyusa	M.31	SM-**(i)kʊ**-B-**a**	Persohn (2016:134)
Ngoni	N.12	SM-**i**-B-**a**	Ngonyani (2003:55-56)
Matengo	N.13	SM-B-**a**	Yoneda (2000: 162, 2016:429)
Mpoto	N.14	SM-B-**a**	Makwaya (pers. comm. 16-01-16), Nurse (2007b)

Table 7.6. Present tense conjugation in the neighboring languages to Manda

As can be seen in Table 7.6, while the Southern Highland (G.60) languages and Nyakyusa have an *-i-* in the TA slot as a marker of present tense (with some morphophonologically conditioned variations),[103] the N.10-languages use the zero-formed construction (e.g. Matengo). The exception is Ngoni, considered to be a Rufiji-Ruvuma language, which has *-i-* as a present tense marker. In addition, Matengo has a construction SM-i-B-a to mark future tense.

To have a morpheme *i-* for similar functions and in similar positions in the morphotaxis is quite common in other parts of the Bantu area, even in languages far away from Manda. It is for example the case in Chaga (E.60), as described by Emanatian (1992), as well as in Kikongo, described by Dom & Bostoen (2015). Maho (2007:222) suggests, based on a large set of languages with broad geographical distribution, that a similarity in the form and morphosyntactic behaviour of an *-i-/-e-* in the TAM1 slot might be a remnant of a Proto-Bantu morpheme with the function of a progressive "or similar". However, this is not proposed in other comparative works. In Persohn & Bernander (submitted), we argue, based on a larger set of Southern Tanzanian languages, that the origin of the formative *-i-* is a source structure consisting of an auxiliary verb reflex of Proto-Bantu **-jikad-* 'dwell, be, sit' and a second verb in the infinitive form. We also propose that this form originated in the G.60-languages.

7.4.2 The perfect SM-B-*ili*

7.4.2.1 Form

Segmentally, the perfect conjugation consists solely of a -VCV suffix, typically surfacing as *-ili*, in the final TAM2 slot.[104] For practical reasons the suffix will be referred to formally as *-ili* for Manda, as this is the most common phonemic representation of this morpheme. The suffix *-ili* stands in contrast to the verbal extensions (see 5.4.3) in not being affected by vowel harmony.[105] Thus: *ni-gend-**ili** /nigɛndili/* 'I have walked'. The final vowel of the form (and thus the whole inflected predicate) is always pronounced as a high /i/. Thus, both the vowels

[103]When occurring with an OM, an additional *ku-* or *ka-* is inserted between the prefix *i-* and the OM.

[104] Reflexes of this suffix – all originating from the reconstructed 'perfect, past' **-ide* presented in Table 7.2 in section 7.3 above – feature in several other conjugations in Manda and exhibit several functional and formal variations. This means that the conclusions presented with regard to the formal issues of this suffix also hold for the other conjugations which contain it. Note, however, that the various conjugations have various tone patterns.

[105] But see a small set of exceptions below.

are of degree one. This stands in contrast to the cognates in several neighboring languages[106] and the cross-Bantu tendency to have a mid-front vowel /ɛ/ <e> in the final position of this suffix. It is, however, associated with a general tendency in Manda that fronted vowels in final position are expressed in a comparatively high position (as discussed in 5.2.1).

The tones fall differently in the perfect construction depending on whether the verbal word is inflected with an object marker or not. Without an object marker, a high tone is realized on the antepenult and on the penult. With an object marker, there is only one tone, realized stem-initially.

(17) *a-yımál-íli* 'he has supervised' vs. *a-**ni**-yímal-ili* 'he has supervised me'

There are other segmental variations in the phonological realization of this suffix in Manda. Occasionally, it is expressed with an allomorph *-iti*, i.e. *ni-gend-**iti*** 'I have walked'. The background to this allomorphic variation is further addressed in section 7.4.2.3, where it is argued that it stems from a dialectal difference, as well as from other socio-linguistic factors. Apart from this variation, the suffix exhibits various other differences in phonological realization.

To begin with, the final syllable is optionally omitted in the same way as was described for the present conjugation (in section 7.4.1.1). This is illustrated in (18) and (19).

(18) *nigóní' pakitánda*

ni-gon-ili	pa-ki-tanda	[ndángáti
SM1SG-lie.down-PRF	LOC16-NCP7-bed	NCP9.bed]

'I am lying on the bed'

(19) *kahúngu akajó': 'nikuwóni' lépe'*

ka-hungu	a-ka-jov-a	ni-ku-won-ili	lepe
NCP12-civet	SM3SG-CONS-say-FV	SM1SG-OM2SG-see-PRF	NEG

'Civet said: 'I didn't see you''

Moreover, just as in the vast majority of the Bantu languages with reflexes of **-ide, -ili* triggers what Bastin (1983) and Hyman (1995) term "imbrication", a morphonological process of internal modification where *-ili* coalesces with the immediately preceding syllable of the verb stem. The outcome is an allomorph of /*-ili/* in the form of an infix/circumfix, consisting of /i/ infixed before the final consonant of the verb base and another /i/ as a FV. As pointed out by Schadeberg (2003b) and Hyman (1995:28-29), this applies to all verb bases that are longer than -CV(N)C-, i.e. basically all derived verbs, whether transparently derived or not (see the description of derived verbs in 5.4.3).

The phonological process of imbrication in Manda is exemplified in (20).[107] (21) is a sample sentence with the verb used in the representation.

[106] However, Ngonyani (2003:57) reports variation between *-ile* and *-ili* in Ngoni and Yoneda (2006:iv) describes a general final vowel variation between /ɛ/ and /i/ in Matengo.
[107] This representation is influenced by Morrison (2011:111), in turn influenced by Bickmore (2007).

(20) *dumuk* > *dumuk-ili* > *dumu-il-k-i* > *dumu-i-k-i* > *dumwiki*
'be(come) broken' > …CVC-ili > …CV-il-C-i > …CV-ik-i …CG-iki

(21) *kitéwo kidúmwíki*
ki-tewo ki-dumuk-ili
NCP7-chair SM7-break.SEP-PRF
'the chair is broken'

In the example(s) above, the vowel of the extension is a back vowel that turns into a glide /w/. Other vowels in this position coalesce or are deleted, as illustrated in (22) and (23).

(22) *kamwána kafúgími mafugúmílo*
ka-mu-ana ka-fugam-ili ma-fugumilo
NCP12-NCP1-child SM12-kneel-PRF NCP6-knee
'the small child is kneeling'

(23) *munjívili bámbu óyɔ*!
mu-mu-jɪv-ɪl-ili bambu ɔyɔ
SM2PL-OM3sg-steal-APPL-PRF NCP1.mister PROX.DEM1
'you have stolen from that mister!'

A final irregular set of fusions and mutations in connection with *-ili* regards the verbs *-won-* 'see' and *-tam-* 'sit' and *-fwat-* 'dress', which are occasionally expressed as *-wene, -teme* and *-fwete* respectively, most probably as a result of apophony due to regressive vowel harmony.[108] A restricted set of such irregular verb stems is "quite common" cross-Bantu according to Hyman (1995:37). The irregular imbrication for *-won-* < **-bón-* has even been reconstructed for Proto-Bantu by Meeussen (1967:86, 111).

7.4.2.2 Function

The following analysis will show that the conjugation SM-B-ili in Manda is best understood as a marker of perfect aspect, following the definition by Comrie (1976:56), i.e. as marking that an action/event happening in the past has relevance for, and continues into, a present state. This stands in contrast to several other Bantu languages, for example the set of Northeastern Bantu languages (JE-languages) discussed by Botne (2010), which use other conjugations to express perfect aspect. In Manda, however, the perfect is actually found with the type of uses that Comrie (1976:56-61) and Dahl (1985:132-33) characterize as typical – and hence as diagnostics - for the perfect cross-linguistically. These usage types are perfects of result or stative perfects, perfects of experience, perfects of recent past ("hot news") and perfects of persistence/continuation. These types of perfects will be addressed in the following paragraphs.

[108] Kisseberth & Abasheikh (1976) refer to similar alternations in Chimwini (G.412) as "ablaut". According to Meeussen (1967:111), "Very many [Bantu] languages attest an irregularity occurring in the sequence *-bón-ide*, with *-bón-* 'see' [i.e. the reflex *-won-* in Manda]".

Firstly, examples (24) and (25) illustrate the resultative use of the perfect conjugation as defined by Comrie (1976:56) as describing the present state as being "the result of some past situation". Hence, there is typically a stronger focus on the result of the past action than on the action itself. With a verb like 'dress', exemplified in (24), the implication is that the child is wearing clothes at the present time, as a result of the past action of having been dressed. The same reading occurs with 'leave' in (25), especially as it is used metaphorically to refer to people who have died, where the focus is on the fact that the people the informant refers to are no longer with him.

(24) *amfwátiki mwána, hínu ahótóla*
a-mu-fwat-ik-ili mu-ana hınu a-hotol-a
SM1SG-OM3SG-dress-IMPOS-PRF NCP1-child now SM3SG-POSS-FV
'she has dressed the child, now she can

kúlʊ́ta kushúli
ku-lʊt-a ku-shuli
INF-go-FV LOC17-NCP9.school
go to school'

(25) *vayí' vamahéle lakíni vamahéle vanilékili*
va-a-y-ili va-mahele lakini [koma] va-mahele va-ni-lek-ili
SM3PL-P2-be-P2 ACP3-many but ACP2-many SM3PL-OM1SG-leave-PRF
'they were many, but many have left me'

Verbs of change-of-state (inchoative or stative-inchoative) *Aktionsart* conjugated with the perfect result in a present stative or adjectival-like reading of the proposition. As pointed out by e.g. Nurse (2008:95-99), this is characteristic of Bantu languages. It is an effect of the resultative semantics of the perfect, which locates the focus on the result of the event inherent in the verb, i.e. the focus is on the "state" part of the "change-of-state" rather than on the "change" itself.

(26) *limbóyáli ligóníli páhi*
li-mboyali li-gon-ili pahi
NCP5-cat SM5-lie.down-PRF LOC16.down
'the cat is lying down'

(27) *yémbe íyı iwólíli*
yembe ıyı i-wol-ili
NCP9.mango PROX.DEM9 SM9-be(come)rotten-PRF
'that mango is rotten'

(28) *máchi gayímíti*
ma-chi ga-yim-iti
NCP6-water SM6-stand.up-PRF
'the water is still (lit. has become standing up)' [translated from Dahl (1985)]

The second usage type, the experiential perfect, is exemplified in (29) to (32).[109] Following Dahl's (1985:141) definition, the interpretation embedded in this type of perfect is that the situation referred to has occurred at least once at some particular time in the past (with some lasting effect in the present). As pointed out e.g. by Nassenstein (2015:93), it also often comes with a pragmatic inference of the event being extraordinary.

(29) *nimbwéne mumáhéle*
ni-mu-won-ili mu-mahele
SM1SG-OM3SG-see-PRF LOC18-many
'I have seen her on several occasions (before)'

(30) *niwónjíti soséji*
ni-wonj-iti soseji [Sw.]
SM1SG-taste-PRF NCP9.sausage
'I have tasted sausage'

(31) *ávíli kuNsúngu sehému yóki*?
a-v-ili ku-Nsungu sehemu [mbali] yoki
SM3SG-be-PRF LOC17-Nsungu NCP9.part which
'in which part of Nsungu has he been?'

(32) *niwonángíni na lais*
ni-won-ang-an-ini na lais [Sw.]
SM1SG-see-REP-ASS-PRF COM NCP1a.president
'I have met with the president'

The third usage type, the so called "perfect of immediate past" is similar in function to the experiential perfect, but with emphasis put on a close temporal proximity of the previously occurring past event to the moment of speaking. In both (33) and (34) the recentness of these past situations is reflected in the use of the adverbial 'just' in the English translations.

[109] There are also examples in the data where the Swahili loan *-wahi* is used to express the experiential perfect (cf. Johnson 1939:523). The irregular final vowel /i/ (of Arabic origin) of the verb seems to have been adopted into Manda and reanalyzed as the reduced variant of the perfect suffix. Through back formation it may thus be pronounced with the full suffix in more careful speech, e.g. *niwáhíli kung'éndéla* 'I have visited him (before)' (!).

(33) *ǒyʊ ngéni ahúmí' pamwánja, atóndíti*
ʊyʊ mu-geni a-hum-iti pa-mwanja a-tond-iti
PROX.DEM1 NCP1-guest SM3SG-come.from-PRF LOC16-trip SM3SG-be.tired-PRF
'this guest has just come from a trip, he is tired'

(34) *nituwili ndala, na kwa ndava iyi*
ni-tuw-ili mu-dala na kwa ndava iyi
SM1SG-marry-PRF NCP1-wife COM CP7 NCP9.reason PROX.DEM9
'I have just married a woman, and for that reason

nihotola lepa kuhicha
ni-hotol-a lepa ku-hich-a
SM1SG-can-FV NEG INF-come-FV
I cannot come' [NT (1937); Luke 14:20]

Finally, examples (35) and (36) illustrate the perfect of continuation or of a persistent situation. This is defined by Botne (2010:33) as referring to an event that started in the past and that carries no implication of termination.[110] Thus, the inference encoded in (35) is that the second person object of this utterance has been caught and is still under arrest. Similarly, the inference that holds in example (36) is that the man and his wife, who are going to their plot, have taken their hoes with them before leaving home, and are still carrying those hoes with them.

(35) *sáwa, ndáva vakukámwili ápa*
sawa [Sw.]ndava va-ku-kamʊl-ili apa
ok NCP9.reason SM3PL-OM2SG-seize-PRF her
'okay, so that is why they have caught you here (and still hold on to you)'

(36) *valʊ́' kulíma kung'ʊ́nda lukéla;*
va-lʊt-a ku-lım-a ku-mu-gʊnda lu-kela
SM3PL-go-FV INF-cultivate-FV LOC17-NCP3-plot NCP11-morning
'they are going to cultivate their plot;

vapíndí' mayéla
va-pınd-ili ma-yela
SM3PL-carry-PRF NCP6-hoe
they have brought hoes (and they still carry them)'

Example (36) also illustrates another use ascribed by Givón (2001:295) as typical for the perfect, namely "counter-sequentiality", in which the natural temporal order in the discourse is broken up in order to introduce a previously occurring event. In this case it indicates that the hoes were brought before the journey started.

[110] I contrast this form with the persistive or 'still' aspect (discussed in 9.3, which more explicitly denotes that a situation connected to an identical one in the past still holds (see Nurse 2008:145).

Taken together, as demonstrated above, the conjugation SM-B-*ili* in Manda covers the different functions prototypical of a perfect. As will be illustrated in 9.2.2, this conjugation is also used in compound constructions to express complex functions derived from a perfect reading, i.e. pluperfect and future perfect.

7.4.2.3 Origin

The main focus of the discussion of origin of SM-B-*ili* will revolve around the suffix *-ili*. With regard to the lack of additional marking in the TAM1 slot which also characterizes the perfect conjugation in Manda, this can arguably be seen as reflecting a correspondence with the similarly unmarked present tense, discussed in the previous section 7.4.1, i.e. as an iconic reflection of reference to a semantically also more unmarked present deictic center.

As already anticipated, the suffix *-ili* does not only surface in the perfect but is also used in circumfixal constructions in the past tense paradigm (as seen in sections 7.4.3 and 7.4.4), and also in the conditional (as seen in section 7.6.3). With its past reading *-ili* has also fused with an 'imperfective' morpheme **-a(n)g-* to denote an event as ongoing at a particular time in the past – i.e. a past imperfective – as described in section 7.4.7.3. Consequently, the following discussion on the origin of the suffix *-ili* will also have bearing on the analysis of these conjugations.

Everything points toward the *-ili* suffix having been inherited from Proto-Bantu into Manda. It is not only present in all the neighboring languages but, according to Nurse & Philippson (2006) it is extremely common throughout the Bantu-speaking area and thus may be reconstructed for Proto-Bantu.[111] The original source of this suffix has been reconstructed as originating in a verb **-gid-e* 'finish' by Voeltz (1977, 1980). Heine (1993:45) argues that the source construction consisted of an event schema of the kind 'X does Y, it is finished', i.e. a serial periphrasis with the source verb in a position following the full verb. This would explain why the grammaticalized **-gid-e* ended up as a suffix rather than as a prefix, the canonical development path for a grammaticalized verb in Bantu (including Manda), as described in 6.3.5.

This reconstruction has, however, been questioned by Nurse (2008:276). Moreover, Crane (2012:79-86) shows, in her more recent review of the Proto-Bantu reconstruction of the (so-called) perfective suffix, that authors vary significantly in their conclusions regarding the exact form and function(s) of the suffix itself. Firstly, there is a debate on what the exact phonological shape of the suffix was and whether it is better treated as mono- or bimorphemic. Secondly, authors disagree on whether the original function was perfect, perfective and/or past. Here, this debate is only referred to in relation to the attempt to explaining the data (as far as possible) in Manda, especially with regard firstly to the phonemic variation in the realization of the consonant of the form, and secondly to its polyfunctionality.

[111] The flectional behavior of this marker is arguably also an additional indication of the old age of this morpheme; cf. Hopper (1991), Givón (2000:122).

As we have seen, the perfect suffix in Manda exhibits a set of morphophonemically conditioned variations in the surface form due to imbrication and apophony. As mentioned in section 7.4.2.1, there is also variation between an *-ili* and an *-iti* realization. These two forms are of similar shape, in the same slot and with fairly similar denotations, but they vary between the realization of the consonant as a liquid or as an unvoiced alveolar plosive. This specific phonemic variation has attracted attention in the Bantu literature with regard to what can be reconstructed for Proto-Bantu. Some authors, such as Meeussen (1967:110), have tried to posit functional differences between these forms as inherited from Proto-Bantu, and thus to reconstruct two separate forms. In other work, most notably Nurse (2008:267-268, 276), it has been argued that the two variants merely reflect morphophonologically constrained shifts.

For Manda, neither of these explanations holds perfectly true. As is transparent in the following examples, both /*-ili*/ and /*-iti*/ are used to express the very same functions.

(37)	**-ili**	**-iti**	
	ni-mal-ili	*ni-mal-iti*	'I have finished'
	ti-tond-ili	*ti-tond-iti*	'we are tired (/we have become tired)'

As is also obvious from this set of examples, both *-ili* and *-iti* may co-occur with the same verbs and hence with the same phonemic segments. Thus, the switch from *-ili* to *-iti* cannot be explained by morphophonological conditions governed by the consonant quality of the verbal base, as has been suggested for languages with similar variations spoken not too far from Manda, such as the Rufiji-Ruvuma language Makonde (P.23; Kraal 2007:197)[112] and Hehe (G.62; Nurse 2008:273). There is one morphophonological condition that does seem to hold, but it relates not to consonant quality but to stem length. It stipulates that short verb roots like *-fw-* 'die', *-gw-* 'fall', *-nyw-* 'drink' and *-y-* 'be(come)' – which in combination with **-ili* form a disyllabic stem – are always realized with a liquid. Apart from this condition, there are no prosodic differences between the two variants and both forms may undergo final syllable deletion in fast speech (as discussed further below and in 5.2.3.1).

Instead, the hypothesis put forward in this thesis is that the difference is a case of geographically and socio-linguistically induced variation and/or register. This hypothesis is based primarily on the fact that the Manda speaking area is positioned in the middle of an isogloss distinguishing Southern Highland languages (G.60), which have the reflex *-ili,*[113] from the N.10 languages – with the exception of Ngoni (N.12) – which have the reflex *-iti*. Note that several other Rufiji-Ruvuma languages also have the reflex *-iti*. An example is

[112] Kraal talks about tendencies, i.e. that *-ile* (in this case) tends to co-occur with certain final consonants of the verbal base, whereas *-ite* tends to occur with others.
[113] Hehe, mentioned earlier, is also a Southern Highland/G.60 language. It is however not spoken in direct proximity to Manda.

Matumbi (P. 13; Odden 1996).[114] This fact, as can be deduced from Table 7.**7** below, suggests that this isogloss cuts through the Manda speaking area. (Cf. the maps, i.e. Figure 2.1 and Figure 2.2 in chapter 2). This can, in turn, explain why it is only speakers of the Southern Manda variety that make use of the reflex *-iti*. That is, whereas the Southern Manda variety is spoken in direct connection to the Southern N.10 languages Mpoto and Matengo, the Matumba dialect – where only *-ili* is used – is surrounded by languages with only a liquid reflex (namely Pangwa, Kisi and Ngoni).

Language	**Code**	**Reflex**	**Sources**
Pangwa	G.64	*-ile*	Stirnimann (1983:93-98)
Kisi	G.66	*-ile*	Ngonyani (2011:103)
Nyakyusa	M.31	*-ile*	Persohn (2016: 112), Nurse (1979)
Ngoni	N.12	*-ile/i*	Ngonyani (2003: 87-88)
Matengo	N.13	*-iti*	Yoneda (2000: 167-169, 2016:427, 429)[115]
Mpoto	N.14	*-iti*	Nurse (2007b)
Manda	N.11	*-iti / -ili*	-

Table 7.7. Reflex of *-*ide* in Manda and the neighboring languages

Moreover, in the New Testament (1937), *-iti* is the predominant form used in the text, which might have had an impact on the spread of this form (as explained in 6.4.1.1, the New Testament is primarily based on southern Manda). This could also explain why older speakers seem more prone to use the form, as they have been more exposed to this text.[116] (This could also explain an additional socio-linguistic parameter that also seems to affect this division in usage, namely the fact that my informants belonging to the Anglican Church are more prone to use the *-iti* reflex than my Roman Catholic informants).

With regard to the function of *-ili*, Crane (2012) demonstrates how **-ide* has been labeled either "perfect/anterior" or "perfective" in Proto-Bantu reconstructions and that this division in designation permeates into descriptions of the reflexes of the form in synchronic Bantu languages as well. However, the definitions tend to agree that this marker "assumes a present reading for stative verbs" (Crane 2012:43). This is also the case for the sources on the languages neighboring Manda. Botne (2010) suggests that **-ide* was a (resultative) perfective aspect marker in Proto-Bantu and shows for a set of JE-languages that it does not represent a marker of the perfect but of the perfective. Consequently, he disputes the suggested path of (secondary) grammaticalization or semantic extension, i.e. that **-ide* evolved through a pathway resultative > anterior [=perfect] > perfective > past, as suggested by Nurse (2003; 2008:301), which in turn is based on a cross-linguistically induced chain-of-change proposed by Bybee et al (1994:81). There are no traces of any specific route of functional development

[114] Peculiarly, the Rufiji language Ndengeleko (P.11) seems to have /*-iki*/ as the "basic" reflex of this form (Ström 2013:251).
[115] Note, that according to Yoneda (2016), *-iti* is the underlying form. However, the form may surface with a liquid.
[116] According to several Manda speakers interviewed, mass was no longer conducted in the Manda language after independence and the disappearance of the British missionaries, and the Manda version of the New Testament (1937) therefore ceased to be used. See also Anderson et al (2003).

for *-ili* in Manda, however; hence any attempt to reconstruct its direction or chronology of change must be avoided. It should be pointed out, though, that contra Botne (2010) the reflex *-ili* does seem to be used to mark typical perfect contexts in Manda. Furthermore, there are no alternative markers of perfect aspect in the language.

It will be seen in the following sections that the *-ili* suffix also surfaces in past tense conjugations in Manda. This suffix will not be discussed in relation to the origin of these conjugations. It should be noted, however, that Nurse & Philippson (2006:181), and also Meeussen (1967), claim that **-ide* might already have had an additional function of denoting past in Proto-Bantu. Most likely, the past meaning of *-ili* is also inherited in Manda. (The issue of a past imperfective conjugation in Manda consisting of a mutation of *-ili* with an imperfective marker will be further discussed in section 7.3.)

7.4.3 Past1 SM-*ka*-B-*ili*

7.4.3.1 Form

The past 1 conjugation is characterized by a formative *-ka-* in the TAM1 slot. Occasionally, the formative is pronounced *-aka-* without any apparent difference in semantic range, but rather reflecting a common variation with regard to several morphemes in Manda (see e.g. 7.4.6.1 below).[117] In addition, the conjugation contains the same suffix *-ili* in TAM2 as does the perfect. The same phonological variations described in the preceding section 7.4.2 for the perfect marker (imbrication, final CV deletion) occur in this form as well.

(38) *tukalongíli lukéla ólʊ*
tu-ka-long-ili lu-kela ʊlʊ
SM1PL-P1-speak-P1 NCP11-morning PROX.DEM11
'we spoke this morning'

As seen in example (38) and examples (39) and (40) below, the accentual pattern is notably different from the perfect. Here a single high tone always falls on the penult (regardless of the presence or not of an object marker).

7.4.3.2 Function

The use of the past 1 conjugation reflects interesting pragmatic-semantic variations. Past 1 is prototypically used and understood by the Manda speakers as relatively more proximal in its temporal reading than past 2, which will be discussed in the following section 7.4.4. Typically (and as exemplified in 7.4.3.1 above) it is used as a hodiernal past, as defined by Nurse (2008:90) and Dahl (2013): as a marker of events that have occurred within the same day.[118] The hodiernal reading can coincide with reference to an explicit time adverbial or as derived from context. (39) is an example of the latter.

[117] There is fluctuation between *-aka-* and *-ka-* also in the analogous construction in Ngoni, according to Ebner (1939:24).
[118] This relatively proximal reading of a conjugation containing *-ka-* is a bit surprising from a Bantu perspective. It is further discussed in section 7.4.4.

(39) *nikanywíli cháyi na ng'káti*

ni-ka-nyw-ili	chayi [Sw.]	na	mu-kati
SM1SG-P1-drink-P1	NCP9.tea	COM	NCP3-bread

'I had (lit. drank) tea and bread'
{speaker describing what he ate for breakfast today}

However, to refer to past 1 as a hodiernal past is problematic. Firstly, in correspondence with the claims by Crane (2012) and Dahl (2013), and counter to what has been stipulated by Nurse (2008:92), the range of the temporal scope and the cut-off point of past 1 in relation to past 2 is not necessarily before/after sunrise, but is rather connected to before and after sleep, as exemplified in (40). This sentence is uttered by the speaker at noon and refers to a situation taking place the night before. That is, even though it took place before sunrise it is still encoded as occurring within the hodiernal scope, given that it appeared after going to sleep.

(40) *nikasisamwíki sáa sába ya kílu*

ni-ka-sisamuk-ili	saa [Sw.]	saba	[muhano na sivılı]	ya	kilu
SM1SG-P1-wake.up(from.sleep)-P1	NCP9.clock	seven		CP9	night

'I woke up (from sleep) at one o'clock in the night'

Furthermore, as pointed out by authors such as Botne (2012), Botne & Kershner (2008), Crane (2013), Nurse (2008:93-94) and Dahl (2013), the linear scales of degrees of temporal distance of past (or future) based on the counting of days are often not so neat and discrete in reality. Instead, these scaled tenses are often relative and intermingle with other cognitive/grammatical concepts. Thus, a hodiernal limitation as sketched for the past 1 conjugation might frequently be violated.

With regard to past 1 in Manda, there is a set of circumstances detected where it is often found outside of a hodiernal temporal scope. To begin, it occurs much more frequently in older speakers' discourse, whereas younger speakers are more consistent in delimiting past 1 to actions that have occurred today. Secondly, non-hodiernal uses of past 1 tend to occur in recordings of more free speech rather than in more rigorous paradigm elicitation. They also tend to occur more generally in contexts where there is no other explicit reference to the temporal setting, whether in paradigm elicitation (where obviously this often is the case) or in other kinds of discourse. As pointed out by Dahl (2013:38), the flexibility of a scaled tense marker is typically shown in contexts without other explicit temporal reference, such as in adverbials. Moreover, past 1 appears to be especially used outside of the hodiernal scope when the conjugated verb is the (inchoative) copula verb *-y-* 'to be(come)'. (41) and (42) are examples of this.

(41) *nénga nikayíli wa sisíyem*

nenga	ni-ka-y-ili	wa	CCM [Sw.][119]
PERS1SG	SM1SG-P1-be-P1	CP1	CCM

'me, I was a CCM member'
{Speaker referring to a situation that held 15-20 years ago}

(42) *vána va shúli vakayíli kɔ́la,*

va-ana	va	shuli	va-ka-y-ili	kɔla
NCP2-child	CP2	NCP9.school	SM3PL-P1-be-P1	DIST.DEM17

'the schoolchildren were there,

kukívánja ká mpíla

ku-ki-vanja	ka	mu-pila [Sw.]
LOC17-NCP7-field	CP7	NCP3-football

at the football field'
{Speaker referring to a specific event that took place in 1967}

Furthermore, throughout the New Testament (1937) – as explicitly seen in the extract below describing the lineage of Jesus – this construction has a much wider scope of temporal reference and often has more of a narrative-like function (see also section 7.6.1).

(43) *Ibrahimu akamhogwili Isaak*

Ibrahimu	a-ka-mu-hogol-ili	Isaak
Ibrahimu	SM3SG-P1-OM3SG-give.birth-P1	Isaak

'Abraham begat (literally 'gave birth to') Isaac…
…nu Isaak ***akamhogwili*** *Yakobo; nu Yakobo* ***akamhogwili*** *Yuda na wa nung'una mundu; nu Yuda* ***akawahogwili*** *Perez na Zera wa Tamar; nu Perez* ***akamhogwili*** *Hezron*
[NT (1937); Matthew 1:2]

7.4.3.3 Origin

A morpheme *-ka-* in the TAM1 position often surfaces in past constructions in Bantu, not least in this area and typically in a construction with a reflex of the suffix **-ide* (discussed more extensively in the previous section 7.4.2.3), as is the case for Manda. This can firstly be deduced from comparison with the neighboring languages in Table 7.8. The typical designation of a formative *-ka-* surfacing in the past tense paradigm across Bantu – including in languages spoken not far away from Manda (such as Matumbi (P.13); Botne 2013) – is as a marker of distal and remote past tense (see Botne 1999, Botne & Kershner 2008, Nurse & Philippson 2006). As a consequence, it has also been linked to the itive or distal *-ka-* by Nurse (2008:242-246).[120] In view of this fact, it is interesting to note that many of the neighboring languages – and Manda itself – instead use a formative *-ka-* to denote a relatively proximal past tense. Thus, the neighboring languages which make use of a past conjugation with SM-*ka*-B-*ide* (as summarized in Table 7.8) typically contrast this conjugation with a more

[119] CCM = *Chama cha Mapinduzi* 'the revolutionary party', the ruling party of Tanzania.
[120] the itive in Manda is discussed in section 7.5.3 and the narrative, here referred to as the consecutive in section 7.6.1

remote past conjugation consisting instead of a formative *-a-* (this is also the case in Manda; see the following section 7.4.4).

LANGUAGE	CODE	Reflex	Comment	Sources
Pangwa	G.64	SM-**xa**-B-**ile**	Regular sound law: **k* > /*x*/	Stirnimann (1983:98-99)
Kisi	G.67	SM-**ka**-B-**ile**		Ngonyani (2011:99)
Nyakyusa	M.31	-	No reflex	(Nurse 1979)
Ngoni	N.12	SM-**aka**-B-**ile/i**		Ngonyani (2003:58-59)
Matengo	N.13	-	No reflex	(Yoneda 2000, 2016)
Mpoto	N.14	SM-**ka**-B-**iti**		Nurse (2007b, 2008:244), Makwaya (pers. comm.)

Table 7.8. Reflex of past conjugation with °SM-*ka*-B-*ide* in neighboring languages to Manda

Typically, the examples from the neighboring languages are also translated with adverbs expressing proximity, such as 'recently' (="*kürzlich*" (Stirnimann 1983:98)) or 'just', as seen in example (44) from Ngoni.

(44) *nakahambíli*
ni-aka-hamb-ili
SM1SG-PST-go-PFV
'I just went' [Ngoni (N.12); Ngonyani (2003:60)]

As a consequence, it is difficult to link this formative directly with the itive *-ka-* or the remote past *-ka-* of other Bantu languages on semantic grounds. There are two possibilities: either the conjugation has shifted from a more remote to a more proximal reading in Manda and the neighboring languages; or alternatively, the formative *-ka-* of this specific conjugation is not a reflex of the reconstructed distal **-ka-* but originates from a different source, such as e.g. the 'persistive, situative' **-k*V- surfacing in the situative conjugation in Manda, further discussed in section 7.6.2.3. This suspicion is strengthened by the characterization of the analogous construction in Ngoni, as given by Ebner (1939:24), namely that it is explicitly used to express that the effect of an action has already been overtaken by another action. Thus, in Ebner's characterization it appears to be more situative-like in the sense that it stands in a tighter relationship to another event as encoded in a subsequent clause. This is a topic in need of further research. Regardless of the history of the past 1 construction, the fact that younger speakers more rigidly delimit its temporal range into hodiernal events would suggest that this construction is petrifying into a more "objective" hodiernal past marker.

7.4.4 Past 2 SM-*a*-B-*ili*

7.4.4.1 Form

The past 2 conjugation consists of a prefix *-a-* in the post-initial TAM1 slot, and the suffix *–ili* in the TAM2 slot. A past formative of the shape *-a-* in the TAM1 position is the most widespread tense morpheme in Bantu, as shown by Nurse (2008:82, 237; see also Nurse &

Philipson 2006). The same morphophonological rules (as derived from historical sound changes) apply for the *-ili* suffix in this conjugation as well, e.g. imbrication, as illustrated in (45).

(45) *tawonangíni makáchu pakutúmbúla*

ti-a-won-ang-an-ili	makachu	pa-ku-tumbula
SM1PL-P2-see-REP-REC-P2	last.year	LOC16-INF-begin-FV

'we met last year, for the first time'

Just as in the case of past 1, a single high tone falls on the penult, surfacing on the same syllable also after final syllable deletion (as in example (46) below).

7.4.4.2 Function

The function of past 2 is to denote a relatively more remote past: that the situation as encoded in the inflected verb occurred far away from the deictic center or relatively further away than past 1 or other past constructions. This is a general cross-Bantu characteristic for a formative *-a-* in the TAM1 position, whether or not incombiantion with *-ili* in TAM1 (see Nurse 2008:90). Typically, according to speaker intuition and in a scalar relation to past 1, past 2 is used for events occurring before today, i.e. as a pre-hodiernal past tense, in Manda.

(46) *natamí'*[121] *kusipitáli wíki sívílɪ*

ni-a-tam-ili	ku-spitali	wiki [domaníka]	sɪ-vɪlɪ
SM1SG-P2-sit-P2	LOC17-hospital	NCP10.week	ACP10-two

'I stayed at the hospital for two weeks'

{Speaker referring to a situation that held last year in October}

(47) *mu-1878 mánda mónga ayómbwíki nyánja*

mu-1878	m-manda	mu-monga	a-a-yɔmbɔk-ili	nyanja
LOC18-1878	NCP1-manda	NCP1-one	SM3SG-P2-cross-P2	NCP9.lake

'in 1878, a Manda crossed the lake'

As reflected in (47), this conjugation is also the typical choice for the introductory clause in a narrative. This will be further apparent in section 7.6.1.

7.4.4.3 Origin

The formative *-a-* as a marker in past tense constructions, even in combination with *-ili*, has its origin in Proto-Bantu. All neighboring languages to Manda share the same construction, with a relatively more remote reading as well, which suggests that this specific feature is also inherited in Manda.

[121] Note that there is apparently no ablaut/imbrication in this example of *-tam-*, unlike the example discussed in section 7.4.2.1.

LANGUAGE	CODE	Reflex	Comment	Sources
Proto-Bantu		*-**a**- + *-**ide**		Nurse & Philippson (2006)
Pangwa	G.64	SM-**a**-B-**ile**		Stirnimann (1983:98-99)
Kisi	G.67	SM-**a**-B-**ile**		Ngonyani (2011:100)
Nyakyusa	M.31	SM-**a**(lí)-B-**ile**	This is the only past conjugation in Nyak.	Persohn (2016:112)
Ngoni	N.12	SM-**a**-B-**ile/i**		Ngonyani (2003:58)
Matengo	N.13	SM-**a**-B-**iti**		Yoneda (2000:161, 2016:429)
Mpoto	N.14	SM-**a**-B-**iti**		Nurse (2007b), Makwaya (pers.com)

Table 7.9. Distal past conjugation in neighboring languages to Manda

In addition to the past paradigm, a formative *-a-* with a remote reading is also found within the future paradigm of Manda and its neighboring languages, as will be apparent in sections 7.4.6 and 7.5.2, and discussed further in section 7.5.2.3.

7.4.5 Future 1 *ya*-SM-B-(*ay*)*i*

7.4.5.1 Form

The future 1 conjugation consists of a morpheme *ya-* in the pre-SM slot of the verbal matrix, and a suffix *-i* and *-ayi* in the TAM2 slot. As will be argued in section 7.4.5.3, these suffixes are related to the subjunctive construction (see also the discussion in section 7.5.1.3). To have a TA morpheme in the pre-SM slot is slightly rare from a canonical Bantu perspective, as this position tends to be devoted to relative and negative prefixes. However, a future construction consisting of a pre-initial prefix or pre-initial clitic is a very typical future construction in this part of the Bantu-speaking area, as shown in work by Botne (1998, 2005), Kershner (2002), Morrison (2011) and Ngonyani (1999, cited in Nurse 2007b). The subjunctive suffix is a structural indication that the future 1 conjugation originated from more modal constructions. However, from a synchronic point of view this construction is best analyzed as indicative and as part of the tense paradigm rather than of the modal paradigm. (These issues will also be further discussed in section 7.4.5.3.)

The tonal pattern is a high tone on the antepenult and on the penult (APU-PU). The /a/ of the pre-initial formative *ya-* often coalesces with a following SM3SG *a-* when they occur together, as in example (48).

(48) *ndáva yumónga yapálúki lépa*
ndava yu-monga ya-a-paluk-i lepa
because ACP1-one F1-SM3SG-disappear-F1 NEG
'because none of us will disappear'

There is only one future tense conjugation in the Southern variety of Manda. However, in section 7.4.6, a future marker only used in the Matumba dialect will also be presented.

Furthermore, as seen in the next example, the *-ayi* form may optionally replace *-i*. In fact, it may even be more common than the *-i* suffix, and for some speakers it is obligatory.

(49) *lɪlínu yanilʊ́táy' ku-Nchúchúma*
lɪlɪnu ya-ni-lʊt-ayi ku-Mchuchuma
today F1-SM1SG-go-F1 LOC17-Mchuchuma
'today, I will go to (the river) Mchuchuma'

As illustrated in (49) above, the *-ayi* suffix does not change the prosody of the verbal word, which remains APU-PU. It is, however, subject to final CV deletion or vowel deletion, as seen in the same example. Moreover, it affects the quality of the vowel of an extension morpheme in the verb stem, raising it to 1st degree height. This is illustrated in (50) below. (This suffix appears in several of the TAM conjugations in Manda, as will be apparent in the rest of this chapter.)

(50) *nénga, yanindíndʊlilayi panyúmba ápa*
nenga ya-ni-mu-dɪndʊl-ɪl-ayi pa-nyumba apa
PERS1SG F1-SM1SG-OM3SG-open-APPL- F1 LOC16-NCP.9home PROX.DEM16
'me, I will open for him here at home'

Note finally, that the tone pattern with an object marker consists of a high tone on the stem-initial position. This is also the case for the construction with a final *-i*.

7.4.5.2 Function

With regard to functional range, future 1 is used to mark all kinds of temporal degrees of remoteness, from the proximal future, as in (49) above, to situations occurring in the more distal future, as illustrated in (51).

(51) *matofáli yanifyatúláyi mwáka ówʊ*
ma-tofali ya-ni-fyatʊl-ayi mu-aka ʊwʊ
NCP6-brick F1-SM1SG-burn.SEP- F1 NCP3-year PROX.DEM3
'I will make [lit. burn] the bricks this year'

With regard to the suffix *-ayi*, speakers who use both of the forms seem to prefer to insert it in the future construction when they want to stress that the action taking place in the future will occur repeatedly or on several occasions, or, alternatively, that the event has already begun but will continue in the future (cf. Hewson & Nurse 2005).

Thus, example (52) contrasts with (53)[122] in accentuating the iterative or habitual conceptualization of the action of 'coming' denoted by the inflected verb.

[122] This speaker tends to delete the initial part of this verbal root *-hich-* 'come, arrive'. This happens quite regularly with cognates of this verb throughout (Eastern) Bantu, e.g. Bena (G63) *-adz-* ~ *-dz-*, Swahili (G42) *-j-*, etc.

(52) *yaníhíchi ápa kiláwu*

ya-ni-hich-i	apa	kilawu
F1-SM1SG-come-F1	PROX.DEM16	tomorrow

'I will come here tomorrow'

(53) *yatícháyi ápa kíla magóno sáa nchéche*

ya-ti-hich-ayi	apa	kila [Sw.]	ma-gono	saa [Sw.]	ncheche
F1-SM1PL-come-F1	PROX.DEM16	every	NCP6-day	clock	four

'we will be coming here every day at four'

In the following examples, *-ayi* highlights the implication of repeated actionality encoded in the verb, i.e. that the egg will crack piece by piece in (54) and that the person referred to in (55) will die slowly, "for example because of illness", as one informant explained.

(54) *kadége yakakang'ándáyi*

ka-dege	ya-ka-kang'and-ayi
NCP12-bird	F1-SM12-crack(tr.)-F1

'the (small) bird will hatch the egg (and it will crack piece by piece)'

(55) *yafwáyi*

ya-a-fw-ayi
F1-SM1SG-die-F1
'he will be dying' (little by little)

The subjunctive suffixes *-i* and *-ayi* and their differences are further discussed under section 7.4.5.3 and 7.5.1 respectively. Note, also, that in section 7.6.3.1, it will be clear that the pre-SM morpheme *ya-* can be used with another function a well, namely as a conditional marker.

7.4.5.3 Origin

Unlike several of the other morphemes discussed in this chapter, no marker of the form *ya-*, denoting future or similar senses, has been reconstructed for Proto-Bantu. However, as seen in Table 7.10, a reflex of this formative – or what are arguably related morphemes – surfaces in some, but not many, of Manda's neighboring languages. It should be noted, that the use of this formative in future expression surfaces in member languages of both the Southern Highland and N.10 group (including Ngoni). At least for Pangwa and Mpoto, the conjugation with *ya-* (or rather *y*V-) in the pre-initial slot makes reference to an event in the proximal future relative to other future tense forms.

LANGUAGE	CODE	Reflex	Contrasts with more distal futures	Sources
Pangwa	G.64	**ye**-SM-B-a	yes (‘soon’)	Stirnimann (1983:185)
Kisi	G.67	-	-	(Ngonyani 2011)
Nyakyusa	M.31	-	-	(Persohn 2016)
Ngoni	N.12	**ya**ti SM-B-a	not clear	Ngonyani (2003:56-57)
Matengo	N.13	-	-	(Yoneda 2000, 2016)
Mpoto	N.14	**ya**-SM-B-(ay)i	yes	Nurse (2007b)

Table 7.10. Use of *ya-* as a future tense marker in neighboring languages to Manda

Cross-Bantu studies such as Nurse (2008:32) and Güldemann (1999, 2003) suggest that the position of a TA formative in the pre-SM slot is a later innovation that has appeared through grammaticalization. Thus, the pre-initial position of *ya-* but also the limited presence in the neighboring languages indicates that this is also the case for the future 1 conjugation in Manda. I propose that this at present simplex construction most probably originates from serial periphrasis, as discussed in 6.3.5, i.e. a collocation of two inflected verbs resulting in an auxiliary construction with an equi-subject indexation as sketched in (56) below.

(56) SMj-AUX # SMj-$VERB_2$

As demonstrated by Botne (1998; see also Anderson 2011), this kind of grammaticalization along the verb-to-affix cline is especially common in the area where Manda is spoken and specifically in relation to the genesis of future tense markers. A described in 6.3.5, and here re-introduced in (57) below, the formal outcome of the grammaticalization of such a collocation can be sketched in two typical steps. Firstly, the subject marker of the auxiliary erodes, probably - as proposed by Güldemann (2003) - due to the double indexation of the subject marker being uneconomical because V1 at this stage has no referential use. Secondly, the construction contracts and the remaining phonemic substance of the auxiliary is reanalyzed as a prefix inflected in the pre-SM or pre-initial slot of the full verb.

(57) SMj-$VERB_1$ # SMj-$VERB_2$ > SMj-AUX # (SMj)-$VERB_2$ > SM-prefix-$VERB_2$

In Manda, there are only records of *ya-* in a fused form, both in the historical source of the New Testament (1937) and also in the comparative work of Guthrie (1948:62). However, with regard to the form of the full verb in (56), its origins can be traced to the subjunctive, based on the formal characteristic of a final *-i* and also on the variant with *-ayi* (the form and function of the subjunctive is discussed in section 7.5.1). Anderson (2006, 2011:13, 29) identifies an auxiliary construction with the full verb marked in a dependent form – such as the subjunctive in Bantu - as a salient typological subtype of auxiliary constructions, which he denotes “the modal subordination sub-type”, exemplifying with Hemba (L.34), here re-iterated for illustration in (58). (Note further, that in the examples of the grammaticalization of serial verb constructions in Bantu - (13) and (14) in 6.3.5 - the content verb is inflected in the subjunctive suffix *-e*.)

(58) *tu-sw-a* *tu-tal-**e***
SM1PL-AUX -FV SM1PL-see-**SBJ**
'we will see' [Hemba (L.34); Aksenova (1997: 34), cited in Anderson (2011:29)]

Anderson (2011:13) means that subjunctive marking is used to encode "non-finalness" or "lesser finiteness" of the full verb in an auxiliary construction. The fact that future tense constructions, in particular, tend to evolve from modal forms cross-linguistically, as Bybee et al (1991) show, may also be seen as a more general semantic connection between modality and future tense, mirrored in the uncertainty connected to an event that has not occurred yet, but merely exists "in the realm of the possible" (Hewson 2012:528). Indeed, as will become clear 10.3.2.1, in the older sources on Manda the future 1 construction was also used to express modal notions. Furthermore, as described in section 7.6.3, some Manda speakers make use of a formative *ya-* in the pre-initial position in conditional constructions.

Accepting that the future construction is derived from an auxiliary construction with the full verb inflected in the subjunctive still leaves the question of the etymon of *ya-* unanswered. Unfortunately, there are no traces of intermediate stages of a more auxiliary- or verb-like status of *ya-*. There are two possible candidates for a lexical source. Both of them, however, are problematic for different reasons. One of the source verb candidates is the motion verb **-gɪ-* 'go'. Such motion verbs turning into future tense markers are possibly the most prototypical grammaticalization schema both cross-linguistically and cross-Bantu (at least, 'go' > FUTURE is the most emblematic case in the literature on grammaticalization, as discussed in 6.3; see also 8.4). It is also a pervasive phenomenon in Bantu languages. In cross-Bantu studies like Botne (2006), this specific etymon is mentioned as a source of future tense affixes. For example, one of the many future forms of Tumbuka (N.21) – spoken just across the lake from Manda – contains a morpheme *ya-* in pre-SM position. As discussed by Kiso (2012:182), it is probably derived from the verb *-y-* 'go', a reflex of **-gɪ-*. However, there are no traces at all in the lexicon of the verb **-gɪ-* 'go' either in Manda or in any of the neighboring languages.[123]

Nonetheless, there does exist a verb of the shape *-y-* in Manda, the copula verb 'be(come)' (see more in 9.2). Moreover, a copula is also a type of verb that may be grammaticalized into a future tense cross-linguistically, according to Heine & Kuteva (2002:96-7). Crucial, here, is the inchoative lexical semantics of *-y-* in Manda, more suitably translated as 'become' rather than just 'be'. Compare for instance the translation of *-y-* together with the comitative *na* in the present and perfect conjugations in (59) and (60).

(59) *ní-y-a na ndáva* 'I will have a reason'
(60) *ní-y-í' na ndáva* 'I have a reason'

[123] Note, however, that an interesting exception is Alt-kingoni, which, according to Spiss (1904:298) had a lexical verb *-y-* 'go'. This can be compared with Nguni languages of today, like Zulu (S.42), which have recruited the cognate verb to a future marker, as was exemplified in (10), 6.3.3.

According to Bybee et al (1994:262), such "change-of-state" semantics involve a sense of predestination that may easily be semanticalized into marking prediction, i.e. future tense.

However, there are no examples of bridging contexts, i.e. contexts where a construction with *-y-* 'be(come)' inflected in present tense (i.e. SM-*y*-*a*) and in collocation with a second verb is ambiguous between a reading of predestination and a reading of prediction in Manda. In fact, speakers tend to disallow such complex constructions altogether. Moreover, the lexical verb *-y-* itself is quite idiosyncratic from a cross-Bantu perspective. It does not link up easily with canonical Bantu nor with Proto-Bantu reconstructed copula verbs. However, in 9.2.4, I argue that the verb *-y-* in Manda is a reflex of Proto-Bantu **-b-* 'dwell, be, become'. Thus, it could be argued that the future marker *ya-* is derived from the lexeme *-y-*, which in turn is a reflex of PB **-b-*. The problem here, however, is that Matumba speakers pronounce the future morpheme as /*ya*/ and not as **/*vya*/ which would be expected given its supposed origin in the copula, pronounced as /*vy*/ in Matumba. Similarly, Pangwa also has a future formative *ya-*, while the reflex of **-b-* is regularly *-v-* in that language.

To sum up, even though it possible to reconstruct the structural prerequisites of the future construction as originating in a serial verb schema with the full verb inflected in the subjunctive, it is at this stage impossible to reconstruct the source of the future formative *ya-* itself. Hopefully, further research will be able to properly account for this as yet unresolved matter.

7.4.6 Future 2 SM-(*a*)*la*-B-*a*

7.4.6.1 Form

There is only one future tense in the southern varieties of Manda. However, a future formative *-la-* has been ascribed to Manda by Nurse & Philippson (2006). According to my Manda informants, a future construction with *-la-* (often realized as *-ala-*) and a vowel *-a* in the final position is a dialectal variant that belongs solely to the Matumba dialect which has closer affinities to the G60/Southern Highland languages, as discussed in section 2.2. As also mentioned in that section, there are several indications that Nurse's Manda data must have been derived from a Matumba speaker(s). The future 2 conjugation always occurs with a final vowel *-a* in Manda (Matumba) and cannot, unlike future 1, co-occur with the subjunctive final vowel (in contrast with what has been reported by Moser (1983:104) and Gray (forthcom.) for similar constructions in neighboring Ngoni and Kisi, respectively).

(61) *nalawóningana ni valóngo vángu*[124]

ni-(a)la-won-ang-an-a	ni	va-longo	va-angu
SM1SG-F2-meet-REP-ASS-FV	COM	NCP2-relative	ACP2-POSS1SG

'I will meet with my relatives'

As seen in example (61), a high tone is assigned to the stem-initial syllable in this conjugation. (This is also the case when object markers are inserted).

7.4.6.2 Function

Interestingly, the data from Matumba speakers not only confirms the presence of this future tense, but also supports a certain interrelation with future 1, where future 2 is used to make reference to relatively more remote and dissociative situations in respect to concepts of both time and reality. This is similar to what has been described for other Bantu languages by Botne & Kershner (2008) and Botne (2012).[125]

In this data, future 2 is typically found in constructions describing an event that will take place far away from now[126] but also further away than an event referred to with future 1. This is apparent in the divergent use of the two future conjugations in this sentence.

(62) *nalalíma malómbi kumwáka*

ni-(a)la-lım-a	ma-lombi	ku-mu-aka
SM1SG-F2-cultivate-FV	NCP6-corn	INF-NCP3-year

'I will cultivate corn next year,

hivi karibúni yanilímáy' málávi

hivi karibuni	[hínu papípi]	ya-ni-lım-ayi	ma-lavi
soon		F1-SM1SG-cultivate- F1	NCP6-peanuts

here soon I will cultivate peanuts'

However, future 2 may also be used with reference to relatively close proximity in time, like 'tomorrow' in example (63). In those cases, the intention is to express more of a "subjective remoteness" (Botne 2012:546; see also Nurse 2008:94), i.e. a lower degree of likelihood that the event encoded in the proposition will occur, and less certainty from the speaker's point of view.

[124] Unfortunately, it is not clear why the /a/ of the repetitive extension has been raised to /i/ in this specific example.

[125] Of course, future time reference is always intermingled with a certain degree of irrealis as it concerns events yet to be executed and thus by default contains a degree of uncertainty with regard to whether the situation will hold or not, unlike the more definite memorial time of the past and the ongoing and thus sensible present, as pointed out e.g. by Bybee et al (1994:280).

[126] One consultant insisted that there was a fixed demarcation in time connected to the use of future 2 to events occurring after the day after tomorrow (!). This was however refuted by other speakers and (as can be seen) by the data itself.

(63) *amányí' Múngu: nalayúmúka au lépe*

a-many-ili	Mungu [Sw.]	ni-(a)la-yumuk-a	au	lepe
SM3SG-know-PRF	God	SM1SG-F2-rise-FV	or	NEG

'it is God who knows whether I will wake up or not'
{speaker referring to a situation occurring tomorrow morning}

7.4.6.3 Origin

The TAM1 morpheme *-la-* is very commonly used as a future marker in Eastern Bantu and particularly in the G60/SH languages (Nurse & Philippson 2006:175), where it canonically indicates the "far future" (i.e. with distal or dissociative denotations). Thus, the pattern of remoteness illustrated in 7.4.6.2 seems to relate to what has been described for similar future formations in the Southern Highland languages, e.g. the "remote future" in Bena (G.63) (Morrison 2011:262)[127]. According to Ebner (1939:23)[128], an analogous construction likewise appears in Ngoni, denoting "Futur des Ungewissheit" [= "Future of uncertainty"]. A future morpheme **-laa-* has also been reconstructed for Proto-Bantu or at least "near" Proto-Bantu (Nurse 2007a). According to Nurse & Philippson (2006), it most typically co-occur with the final vowel *-a*, i.e. the same suffix as in the present tense (discussed in section 7.4.1). As can be inferred from the comparative data, this seems to be the construction in use in this area as well.

LANGUAGE		**CODE**	**Reflex**	**Sources**
Proto-Bantu			****-laa + -a***	Nurse & Philippson (2006)
Pangwa		G.64	SM-**la**-B-**a**	Stirnimann (1983:104-105)
Kisi		G.67	SM-**la**-B-**a**	Ngonyani (2011:100)
Nyakyusa		M.31	-	(Persohn 2016)
Ngoni		N.12	SM-**(a)la**-B-**a**	(Only in) Ebner (1939:23)
Matengo		N.13	-	(Yoneda 2000)
Mpoto		N.14	-	(Nurse 2007b)
Manda		N.11		
	Southern dialect		-	
	Matumba dialect		SM-**(a)la**-B-**a**	

Table 7.11. The distribution of future *-la*-B-*a* in Manda and the neighboring languages

[127] Morrison refers to three future tenses in Bena in a Reichenbachian, temporal and linear manner, where the future construction analogous to future 2 in Manda is described as a remote future used to describe events "that will take place somewhere far in the future (usually in a few months or years)" (Morrison 2011:262). As seen from her own examples in other parts of the dissertation, as well as from other (older) sources (e.g. Priebusch 1935:49), the *-la-* form appears to be able to be used to describe events occurring closer in time but possibly with a higher degree of irrealis.

[128] Ngonyani (2003) makes no reference to this form in his grammar of Ngoni.

As seen in Table 7.11, however, although the form is prevalent throughout the Bantu area, the lack of it in other Rufiji-Ruvuma languages, as well as in Southern Manda varieties, suggests that it is either borrowed from the Southern Highland languages in the Matumba variety or inherited and then lost in the Southern variety. It does not occur in the New Testament (1937), which is to be expected given that the text is based on the southern varieties (see 6.4.1.1).

In addition, it is worth noting that this future marker in Manda is often expressed as *-ala-*, i.e. with an extra /a/ in relation to the reconstructed form. Plausibly, this structure originates from the fusion of a compositional concatenative combination of the remote morpheme *-a-* (discussed in 7.5.2) and the future *-la-*. Another possible explanation is the general tendency in Manda to replace the vowels of subject markers with /a/ (cf. section 7.4.5.1 above).

7.4.7 Past imperfective SM-B-*eye* and SM-*a*-B-*ayi*

The two past imperfective conjugations, SM-B-*eye* and SM-*a*-B-*ayi*, are synchronically analyzed as consisting of a VCV-shaped suffix in the final TAM2 position of the verbal word. Based on morphophonological, functional and comparative grounds, however, it can be shown that both of these forms are partly derived from the morpheme **-ag-* (~ **-a(n)g-*), which is common cross-Bantu and can be reconstructed for Proto-Bantu (see 7.4.7.3). There are several qualities shared by these two constructions, and they are therefore discussed together, being labeled as "past imperfective 1" and "past imperfective 2", respectively.

7.4.7.1 Form

Formally, there are several differences between the past imperfective 1 and the past imperfective 2 as illustrated in (64) and (65).

(64) *nindíndeye nsǿngʊ yóla*
ni-mu-lɪnd-eye mu-sʊngʊ yʊla
SM1SG-OM3SG-wait-P.I1 NCP1-white.person DIST.DEM1
'I was waiting for that white guy'

(65) *tayogiláyi mumáchi*
ti-a-yog-ɪl-ayi mu-ma-chi
SM1PL-P.I2-bath-APPL-P.I2 LOC18-NCP6-water
'we used to bathe in the water'

To begin, whereas the past imperfective 1 lacks a morpheme in the TAM1 slot, a prefix *-a-* surfaces in the past imperfective 2. Moreover, the vowel quality of the suffix in the final TAM2 slot differs between the two conjugations. Another crucial formal difference between these forms is prosody. The tone pattern of the first construction is analogous with the perfect, with an antepenult-penult tone melody, as well as with an alternative stem-initial pattern when inflected with an object marker. The second construction has a rigid penult accent (regardless of the structure of the macro-stem) similar to that of the past 2 conjugation. Hence, there is a formal connection in both TAM morphology and prosodic patterning between the perfect and the past imperfective 1 (no morpheme in the TAM1 slot and antepenult-penult tone assignment), and between the past 2 and the past imperfective 2 (*-a-* in

the TAM1 slot, penult tone assignment). Both conjugations are affected by optional final CV deletion. Furthermore, both affect the degree of aperture of the vowel of an extension morpheme of the verbal base by raising it. Thus, for example, the applicative extension *-ɪl-* is raised to /*il*/ in example (65) above.

7.4.7.2 Function

These two conjugations are both markers of past imperfective. Based on definitions such as Bybee et al (1994:137-9) and Comrie (1976:24-40), imperfective is here taken as a broad aspectual category indicating that the viewpoint is on the internal structure of a situation. The past imperfectives of Manda are used to make reference to several different kinds or subcategories of imperfective aspect as occurring in the past. There are examples in the data where they are used to mark progressive aspect; that is, they are employed to mark that an event – typically expressed by a verb phrase consisting of a dynamic verb – is ongoing at the time of reference as defined by Nurse (2008:143).

(66) *híla magóno vatóléye*
hila ma-gono va-tol-eye
every NCP6-day SM3PL-take-P.I1
'every day they were taking'

(67) {'after three days they found him in the temple courts, sitting among the teachers...'}
na ayufwaneye, na awakoteye wombe
na a-yufwan-eye na a-va-kot-eye wombe
COM SM3SG-listen-PST.I1 COM SM3SG-OM3PL-ask-P.I1 PERS.3PL
'...and he was listening and asking them questions' [NT (1937); Luke 2:46]

(68) *ndáya kíki wénga wanikongáyi?*
ndaya kiki wenga u-a-ni-kong-ayi
reason what PERS2SG SM2SG-P.I2-OM1SG-deceive-P.I2
'for what reason were you deceiving me?'

These constructions may also occur with verbs of other lexical types than dynamic verbs, such as the stative 'be open' in (69). Moreover, they very often encompass more of a habitual reading (roughly 'used to…'), as with both 'love' and 'drink' in example (70).

(69) *idɪndúkéye*
i-dɪndʊk-eye
SM4-be.open-P.I1
'they (the doors) were usually open'

(70) *nénga naganáyi sána,*
nenga ni-a-gan-ayi sana [nyamuhópi]
PERS1SG SM1SG-P.I2-love-P.I2 very
'me, I used to really love (it),

nanywáyi sána ulási
ni-a-nyw-ayi sana [nyamuhópi] u-lasi
SM1SG-P.I2-drink-P.I2 very NCP14-*ulanzi*
I was really drinking a lot of *ulanzi* (= fermented bamboo sap)'

These constructions may also denote a sense of repetitiveness or iterativity, as seen in the regularity of the situations in the examples above, but particularly apparent with a punctual verb like 'sneeze', e.g. *a-a-tyasamul-**áyi*** 'he sneezed (several times)' vs *a-a-tyasamwíli* 'he sneezed (once)'.

Thus, as these constructions cover both progressive and habitual aspect occurring in the past, they are consequently labeled as past imperfective. The functional difference between these two constructions is crucially connected to the degree of remoteness. Once again, however, the delineation here is not strictly linear or cyclical, but represents broader temporal intervals or layers of time units. What motivates the use of one or the other of these constructions appears to rather be connected to whether the event is conceived as relatively proximal or distal, in Botne's (2012:542) terms. This is clear in the examples below, where past imperfective 1 harmonizes with the proximal time adverbial in (a), whereas past imperfective 2 harmonizes with the distal time adverbial in (b).

(71) a. *juma íyı tihínéye mahalámísi,*
juma [domaníka] ıyı ti-hin-eye mahalamisi
NCP9.week PROX.DEM9 SM1PL-dance-P.I1 mahalamisi
'*this* week we were dancing the Mahalamisi'

b. *júma yíla tahináyi mugánda*
juma [domaníka] yıla ti-a-hin-ayi muganda
NCP9.week DIST.DEM9 SM1PL-P.I2-dance-P.I2 muganda
'*that* week we were dancing the Muganda'

(72) a. *mwési ógɔ abítéye kuSongéa*
mu-esi ɔgɔ a-bıt-eye ku-Songea
NCP3-month PROX.DEM3 SM3SG-go-P.I1 LOC17-Songea
'*this* month she was going to Songea'

b. *mwési gɔ́la abıtáy' kuLudéwa*
mu-esi gɔla a-a-bıt-ayi ku-Ludewa
NCP3-month DIST.DEM3 SM3SG-P.I2-go-P.I2 LOC17-Ludewa
'*that* month she was going to Ludewa'

7.4.7.3 Origin

Several factors, both internal and comparative, suggest that the suffixes of both past imperfective conjugations are (partially) derived from the for Proto-Bantu reconstructed 'imperfective' morpheme *-*ag*- (~*-*ang*-), surfacing in a "pre-final" position before the final suffixes (as described in section 7.3 above). According to Nurse & Philippson (2006), this "pre-final" suffix originates from a "repetitive" derivational extension (see Schadeberg 2003a), but typically refers to a "range of imperfective aspectual meanings" (Nurse & Philippson 2006:190; see also Sebasoni 1967) similar to those described for the past imperfective constructions of Manda in the previous subsection.[129]

I propose that the proximal past imperfective 1 originates from a mutation of the imperfective and the suffix *-*ide*, and that the distal past imperfective 2 in turn originates from a construction consisting of the 'past' prefix -*a*- in TAM1, the 'imperfective' *-*ag*- in the "pre-final position" and the final vowel -*a* (i.e. the 'default' suffix discussed also for present tense and future 2). This becomes clearer when comparing Manda with the analogous paradigms in the neighboring languages. As demonstrated in Table 7.12, all the neighboring languages except Ngoni have two past imperfective constructions similar in shape to the two constructions in Manda. Moreover (and even though the exact formulation of the various sources differs), in all the languages there is a division of labor between the constructions, roughly based on a more proximal and a more distal temporal scope.[130] Even Ngoni, seemingly without a directly corresponding proximal past imperfective, has a distal past of similar shape.

[129] An imperfective aspectual reading, as in the cases discussed here, is the typical instantiation of *-*a(n)g*- but, as already discussed in section 7.3 and 7.4.5.3, it appears in several other constructions in Manda as well (see also Devos & Van Olmen 2013).

[130] For Matengo, Yoneda (2016) has referred to constructions ending with suffix -*aje* (including the two constructions here, but also in other parts of the TAM paradigm) as also functioning as conjoint (CJ) markers, i.e. markers of term focus. Apparently, however, she also claims that they also have non-perfect(ive) aspectual functions and even that they are rather related to aspect than focus (Yoneda 2016:430). In Manda -*ayi* or -*eye* cannot be accounted for as a CJ marker in the crucial sense that it can - and often do - stand in sentence final position, which a CJ marker is not supposed to according to e.g. Nurse (2006), van der Wal (2013) and Morimoto (2013).

Language	Code	Past imperfective 1	Past imperfective 2	Comments	Sources
Pangwa	G.64	SM-B-**ike**	SM-**a**-B-**ak-a**	General sound law: PB *g > /k/.	Stirnimann (1983:107)
Kisi	G.67	SM-B-**eghe**	SM-**a**-B-**agh-a**		Gray (forthcom.: 116)
Nyakyusa	M.31	-	SM-**a**-B-**ag-a**		Persohn (2016:112)
Ngoni	N.12	-	SM-**a**-B-**á(ga)**	-Moser: SM-a-B-aga -Ngonyani: SM-a-B-á (= final H)	Moser (1983:102), Ngonyani (2003:60)
Matengo	N.13	SM-B**(-it)-aje**	SM-**a**-B-**aje**	<j> = IPA [ɟ].	Yoneda (2016:429)
Mpoto	N.14	SM-B-**ayi**	SM-**a**-B-**ayi**		Nurse (2007b), Makwaya (pers. comm.)
Manda	N.11	SM-B-**eye**	SM-**a**-B-**ay(i)**		

Table 7.12. Past imperfective conjugations in Manda and its neighbors

With regard to the proximal past imperfective 1, it is argued that – albeit non-compositional in synchronic Manda or in the neighboring languages – the form can be reconstructed as being derived from a combination of *-*ide* "bisected" by *-*ag*- (i.e. °*id-ag-e*; see Nurse 2008:263), based on both functional and formal motivations. Firstly, based on the construction's function, it reflects a combination of both a typical cross-Bantu past use of *-*ide* (also in Manda) and a (broad) imperfective use of *-*ag*- (Nurse & Philippson 2006). A similar combination of forms with similar functions have also been described for Bantu languages geographically distant from Manda, e.g. for (varieties of) Kikongo by Dom & Bostoen (2015) and a set of Great Lake languages by Botne (2012)[131].

Second, with regard to form, there are language-inherent phonetic characteristics pointing towards the involvement of the imperfective. To begin with, inflection with *-eye* in Manda triggers a raising in vowel height of a preceding (extended) verb base syllable (as in (69) above), which is a general characteristic of all /*ay*/-suffixes (< *-*ag*-) in Manda. Moreover, when comparing the set of languages in Table 7.12, we see that there are more apparent remnants of a compositional construction involving *-*ide* and *-*ag*-; e.g. in both Matengo and Mpoto, the first vowel of the corresponding VCV element is /a/, but especially in Matengo (and several other Rufiji-Ruvuma languages[132]), and there is also an allomorphic realization *-it-aj-e*, *-ite* as regular reflexes of *-*ide*. In Kisi the formal representation is *-eghe*,

[131] See also Sebasoni (1967) for several cross-Bantu examples that appear to be of this kind.
[132] In Yao (P.21) there is a corresponding construction SM-B-*il-eje*, analyzed by Ngunda (2000:296) as the "P[ast] 1 tense" bisected by the "Incompletive aspect' (i.e. a reflex of the 'imperfective' suffix *-*ag*-).

which is both phonemically similar to the Manda form but simultaneously reflects a less weak instantiation of Proto-Bantu *-*ag*-.

Notice that for Pangwa, the phonological shape of the suffix can be accounted for directly as a regular case of imbrication. Given that *-*ag*- (represented in Pangwa as a devoiced -*ak*-) surfaces in the extension slot and thus forms part of the base at the point of mutation, the /a/ of the form undergoes regressive assimilation that is regular for this language; the assimilation /a-i > i/ is sketched below (see also Stirnimann 1983:107-108).[133]

(73)	*(val-ak >)*	*valak*	> *valak-ile*	> *vala-il-k-e*	> *val-i-k-e*	> *valike*
	blossom-IPFV	'blossoming '	> …CVC-ili	> …CV-il-C-i	> …CV-ik-i	> …C-iki

According to Nurse (2008:263), Bantu languages may vary (even language-internally) in whether the 'imperfective' precedes the *-*ide* suffix thus triggering regular imbrication (as in the case of Pangwa) or whether it bisects it and thus does *not* trigger regular imbrication but other cases of morphonological mutation, as has been proposed for the Rufiji-Ruvuma languages and Kisi, and here for Manda.

Interestingly, this mutation has also facilitated the creation of a paradigmatic contrast between a marked imperfective and an unmarked implied perfective within the past domain (as also illustrated in Botne (2010:59) for some JE languages). Note also that this development of -*ili* stands in accordance with Nurse's conclusion (2003:97) that the perfective tends to be formally simpler than the imperfective in Bantu.

Continuing with the remote past imperfective 2, there are two things that stand out when comparing the set of reflexes in Table 7.12. To begin with, all the languages in the table have a formative -*a*- in the post-initial TAM1 slot, i.e. the same form and position as the remote past (past 2) and other more "remote tenses", like the future 2 and the future obligative.[134] Here it suffices to say that the presence of -*a*- is probably connected to the remote function of the conjugation. Concentrating on the final part of the conjugation, the inference from comparative data suggests that the past imperfective 2 of Manda can be reconstructed historically as partly originating from the 'imperfective' as well, albeit with the 'default' final vowel *-*a* rather than the past suffix *-*ili*. Hence, a final structure º-*aga* and a whole construction ºSM-*a*-B-*aga* is suggested as the original form in Manda.[135]

The most concrete evidence in support of such a hypothesis is that this very structure is represented in the New Testament (1937). As seen in (74) and (75)it also has a similar function of denoting ongoing actionality.

[133] This can also be compared with Bena (G63), another Southern Highland language, where the same construction is realized as SM-B-*iige* (Morrison 2011:264), i.e. with a voiced velar plosive.
[134] This is further discussed in section 7.5.2.3.
[135] Note further that Guthrie (1971:145) reconstruct the complete construction *SM-*a*-B-*aga* as 'past imperfective' for Proto-Bantu.

(74) *mumu walondalond**ag**a kunkamula*
mumu wa-a-londalond-**ag**-a ku-mu-kamul-a
so SM3PL-P2-seek.RED-IPFV-FV INF-OM3SG-seize-FV
'so, they were **seeking** to seize Him'
[NT (1937); John 7:30]

(75) *Baho nikayili na nkeke nalongel**aga***
baho ni-ka-y-ili na mu-keke ni-a-longel-ag-a
when SM1SG-P1-be-P1 FOC NCP1-child SM1SG-P2-speak-IPFV-FV
'When I was a child I talked

ngati na nkeke, naholaga ngati na nkeke,
ngati na mu-keke ni-a-hol-ag-a ngati na mu-keke
like FOC NCP1-child SM1SG-P2-think-IPFV-FV like FOC NCP1-child
like a child, I thought like a child,

*nawalang**aga** ngati na nkeke*
ni-a-walang-ag-a ngati na mu-keke
SM1SG-P2-reason-IPFV-FV like FOC NCP1-child
I reasoned like a child […]'
[NT (1937), 1 Cor 13:11]

At some point in time, however, the /*g*/ (and final /-*a*/) must have undergone lenition in Manda. This is an areal feature, as suggested from the comparative data in where all neighboring languages (except Pangwa and Nyakyusa) have been affected by weakening of this construction to differing degrees. In other Bantu languages spoken just outside of this area there is an analogous construction of similar function but with a "hard" /g/. One example is the "Past 4 progressive" (where "4" is the most remote tense) SM-*a*-B-*aga* in Bena (G.63; Morrison 2011:267).

The reason behind the palatalization of the 'imperfective' in Manda is not clear. It is probably the result of a joint process of weakening of º/g/ and/or the raising of the final vowel. This conclusion is based on two characteristics of Manda phonology. First, there are other instances where a vowel -*a* standing in final position is optionally raised to a high front vowel (when not devoiced or omitted altogether), e.g. in the case of the negation particle *lépa ~ lépi*, the adverbial *naha ~ nahi* 'now', the comitative *na ~ ni*. Secondly, the insertion of this suffix – here identified as the 'imperfective' – tends to raise the degree of aperture of vowels that are in proximity to it (as illustrated in (65)).

To summarize, there are several pieces of evidence that suggest that both of the past imperfective forms in Manda originate from constructions with the 'imperfective' *-*ag*-, albeit in different syntagmatic contexts. Whereas the proximal past imperfective 1 is derived from a mutation of *-*ag*- and *-*ili*, the structure of the distal past imperfective 2 reflects the weakening of the final CV element of a compound consisting of the 'imperfective' -*ag*- and the final vowel -*a*.

7.5 Mood conjugations

This section sets out to describe the various inflectional markers of mood found in Manda. The set of mood constructions are summarized in Table 7.13, with their respective tone pattern and their given interlinearization.

Section	Label	Tone pattern	Tone pattern with OM	Gloss of TAM affixes
7.5.1	Subjunctive	APU-PU	SI	-SBJ
7.5.2	Future obligative	SI	SI	-F.OBL- -SBJ
7.5.3	Itive	SI	SI	-ITV- -SBJ

Table 7.13. (Simplex) mood conjugations in Manda

The main conjugation here is the subjunctive, discussed in section 7.5.1 which serves as a marker in several contexts, including in subordinate constructions. Indeed, as argued in section 7.4.5.3 above, the subjunctive has even served as the basis of the future 1 conjugation in Manda. (The use of the subjunctive in modal expressions is further discussed in 10.5.1.2). Within the discussion of the subjunctive, the absence in Manda of a canonical Bantu mood conjugation, namely the imperative, is also addressed, as well as the inclusion of the 'imperfective' suffix *-*a(n)g*-. Two other conjugations expressing mood in Manda, namely the future obligative and the itive, will also be discussed, in sections 7.5.2 and 7.5.3 respectively. Their shared functional range is reflected in their shared suffixation, here jointly glossed as SBJ.

7.5.1 Subjunctive SM-B-*(ay)i*

7.5.1.1 Form

The subjunctive is expressed with a final -*i*, but more commonly with -*ayi*. The tonal melody is antepenult-penult. There are examples in the synchronic data where the subjunctive form is expressed in accordance with the Bantu canonical structure of SM + Base + *-*e* (Nurse & Philippson 2006), especially among older speakers. Just as for the case of the suffix -*ili* vs. Proto-Bantu *-*ide*, however, synchronic variants of Manda exhibit a relatively high quality of the front vowel of the subjunctive final, i.e. -*i* rather than -*e*. This is illustrated in (76).

(76) *niséléki*
ni-selek-i
SM1SG-descend-SBJ
'I should descend'

Occasionally, however, when the vowels of the stem are low, the final vowel harmonizes with the stem, resulting in a lower realization of the final vowel, e.g. *a-télék-**e*** 's/he should cook'. In the New Testament (1937), where the construction with a single FV is most common, the conjugation is orthographically represented with the grapheme <e>, suggesting a consistently lower realization.

Most often today, an additional */ay/* is added to the construction (as argued below, this is probably a remnant of Proto-Bantu *-*ag*-). This has a phonological impact, as reflected in the example below.

(77) *utitávilay' timányáyi*
u-ti-tav-ɪl-ayi ti-many-ayi
SM2SG-OM1PL-tell-APPL-SBJ SM1SG-know-SBJ
'tell us so that we know'

As seen, the stem vowel preceding */ay/* is raised and the applicative /ɪl/ in -*tavɪl*- thus becomes /*tavil*/. Moreover, the addition of the segment /*ay*/ results in the final vowel (unconditionally realized as 1st degree high) or the whole final syllable /yi/ of the construction being deleted when occurring in a non-final position in the clause.[136] The tone melody is still antepenult-penult in -*ayi* forms of the subjunctive. However, due to the insertion of an object marker in this example, the tone pattern shifts to a single high tone in stem-initial position.

Both older and younger speakers use the conjugation with -*ayi*, although it is much more frequent among younger speakers, where it has taken over totally. Some speakers (especially younger speakers) consider the SM-B-*i* construction as archaic, and exclusively use the construction with -*ayi* in final position in free speech.

7.5.1.2 Function

The subjunctive covers various categories of irrealis such as optatives and different kinds of directives and commands such as (co-)hortative as illustrated in example (78) but also jussive. Interestingly from a cross-Bantu perspective, and as further discussed below, this construction also covers imperatives.

(78) *ting'kómáy' ngéne ʊyʊ*
ti-mu-kom-ayi mu-gene ʊyʊ
SM1PL-OM3SG-beat.to.death-APPL-SBJ NCP1-guest PROX.DEM1
'let us kill (him) that guest!'

The subjunctive is also found in various dependent clauses like the protasis clause of a conditional, in purposive clauses and as a marker of weak obligation (cf. Devos (2008a) for a discussion of similar uses of the subjunctive in Shangaci (P.312)).

(79) *víkáyi ntyímbu ápa, niwúyúli*
vɪk-ayi ntyimbu apa ni-wuyul-i
put-SBJ NCP9.calabash PROX.DEM16 SM1SG-clean-SBJ
'put the calabash here, so I can clean (it)'

It is also used in complement clauses (whether explicitly marked with a complementizer or

[136] See also 5.2.3.1.

not[137]) where the matrix verb subject is not co-referential with the participant of the complement clause.

(80) *nilónda nyóngó' Mackenzie abítáyi kumuhánga*

ni-lond-a	nyongolo	Mackenzie	a-bɪt-ayi	ku-mu-hanga
SM1SG-want-FV	NCP1.mother	Mackenzie	SM3SG-go-SBJ	LOC17-NCP3-shore

'I want Mama MacKenzie to go to the shore'

(81) *anitavíli kukíta ning'kóvilay símu*

a-a-ni-tav-ɪl-ili	kukɪta	ni-mu-kɔv-ɪl-ayi	simu [Sw.]
SM3SG-P2-OM1SG-tell-APPL-P2	COMPL	SM1SG-OM3SG-hit-APPL-SBJ	NCP9.phone

'he told me to call him / he said to me that I should call him'

As seen in the examples, there is an overlap in the usage of the subjunctive with the different final endings (including the reduction of the final syllable), where younger speakers, especially, do not use the shorter form. (This was also described in section 7.4.5 for the future 1 conjugation, which uses the same suffix). However, there are pragmatic-semantic differences still lingering on among the speakers that use both forms. For example, a punctual verb like 'kiss' is seen as having more of an iterative reading when inflected with *-ayi* but only a singleton or semelfactive reading with *-i*.

(82) a. *u-ni-núm-**ayi*** 'kiss me (here and there, over and over)!'
b. *hícháy', u-ni-núm-**i*** '(come and) give me a kiss!'

Furthermore, when asked to contrast the two forms, speakers tend to ascribe to the longer *-ayi* form the qualities of being more expressive or more emphatic.

In the New Testament (1937), subjunctive constructions involving *-ay-* almost exclusively occur with motion verbs and/or to mark the intensity of an action or a command.[138] These questions of variation in functionality and their historical background will be further addressed in section 7.5.1.3.

Manda is a rare language from a cross-Bantu perspective as it does not make use of the "morphologically specialized imperative" (Devos & Van Olmen 2013:9) of the form B-*a* - i.e. the bare stem without a subject marker or any other prefixal marking - for a singular addressee. This stands in contrast to the 97% of Devos & Van Olmen's (2013) sample of Bantu languages which do exhibit this form/function.[139] Directives and commands addressed to a single addressee may be expressed without marking the subject, but will in that case

[137] Both of these complementizers, *kukɪta* and *kuya*, are most likely derived from the lexical verbs '(to) do' and 'to be(come)' respectively. See Güldemann (2008), Devos & Bostoen (2012) for more information on complementizers (and their origins) in Bantu languages.
[138] In the New Testament, the subjunctive 1 is orthographically represented as <e>.
[139] Their sample is in turn based on Nurse (2007b, 2008).

obligatorily occur with a final *-a(yi)*, and also with the same tone pattern as the subjunctive.[140] Compare (83) and (84).

(83) *utyesemúláyi*!
u-tyesemul-ayi
SM2SG-sneeze-SBJ
'sneeze!'

(84) *tyesemúláyi!*
tyesemul-ayi
sneeze-SBJ
'sneeze!'

The subjunctive is also the construction used for directive speech acts addressed to plural addressees, as described below. Moreover, it seems that the form without subject marking can be used for more mitigated or polite exhortations as well. If this was indeed a form designated for an imperative, one would expect a contrast in this aspect of the subjunctive, i.e. in being more direct and less polite (Devos & Van Olmen 2013:24).

(85) *víkáy' ndáláma sáko kwa njála ya palóngólo*
vık-ayi ndalama si-ako kwa njala ya pa-longolo
put-SBJ NCP10.money 10-POSS2SG CP17 NCP9.hunger CP9 LOC16-front.of
'you should save your money for later problems (lit. hunger)'

(86) *pépáyi, nihókíti*
pep-ayi ni-hok-iti
excuse-SBJ SM1SG-do.wrong.PRF
'excuse (me), I have done wrong'

Hence, there is no functional or formal difference between a supposedly imperative + *-a(yi)* construction and the subjunctive + *-a(yi)* construction. This question will be further addressed in the following section 7.5.1.3, where the origin of the final suffix *-ayi* is further scrutinized.

[140] It is possible that the "imperative form" has existed historically in Manda, as there appear to be residual constructions in the historical religious texts that still also linger on as archaisms in spoken language. An example is the collocation <*lola Bambo*!> "behold the Lord" that appears in both the New Testament (1937) and the Christian hymns. In this phrase, the verb appears without a subject marker and is pronounced with the high tone on the penult, i.e. /lóla bámbu/. Another example is the children's game "*Vílínga, kwáta*", the name of which can be analyzed as consisting of the imperative forms of the verbs 'turn' and 'seize'. It is possible that the original imperative disappeared through the common process - especially in southern and central Tanzania - of "imperative-subjunctive hybridization" (Devos & Van Olmen 2013), where the formal difference between the imperative and the subjunctive conflate as the subjunctive conjugation extend to denote imperative situations (directives to 2 person adressee(s)). This could also account for why the construction with *-ayi* ends with /i/ also in imperative situations. Another possibility is that the final *-a* got raised in a manner similar to what was described for the past imperfective 2 in section 7.4.7.3.The origin of the construction with *-ayi* is further discussed in section 7.5.1.3.

7.5.1.3 Origin

As mentioned at the beginning of section 7.5.1.1, the subjunctive construction with the final high fronted vowel belongs to "Canonical Bantu" and has also been reconstructed for Proto-Bantu by Meeussen (1967) and Nurse & Philippson (2006). See also Ngonyani (2013a) for an account for Kisi, Ngoni and Ndendeule, all spoken close to Manda.

This sub-section concentrates on the origin of the *-ayi* suffix in the realm of the subjunctive mood. The hypothesis here is that the *-ayi* form surfacing in non-indicative constructions in Manda is the result of lenition or palatalization of the very same 'imperfective' **-ag-* as described for the imperfective constructions in section 7.4.7.3. That **g* > [j] in Manda – possibly through an intermediate stage of a [ɣ] realization – can be deduced from the corresponding set of realizations of the formative in the neighboring languages as represented in Table 7.14. The final vowels of the constructions vary between (imperative) /a/ and (subjunctive) +high +front vowel.

Language	**Code**	***-ag-* + mood**	**Reflex of **-ag-***	**Sources**
Pangwa	G.64	SM-B-**ake**	/*ak*/	Stirnimann (1983:116-118)
Nyakusa	M.31	B-**aga**, SM-B-**ege**	/*ag*/	Nurse (1979), Persohn (2016:212, 214)
Kisi	G.67	SM-B-**agha** ~SM-B-**aghe** ~SM-B-**aye**	/*agh*/	Gray (forthcom.:116)
Ngoni	N.12	(SM)-B-**age** ~(SM)-B-**aye** ~(SM)-B-**ayi**	/*ag ~ ay*/	Ebner (1939:77); Moser (1983:108); Ngonyani (2003:63)
Matengo	N.13	(SM)-B-**aje**	/*aj*/	Kayuni (pers. comm.), Yoneda (2016:429)
Mpoto	N.14	(SM)-B-**ayi**	/*ay*/	Makwaya (pers. comm.)

Table 7.14. The 'imperfective' suffix in imperative/subjunctive constructions in the neighboring languages

It is actually possible to follow such a palatalization process, by comparing this set of neighboring languages from top to bottom in the table. Crucial here is the data on Ngoni by Ebner (1939:27; see also Moser 1983:108) who reports the variation –shown in Table 7.14, from hard to weak realizations of the consonant. Ngonyani (2003:63) analyses the morphology differently here, discussing a *-yi* form, which in turn has led Devos & Van Olmen (2013) to interpret it as a plural marker. Given the data from Ebner (who also states that the final vowel may range from /i/ to /e/), suggests that we are rather dealing with the 'imperfective' (+ the subjunctive final vowel).

Beyond these languages there are also reports of similar conditioned or unconditioned weakening of the 'imperfective' in several Rufiji-Ruvuma languages spoken not far from Manda, e.g. by Harries (1950) and Hyman & Ngunga (1994:66), who talk about palatalization of reflexes of **-ag-* in Mwera (P.22) and Yao (P.21) respectively. See also Sebasoni (1967) and Miehe (1989) for examples of other Bantu languages with lenition of the 'imperfective'.

From a functional viewpoint, it is typical across Bantu languages that *-*ag*- is included in mood constructions (especially in directives) to "give a heightened sense of urgency" (Rose et al 2002) and thus to show intensity or as an exclamatory suffix, as described by Miehe (1989:30). According to Devos & Van Olmen (2013; see also Rose et al 2002:40-41), one of the two common paths of inclusion of *-ag-* into into a mood (as opposed to a tense-aspect) construction in Bantu goes via the route imperfective > directional (with force) > intensive.[141] This is the typical route in this area, given labels such as "emphasis or imploring" in Ngoni (Ngonyani 2003:63), "verstärkte" (roughly "strengthened" or "intensified") in Kinga (G65), (Wolff 1905:78) or "more forceful" (Meinhof 1984, cited in Devos & Van Olmen 2013:12)[142]. This is also in accord with cross-linguistic tendencies. According to the study by Mauri & Sansò (2011), the motivation to involve imperfective markers in commands is to create overtones of urgency and imminence. That is, marking the event as already being in progress implies to the addressee (or the performer) the speaker's (or the commander's) expectation of an imminent actualization.

However, at least in Pangwa, the 'imperfective' morpheme *-*ag*- attaches to the subjunctive construction to indicate both whether the action/event is intensive and also just to mark a subordinate clause as "continuous" (Stirnimann 1983:118).[143] Such a polyfunctional split between an intensive and continuous instantiation accounts for the presence of *-ay(i*) in both commands, as well as in other subjunctive functions in Manda. Although apparently often levelled out synchronically, there is arguably a remnant of this functional difference between a non-indicative construction with or without the inflection of the 'imperfective' in Manda as well. This conclusion is derived from examples (82) a-b) above. From such examples, it can be seen that those speakers of Manda who use both of the constructions seem to contrast between a SM-B-*i* form and an SM-B-*ayi* form with regard to notions such as continuity and emphasis.

The scenario portrayed above most probably accounts for the *-ayi* suffix in the future 1 conjugation as well, i.e. the use of a reflex of *-*ag*- in future constructions originates from its use in non-indicative constructions. This conclusion relies on the phenomenon discussed in section 7.4.5.3 in this chapter and also in 6.3.5, namely that grammaticalization of future constructions in the area is generally the result of an equi-subject auxiliary schema with the second verb inflected in the subjunctive form. Note also that the tonal patterns are analogous between the subjunctive conjunction and the future conjunction. Thus, the variation in a single future realization between SM-B-*i* or SM-B-ayi, as in Manda, points toward a variation already inherent in the subjunctive form of the historical second verb, i.e. with or without the 'imperfective' and the variation in reading between the two forms.

[141] Devos & Van Olmen (2013) refers to this marker as the "pluractional".
[142] Interestingly, in Bena (G.63), the form *-ag*-e has an "inceptive" reading, e.g. *tugonáge* 'let's start to sleep' (Morrison 2011:283). See also Nurse (1979) for a description of other (less typical) meanings of the morpheme *-*ag*- in Bena.
[143] See also Nurse (1979), who claims that the 'imperfective' is used exclusively with motion verbs in Nyakyusa. See also Persohn (2016:214) for additional functions ascribed to *-*ag*- + mood in this language.

7.5.2 Future obligative SM-*a*-B-*ayi*

7.5.2.1 Form

The future obligative consists of a prefix *a-* in the post-initial TAM1 slot and the *-ayi* suffix in final TAM2 position. Thus, it is segmentally identical to the (remote) past imperfective 2 discussed in section 7.4.7. Unlike the past imperfective, however, the high tone surfaces on the stem-initial position in this conjugation.

(87) *mwesi gwaguhida* ***tavyáyi*** *kuIlinga*

mu-esi	gwa-gu-hid-a	ti-a-vy-ayi	ku-Ilinga
NCP3-month	REL3-SM3-come-FV	SM1PL-F.OBL-be-SBJ	LOC17-Iringa

'We shall make sure to be in Iringa next month'

(88) *dadi alagísi* ***vabítayi*** *kung'ónda kilawu*

dadi	a-lagɪs-ili	va-a-bɪt-ayi	ku-mu-gɔnda	kilawu
NCP1a.father	SM1SG-instruct-PRF	SM3PL-F.OBL-go-SBJ	LOC17-NCP3-plot	tomorrow

'father ordered that they should go to the field tomorrow'

(89) *mavána mwénga mwagánanayi!*

ma-va-ana [144]	mwenga	mu-a-gan-an-ayi
NCP6-NCP2-children	PERS2PL	SM2PL-F.OBL-love-ASS-SBJ

'children, you shall love each other!'

7.5.2.2 Function

The future obligative is rare in the data. Where it occurs, it denotes the necessity for an action/event to take place. It contrasts in meaning with the subjunctive with regard to remoteness, as it expresses a situation as holding (further) away in the future. However, unlike the future construction(s), it is never used in indicative/realis contexts.

7.5.2.3 Origin

This conjugation is a bit of an enigma. I have not found a comparable construction in any of the neighboring languages. Although the form and function of this conjugation clearly suggests that the suffix in TAM2 is the subjunctive, it is less clear where the formative *-a-* in TAM2 comes from in this case.[145] It is possible that this *-a-* is in some way related to an *a-* that surfaces in many future conjugations in the larger Bantu area where Manda is spoken. As discussed by Nurse (2008:90-91) and Botne (2013), morphological symmetry between past and future tense scaling is a significant phenomenon here. Especially where a prefix *-a-* in the post-initial TAM1 position is found in both the past and the future paradigm, it has a similar function of expressing remoteness relative to other markers of the respective paradigm. Thus, even though a (remote) past /a/ can be derived from Proto-Bantu, there is also a morpheme /a/ in the same TAM1 position mirroring an analogous quality of remoteness but with reference to events taking place in the future rather than in the past. Manda does have

[144] According to the informant who produced this utterance, the additive NCP6 is employed here to augment the number of children referred to. See (82) in 11.5 for an example with the same word. I have no other examples of such a construction in my data.

[145] Note that this /a/, unlike the /a/ that shows up in Manda in this position in the past 1 and (most probably) future 2, is not semantically empty but does express a discrete function in this case.

an *-a-* formative in the past paradigm (see section 7.4.4); however, there is no reflex to be found in the future paradigm (except perhaps for the optional /*a*/ of future 2 *-(a)la-* in the Matumba dialect; see section 7.4.6).

Nurse (2008:113, 2007b) shows that the neighboring language Mpoto (N.14) appears to be one of these "mirror languages with a formative *-a-* in both a remote past and a remote future tense conjugation.

(90) SM-**a**-B-*ili* REMOTE PAST vs. SM-**a**-B-*ayi* REMOTE FUTURE

Interestingly, Mpoto uses a conjugation identical to the future obligative in Manda to express a remote future tense. It is likely that these two categories are related, as it is typically the case that a subjunctive extends to futures cross-linguistically and specifically in this area (as proposed for the future 1 formative *ya-* in Manda; see section 7.4.5.3). This would, in turn, strengthen the hypothesis that the *a-* formative in Manda is related to the "remote" marker discussed for other Southern Tanzanian languages.

7.5.3 Itive SM-*ka*-B-*ayi*

7.5.3.1 Form

The itive is similar in shape and function to the subjunctive but carries an additional formative *ka-* in the TAM1 slot. It often occurs in sequence with another verb conjugated in the subjunctive, within a single utterance, as in (91). According to the data (and unlike the subjunctive), the itive is exclusively inflected with the *-ayi* suffix. There is a high tone on the stem-initial position, both without and with object markers.

(91) *bítáy' kúnja ukanihémalilay' sóda*

bɪt-ayi	ku-nja	u-ka-ni-hemel-ɪl-ayi	soda [Sw.]
go-SBJ	LOC17.outside	SM2SG-ITV-OM1SG-buy-APPL-SBJ	NCP9.soda

'go out (and) by me a soda'

When used as a directive addressed to a single addressee, the SM can optionally be deleted, as in (92).

(92) *kaséngulayi*
ka-sengʊl-ayi
ITV-thank-SBJ
'(go and) say thanks'

Compare this, however, with (93).

(93) *ukapámbula' mapéla*
u-ka-pambul-ayi ma-pela
SM2SG-ITV-throw.down-SBJ NCP6-baobab.fruit
'go up (in the tree and) throw down the baobab fruits'

In this example, the itive surfaces with a subject marker (2nd person singular) even though it refers to the addressee.

7.5.3.2 Function

The semantics expressed by the itive, also known as the *andative* (Bybee et al 1994) or *ka-movendi* (Schadeberg 1992), can roughly be paraphrased as 'go and X', i.e. it expresses spatial movement away from the deictic center in order to perform or undergo a subsequent action (Rose et al 2002:47, Bybee et al 1994:320, Botne 1999). As seen in example (94) the itive is typically used for direct commands or directives and occurs in sequence with another verb of motion with a co-referential subject that includes the addressee (with or without the speaker).

(94) *tihambáyi*[146] *tikayógayi kumuhánga*
ti-hamb-ayi ti-ka-yog-ayi ku-mu-hanga
SM1PL-go-SBJ SM1PL-ITV-bath-SBJ LOC17-NCP3-lake.shore
'let's go and take a bath in the lake!'

The subject may shift to third person, producing purpose-like clauses, as with the verb 'cultivate' in example (95).[147]

(95) *ligóno la kadátu mpéla' liyéla akalímay*'
li-gono la kadatu mu-pel-ayi li-yela a-ka-lım-ayi
NCP5-day CP5 third OM3SG-give-SBJ NCP5-hoe SM3SG-ITV-cultivate-SBJ
'on the third day give him a hoe so that he can (go and) cultivate'

However, the contexts in which the itive in Manda is used are exclusively intersubjective in character, and directed toward the addressee in one way or another.

7.5.3.3 Origin

An itive formative of the shape *-*ka*- has been considered "likely" (Nurse & Philippson 2006:173) to have originated from Proto-Bantu. According to Botne (1999), the form originates from performative constructions and consequently occurred exclusively together with imperative and subjunctive morphemes, similar to what is described for Manda above. As seen in Table 7.15, the itive conjugation, i.e. prefixal *-*ka*- in a construction with the

[146] The motion verb *-hamb-* 'go' (< PB *-*tamb*- with the same meaning) is probably a loan from Ngoni. It is identified as Alt-kingoni (i.e. as Zulu) by Spiss (1904) and it only occurs in Manda in this kind of co-hortative construction (where it is frequently used, however).
[147] This example is actually a translated portion of a paraphrase of a famous pro-verb further popularized by *Mheshimiwa* Julius Kambarage Nyerere, the Father of the Nation of Tanzania. In the Swahili version it says *'mgeni kwa siku mbili, siku ya tatu mpe jembe'* and refers (roughly) to the joint efforts needed in order to build the nation (see Lönneborg 1999; van Pelt 1971).

subjunctive suffix, surfaces in all of Manda's neighboring languages as well. Taken together, these facts strongly suggest that both the prefix and the whole conjugation it surfaces in are inherent to Manda.

Language	**Code**		**Comments**	**Sources**
Pangwa	G.64	SM-**xa**-B-**e**	-	Stirnimann (1983:119)
Kisi	G.67	SM-**ka**-B(-**agh)-e**	-	Gray (forthcom.: 109)
Nyakyusa	M.31	SM-**ka**-B-**e**	-	Persohn (2016: 223-225)
Ngoni	N.12	SM-**ka**-B-**aye**	-	Ebner (1939:27)
Matengo	N.13	SM-**aka**-B-**ajé** SM-**aka**-B-**í**	"go-future"	Yoneda (2016:429)
Mpoto	N.14	SM-**ká**-B-**ayi**	future marker	Nurse (2007b); Makwaya (pers. comm.)

Table 7.15. Reflexes of the itive conjugation in the neighboring languages

However, it should be noted that this conjugation appears to have been exposed to subtle semantic shifts in some of the neighboring languages suggestive of secondary grammaticalization, where the spatial distance has been extended to also incorporate a future temporal reading as a conventionalized part of its meaning. Thus, according to Stirnimann (1983:119), the cognate conjugation in Pangwa expresses both 'elsewhere' and 'later', while in Matengo it is characterized as a "go-future" (Yoneda 2016:429).[148] In Mpoto, the cognate conjugation seemingly marks future tense (Nurse 2007b, 2008:244; John Oswald Makwaya pers. comm. 16-01-16).

7.6 Other simplex conjugations

This section accounts for a diverse set of simplex constructions. The constructions have in common that they do not fit perfectly with the categorizations described in the previous sections, crucially in the sense that they typically stand in a dependent relation to an event as described in a verb marked by another TAM construction. However, they are all typical inflectional categories of the verb in Bantu and as will be seen they are often diachronically interrelated to other TAM constructions. Thus, they deserve to be discussed in this chapter.

These constructions are summarized with their labels, tone patterns and the way they are glossed in Table 7.16.

[148] It is not totally clear to me what Yoneda refers to with "go-future", but the term suggests that it represents the intermingling of spatial with temporal distance marking.

Section	Label	Tone pattern	Tone pattern with OM	Gloss of TAM affixes
7.6.1	Consecutive	APU-PU	SI	-CONS- -FV
7.6.2	Situative	SI	SI	-SIT- -FV ~ -SIT- -SIT
7.6.3	Conditional	SI	SI	-COND- -COND

Table 7.16. Other verb conjugations in Manda

Section 7.6.1 discusses the consecutive used to mark sequentially in discourse, section 7.6.2 the situative used for marking taxis and section 7.6.3 describes the conditional used to inflect the apodosis (and ocassionally also the protasis) of a conditional.

7.6.1 Consecutive SM-*ka*-B-*a*

7.6.1.1 Form

The form of the consecutive (also commonly known as the narrative) also contains a *-ka-* formative in the TAM1 slot and, unlike the past 1 and the itive, the final vowel *-a* after the stem. The tonal melody is analogous to the one presented for the present tense in section 7.4.1.1. That is, a high tone on the penult on mono- or disyllabic stems, as in (96) and otherwise an APU-PU melody.

(96) *valíli, vakawóka vakabíta kavílɪ*

va-a-l-ili	va-ka-wʊk-a	va-ka-bɪt-a	kavɪlɪ
SM3PL-P2-eat-P2	SM3PL-CONS-depart-FV	SM3PL-CONS-go-FV	again

'they ate, (and) they went from there, (and) they went (there) again'

7.6.1.2 Function

The function of the consecutive in Manda reflects the definition given by Nurse (2008:123), namely to "represent independent situations occurring sequentially in the same time frame, each one having its time established by the previous situation". In Manda, this construction is typically used in narratives, but also in other kind of texts containing a string of events piled up in sequence, one after another. The temporal frame of the discourse is initially anchored by some other TA marker, typically the past 2, as in the following example.

(97) *vantovíti, akagwála, akakɪláwóka*

va-a-mu-tov-iti	a-ka-gwal-a	a-ka-kɪlawʊk-a
SM3PL-P2-OM3SG-hit-P2	SM3SG-CONS-flee-FV	SM3SG-CONS-return-FV

'they hit him (so) he fled (and) returned…'

Thus, the consecutive construction in Manda, as well as in other Bantu languages, is a dependent conjugation, as it is governed by an already established frame of temporal reference. This has led Nurse (2008:120) to call it a "relative tense" (in contrast to absolute tenses anchored in the "here and now" of the moment of speaking).

7.6.1.3 Origin

The consecutive conjugation can be linked rather straight forward to Proto-Bantu morphologically, both functionally and formally. That is, the narrative function and the form

of the prefix matches with the reconstructed 'itive, narrative, (far) future, (far) past' *-*ka*- (Nurse & Philippson 2006) and the suffix with the 'default' final vowel *-*a*. With this said, it should also be noted that the consecutive in Manda is identical in both form and function to the Swahili consecutive construction (see e.g. Schadeberg 1992) and thus it is possible that this form is originally a loan from Swahili (as has been claimed for an equivalent construction in Bena (G.63); Morrison 2011:254-255). However, the tone pattern is clearly Manda and not Swahili (Swahili lacking tone). Furthermore, it is possible to link the reflexes of *-*ka*- semantically and historically to other conjugations in Manda as well, most notably the itive (section 7.5.3), which has also been suggested by Botne (1999) as being the original function expressed by this formative.[149] Whether indigenous or a Swahili loan, it is sufficient to conclude that the consecutive is so frequently used, by all speakers, that it must be considered as belonging to the synchronic TAM paradigm of Manda.

7.6.2 Situative SM-*ka*-B-*a(yi)*

7.6.2.1 Form

The situative is marked with a construction of the form SM-*ka*-B-*a* as illustrated in (98) or, alternatively, SM-*ka*-B-*ayi* as illustrated in (99).

(98) *nikapáta héla, yanijéngi nyúmba*

ni-ka-pat-a	hela [ndáláma]	ya-ni-jeng-i	nyumba
SM1SG-SIT-get-SIT	NCP9.money	F1-SM1SG-build-F1	NCP9.house

'when/if I get money, I will buy a house'

(99) *nikapatáyi héla, yanijéngi nyúmba*

ni-ka-pat-ayi	hela [ndáláma]	ya-ni-jeng-i	nyumba
SM1SG-SIT-get-SIT	NCP9.money	F1-SM1SG-build-F1	NCP9.house

'when/if I get money, I will buy a house'

The situative is structurally similar to and forms formal minimal pairs with other TAM constructions in Manda. When surfacing as SM-*ka*-B-*ayi*, the situative is structurally identical to the itive and shares other phonological traits with it, such as final CV deletion. However, the situative differs prosodically from the itive, as it consists of a regular single high tone on the penult.[150] When surfacing as SM-*ka*-B-*a*, the situative has the exact same segmental and suprasegmental pattern as the consecutive but differs in function, as will become clear in the subsequent description.

7.6.2.2 Function

The situative is used for backgrounded, subordinated clauses. The two constructions, which typically figure in the first part of a complex sentence, are used for highlighting an event that has happened before the action/event of the main clause, or to indicate that what is described

[149] As discussed in section 7.3 the prefix *-ka*- is possibly also connected to the *-ka*- prefix of past 1. However, it is probably not connected to the homophonous *-ka*- of the situative, discussed in section 7.6.2.

[150] It is interesting that this tone pattern suggests a close formal resemblance to the past 1; cf. section 7.4.3.

in the main clause falls out from what is happening in the temporal adverbial clause. (Note that in example (101) the vowel of the subject marker has been replaced with /a/.)

(100) *vakakɪluká' kuhúma kwavakabíti,*
va-ka-kɪlawʊk-ayi[151] ku-hum-a kwa-va-ka-bɪt-ili
SM3PL-SIT-return-SIT INF-come.from-FV REL17-SM3PL-P1-go-P1
'having returned from where they had gone,

vakólí' vahɪjíwi
va-kol-ili va-hɪj-iw-ili
SM3PL-encounter-PRF SM3PL-steal-PASS-PRF
they noticed that they had been robbed'

(101) *básí, nakahumá' kóla, niyítóka wííii!*
basi [Sw.] ni-ka-hum-ayi kʊla ni-yɪtʊk-a wiiii
so SM1SG-SIT-come.from-SIT DIST.DEM17 SM1SG-leap-FV wiiii
'so, as I come out there, I jump (over) *wiii*!'

When operating on the verb *-mal-* 'finish' (+ infinitive), more emphasis is put on the completion or accomplishment of the event. Typically, the backgrounded event in these contexts consists of a recapitulation of the preceding event in the discourse. Thus, it behaves similarly to the so-called "resumptive", as described for Makwe (P.231) by Devos (2008a:335). This is illustrated in (102).

(102) *nikamála pála, yanikɪlókáyi kuyóga;*
ni-ka-mal-a pala ya-ni-kɪlawʊk-ayi ku-yog-a
SM1SG-SIT-finish-FV DIST.DEM16 F1-SM1SG-return-F1 INF-bath-FV
'when finishing there, I will return to bathe;

nikamála kúyóga, níbíta kunyúmba
ni-ka-mal-a ku-yog-a ni-bɪt-a ku-nyumba
SM1SG-SIT-finish-FV INF-bath-FV SM1SG-go-FV LOC17-NCP9.home
when I have finished bathing, I will go home'

As pointed out by Doke (1935:75 cited in Petzell 2008:115), it is common in Bantu languages for this kind of conjugation to simuoultaneosuly mark adverbial clauses with a temporal ('when') and hypothetical ('if') interpretation. Thus, the situative in Manda may also be used to make reference to hypothetical or possible situations, i.e. 'if'-clauses like (103) and (104).

(103) *Mulúngu akagána*
Mulungu a-ka-gan-a
God SM3SG-SIT-love-FV
'if God will (lit. likes)'

[151] Note that *-kɪlawʊk-* in this example as well as in example (102) is truncated in this example, which is common among Manda speakers.

(104) *nikapatá' nawúli,*

ni-ka-pat-ayi	nawuli [Sw.]
SM1SG-SIT-get-SIT	NCP9.fare

'if I get money for the fare,

nigána kubí' kuwonángána nákо kavílı kuNjómbi

ni-gan-a	ku-bıt-a	ku-wonangan-a	na-ko	kavılı	ku-Njombi
SM1SG-like-FV	INF-go-FV	INF-meet-FV	COM-3SG	again	LOC17-Njombe

I would like to go visit him again in Njombe'

Note, however, that hypothetical constructions may also be expressed with the conjunctive-like particles *wóna* or *ngáti* + main (or independent) verb, or with the conditional conjugation discussed in section 7.6.3.

7.6.2.3 Origin

The affixes of the situative conjugation in Manda can be linked to the following reconstructions of Proto-Bantu morphemes. Beginning from the end with the suffixes of the situative, the conjugation with only *-a* in TAM2 position can be linked rather straightforwardly to the final vowel *-a,* whereas the conjugation with *-ayi* can be linked to pre-final *-*ag*- + final *-a* along a similar pathway of morphonological change as described for the past imperfective 2 in section 7.4.7.3.

With regard to the TAM1 prefix, it is most likely the case that it originates from the 'persitive, situative' morpheme *-*k*V-, presented in Table 7.3, section 7.3. Nurse & Philippson (2006), Nurse (2008:243) and Güldemann (1996:138-143, 1998) have all pointed out that a prefix of the shape *-ka-* shows a clear overlap in function with a more canonical and for Proto-Bantu reconstructed prefix *-*kí*- (Nurse & Philippson 2006, Meeussen 1967). This has led Maho (2001) to treat these two formatives together as -*k*V-, i.e. with an indefinite vowel. According to Nurse (2008:243-245), who refers to the vowel alternation as "unexplainable", the reflex with /*a*/ is probably a local development as it surfaces in a "thin continuous strip" along the east coast of Africa and inland, including the southern parts of Tanzania where Manda is spoken.

As shown by Güldemann (1996:138-143, 1998) and Nurse (2008:247-248), a recurring pattern in Bantu languages is that reflexes of the prefix -*k*V- typically exist in both main and subordinate clauses with a functional division of labor. That is, it functions as a persistive ("still"-aspectual) marker in main clauses whereas it marks conditional, participial and simultaneous taxis - i.e. functions similar to what has been described for the situative in Manda - in subordinate clauses. (105) is an example of this from Nyanja (N.31a) as given in Güldemann (1996:141, 1998:168). Note that *-ka-* occurs in a complex conjugation together with the copula *-lı* and the main verb in the infinitive when expressing persistive aspect. This is common according to Nurse (2008:147).

(105) *a-ka-li* *ku-dwal-a* vs. *mu-ka-cok-a* *pano*
SM3SG-PERS-COP INF-be.ill-FV SM2PL-SIT-go.away-FV here
'he is still ill' 'if/when you leave here'
[Nyanja (N.31a); Güldemann (1996:141), citing Bulley (1925:33) and Stevick (1965a:141); my glossing]

Güldemann (1998:171, 1996:74-75) suggests that the persistive use in main clauses is an earlier instantiation of *-k*V- and that the extension from persistive to situative meaning in subordinate clauses stems from the semanticization of a figure-ground concept, where the durative reading of the persistive is recruited to mark a "large", i.e. a continuing and thus backgrounded event, to contrast with a "small", i.e. punctual, event of the main predicate. At a late stage of (secondary) grammaticalization the original persistive meaning may disappear, leaving *-k*V- as a retention in subordinate clauses. This is arguably what has happened in Manda, where no construction containing *-ka-* is used to mark persistive ("still") aspect. Instead, an alternative form *-(a)kona* is used to mark persistive aspect, as further described 9.3. However, as discussed in 9.3.4, there are indications for that the recruitment of *-(a)kona* as a persistive marker is a relatively recent innovation. It is thus likely that Manda used to mark also persistive aspect with a conjugation consisting of *-ka-*. Such a hypothesis is partially supported by the comparative data. As seen in Table 7.17, some neighboring languages actually appears to use a form similar in shape to the post-initial *-ka-* + copula construction exemplified in (105) above to mark persistive aspect or at least notions such as 'still, (not) yet'. Thus, Nyakyusa has a persistive of the form SM-*kalɪ* whereas Kisi has a form *kikali* 'not yet' (= SM7-*kali*?). Finally, Matengo appears to both use a form *-(a)kali (-kalila*?) and *-kona* to mark 'still'/'not yet'.[152] The table also marks languages where a formative *-k*V- is used in subordinate clauses with functions similar to what has been described for the situative in Manda.

[152] Peculiarly, Ngoni appears to have a past progressive marker SM-(*a)kali*-B-*a*, i.e. a form highly reminiscent of a coalesced variant of the persistive conjugation (see Ngonyani 2003:59, Moser 1983:128-29, Ebner 1939:24). It is possible that these forms are connected in some way, given the fact that a persistive and a progressive are semantically very close as they both mark an ongoing situation. Thus, it is not far-fetched to suggest a shift in meaning from one to the other. It is more difficult to account for why this progressive marker in Ngoni operates in the past domain, though. (Note that Ngoni also uses *-(a)kona* as a marker of persistive (see 9.3.4).

Language	Code	Persistive marker in main clause	Subordinate marker	Sources
Nyakyusa	M.31	yes	no	Persohn (2016:174)
Pangwa	G.64	no	no	(Stirnimann 1983)
Kisi	G.67	yes(?)	yes	Ngonyani (2011:159)
Ngoni	N.12	no	yes	Ngonyani (2003:83)
Matengo	N.13	yes(?)	yes	Yoneda (2000:165, pers. comm.), Häfliger (1909:153), Kayuni (pers. comm.)
Mpoto	N.14	no	no	Botne (pers. comm.)

Table 7.17. Use of *-ka-* (as persistive) in main clauses and in subordinate clauses in the neighboring languages to Manda

Finally, it should be noted that Manda has several other formatives of the shape *-ka-* which occur in the same position within the verbal word as the situative and which, although not marking persistive aspects, are used in conjugations in main clauses. These are the past 1 (section 7.4.3), the itive (section 7.5.3) and the consecutive (section 7.6.1). However, it is hard to prove any connection between the situative and these other conjugations (as discussed in section 7.4.3.3, past 1 is a plausible exception). To link this *-ka-* with other markers of the same form but of different function has also been problematic at large cross-Bantu studies such as Güldemann (1998), Nurse & Philippson (2006) and Nurse (2008:146, 241-243)[153]. Thus, the most likely scenario is the one presented in Table 7.2 and Table 7.3, namely that these different conjugations with *-ka-* stems from two different inherited formatives, namely **-ka-* and **-k*V-.

7.6.3 Apodosis conditional *nga*-SM-B-*ili*

7.6.3.1 Form

The apodosis of a (contra-factual) conditional sentence is expressed with a simplex conjugation in Manda. It consists of the formative *nga-* occurring in the pre-initial slot. In addition to the morpheme *nga-* in pre-SM position, the construction consists of the suffix *-ili* in the final TAM2 slot.

[153] Güldemann (1998:166-167) mentions in a footnote that he believes the persistive~situative *-ka-* and the consecutive *-ka-*, but the not the distal (itive) *-ka-*, to be related and that he aims to publish a paper on this topic. As far as I know, such a paper has never been published. Nurse (2008:241-243; see also Nurse & Philipsson 2006) excludes the persistive~situative constructions with *-ka-* from a discussion where he reconstructs a semasiological relationship between the reflexes of *-ka-* expressing distal (itive), consecutive, future and past. The hypotheses with regard to Manda are based on Nurse's reconstruction.

(106) *kuvyáyi ulílàyi, ngatikupíliki*
kuvyayi u-lıl-ayi nga-ti-ku-pılık-ili
COND SM2SG-cry-SBJ COND-SM1PL-OM2SG-hear-COND
'if you had cried, we would have heard you'

All phonological rules, with regard for instance to imbrication and tone assignment, affecting the suffix *-ili* follow what has been illustrated in subsection 7.4.2.1.

With regard to the protasis clause, it is expressed in a complex construction consisting of what appears to be derived from the copula verb *-y-* (*-vy-* in the Matumba dialect) inflected in different ways, including with *nga-*, operating on a second content verb inflected in the subjunctive. These different varieties are illustrated in (107).

(107) *niyá'~ngayá'~kuyá'~ nimányáyi,…*
ni-y-ayi ~ngayayi ~kuyayi ni-many-ayi…
SM1SG-be-SBJ ~COND ~COND SM1SG-know-SBJ
'if I knew…'

The role of the copula verb *-y-* is further discussed in 9.2.[154]

7.6.3.2 Function

This construction is used to express the consequence of a situation described in a hypothetical or counterfactual conditional clause.

(108) *niyá' nimányáyi, nganilótíli*
ni-y-ayi ni-many-ayi nga-ni-lʊt-ili
SM1SG-be-SBJ SM1SG-know-SBJ COND-SM1SG-go-COND
'if I knew, I would have gone'

(109) *ngayá' nityasamúláyi, mútu ngauví ní' lépe*
ngayayi ni-tyasamʊl-ayi mu-tu nga-u-vin-ili lepe
COND SM1SG-sneeze-SBJ NCP3-head COND-SM3SG-hurt-COND NEG
'if I could sneeze, the head would not hurt'

Interestingly, some speakers use *ya-* instead of *nga-* to express the analogous meaning, i.e. a construction highly similar in form, position and meaning to the future 1. Compare (110) with the examples in section 7.4.5. Note further that this example contains an additional tactic of marking the protasis. However, this tactic once again includes the copula verb *-y-*.

[154] See also 11.3.1 for an example of the use of the negative auxiliary *-kotok-* in negated conditional clauses.

(110) *yaniyáy' nénga na nyóngólo múndu*

ya-ni-y-ayi	nenga	ni.a	nyongolo	mundu
COND-SM1SG-be-SBJ	PERS1SG	SM1SG.a	NCP1.mother	POSS3SG

'if I was his mother,

yanimbágwíli
ya-ni-mu-bagol-ili
COND-SM1SG-OM3SG-spank-COND
I would spank him'

This connection in form and also in function of *ya-* of usage in different non-factual contexts is addressed in the discussion on the origin of the future 1 in section 7.4.5.3.

7.6.3.3 Origin

The morpheme **nga-* has been reconstructed for Proto-Bantu as a conditional formative by Meussen (1967:109). However, according to Nurse (2008:254; see also Miehe 2000), the incorporation of this marker within the verbal word, like in Manda, stems from more recent grammaticalization processes. Nurse (2008:254) bases this conclusion partly on the fact that *nga-* as a formative tends to surface in the pre-initial position (see also the discussion of the origins of the future 1 formative *ya-* in section 7.4.5.3). As seen in Table 7.18, both Pangwa and Nyakusa have periphrastic constructions with an *nga-*form of similar function. It is possible that this was the case originally in Manda as well. The claim that the conditional conjugation is the result of the fusion and univerbation of *nga-* and the perfect SM-B-*ili* is strengthened by the fact that the complex tone patterns of the conditional and the perfect are identical, as was noted in section 7.6.3.1.

Language	**Code**		**Comments**	**Sources**
Pangwa	G.64	SM-**nga**-va # SM-B-ile	-*va* = copula verb -protasis -concessive meaning	Stirnimann (1983:189)
Kisi	G.67	**nga**-SM-B-ile	-apodosis	Gray (forthcom.:163)
Nyakyusa	M.31	**nga**lɪ # verb	-apodosis -*ngalɪ* may stand with different conjugations -< *nga* + COP -*lɪ* (??)	Persohn (2016: 236)
Ngoni	N.12	**nga**-SM-B-ile	-apodosis -especially in contingent clauses	Ngonyani (2003:84)
Matengo	N.13	**nga**ti	-listed as meaning 'if' (= Ger. 'wenn') - < *nga* + *-ti* 'say' (??)	Häfliger (1909:209)
Mpoto	N.14	**nga**-SM-B-iti	-	Nurse (2008:54)

Table 7.18. Constructions with reflexes of *_nga_- in the neighboring languages to Manda

There are, however, no traces in the Manda data of a periphrastic construction in the apodosis (although there is in the protasis). The conditional already surfaces as a simplex conjugation in the New Testament (1937), as seen in (111).

(111) {But understand this: If the owner of the house had known at what time of night the thief was coming…}
ngatemi miho, leka
nga-a-tam-iti ma-iho leka
COND-SM3SG-sit-COND NCP6-eye then
'…he would have kept watch (lit. 'sit eyes') and

ngaayitakili lepa nyumba yake kubomoleka
nga-a-yitak-ili lepa nyumba yi-ake ku-bomol-ık-a
COND-SM3SG-agree-COND NEG NCP9.house ACP9-POSS3SG INF-destroy-NEUT-FV
would not have let his house be broken into' [NT (1937), Matthew 24:43]

The suffix can be linked to a reflex of *-*ide*. With regard to the use of this suffix in this conjugation, it arguably reflects the cross-linguistic tendency of using past/perfect(ive) morphology to mark a distance in realis, by using markers of distance in time (see e.g. Givón 2001:362-363).

7.7 Summary and conclusions

This chapter has accounted for the TAM formatives used within single-word verb conjugations in Manda. As can be inferred from the data and the attempts at reconstruction, Manda in many ways represents a fairly typical Bantu language. This is certainly the case with regard to the presence of a scaled tense system both in the past and in the future tense paradigm (although the future tense scaling is restricted to the Matumba dialect). Tense granularity of this sort is often presented as a typological hallmark of the Bantu languages (e.g. by Dahl 1985:121; see also Nurse 2008:88-90). Manda also adheres to common Bantu tendencies in the sense that almost all affixes are clearly reflexes of Proto-Bantu as reconstructed e.g. by Meeussen (1967), Guthrie (1971:145), Nurse & Philippson (2006) and Nurse (2008). Such reflexes include the conditional *nga-*, the past prefix *-a-*, the (distal) future *-la-* and a zero marking for present tense (note that the two latter prefixes do not surface in all varieties of Manda). The subjunctive *-i* can also be included in this category of affixes, as its high degree of aperture *vis-a-vis* the Proto-Bantu subjunctive *-*e* represents a general sound law in Manda of heightening of a word-final vowel. These morphemes have not undergone any major shift formally or functionally with regard to their reconstructed counterparts. The fact that these morphemes, as well as the conjugations they are part of, also surface in several of the neighboring languages, further corroborates the hypothesis that they are markers passed on to Manda.

Through internal reconstruction, aided by internal and external comparison, it was also possible to reconstruct less transparent reflexes of Proto-Bantu reconstructions. Thus, it was shown that several of the other conjugations discussed could be explained as containing suffixes originating from two Proto-Bantu morphemes, namely *-*ide* and *-*a(n)g-*, manipulated by several phonological and/or semantic processes of change (including the amalgamation of these morphemes themselves to each other). Less clear still is the origin of the prefix *-a-* in the future obligative as well as the prefix *-ka-* in the past 1. The history of these constructions and their possible interconnection to other prefixes of the same shape are

interesting topics for further research. For other cases of *-ka-* the origin is more obvious. The itive and the consecutive could be linked to the 'itive, narrative (…)' *-*ka*-, whereas it was suggested that *-ka-* surfacing in the situative is rather to be connected to the 'persitive, situative' *-*k*V-, the phonological realization of this morpheme as /*ka*/ being a common reflex in this area. Taken together, this means that the various *-ka-* surfacing in Manda can be understood as originating from (at least) two different morphemes as reconstructed for Proto-Bantu. Finally, it was also shown that the simplex TAM paradigm does include some more recent innovations that are more or less exclusive to Manda. The most notable of these innovations is the future 1 tense with the prefix *ya-* in pre-SM position, which arguably stems from the grammaticalization of a serial periphrastic construction.

In addition, it is interesting to note how the Manda language shares retentions and innovations with the neighboring languages of the different Bantu subgroupings. What stands out here, is also how isoglosses between G.60/Southern Highland (often also including Ngoni (N.12)) and N.10 are reflected as dialectal varieties between the southern Manda dialect and the northern Matumba dialect. These isoglosses cutting through the Manda speaking area include the disparate realizations of the present tense conjugations, the future 2 marker which only surfaces in Matumba and the realization of the reflex of *-*ide* as *-iti*, given some phonological conditions, which only appears in the southern dialect. At the same time, it also interesting to note how many of the TAM constructions which Manda shares with its different neighbors, regardless of genealogical belonging, including those originating from innovations through (both primary and secondary) grammaticalization. Indeed, this points toward Manda being in the center of a grammaticalization area, as discussed in 3.2.1.

8 Aspectual auxiliaries

8.1 Introduction

This chapter presents three different auxiliary verbs in Manda that are used for expressing aspectual notions, namely the completive *-mal-*, the proximative *-lond-* and the prospective *-bɪt-*. These verbs constitute typologically salient aspectual categories. That is, they are common members of the TAM paradigm, both from a cross-linguistic perspective (see e.g. Bybee et al 1994), and specifically for Bantu languages (see e.g. Nurse 2008). The aim of this chapter is to describe and analyze these auxiliary verbs and their behavior by trying to reconstruct their lexical heritage, as well as their historical and ongoing development. Thus, this chapter will also show that the auxiliaries under scrutiny not only represent common cross-linguistic aspectual categories but that they also corroborate and feed into previous hypotheses of the pathways of change of such aspectual markers.

As will be seen, these auxiliaries share several commonalities aside from their aspectual functions. For example, they all occur in constructions with a second verb in the infinitive form. They also originate from the type of lexical verbs that tend to get grammaticalized – although a closer examination will show a more complex picture of the lexical semantics of the source verbs. Furthermore, although these auxiliaries differ in their degree of formal and functional grammaticalization, they are actually all relatively stable syntagmatically. That is, despite some syntactic changes, there are no instances of more advanced formal reduction – like cliticization and phonemic erosion – which would have more clearly singled out the semantically autonomous auxiliary from its lexical substitute. This low degree of formal change is surprising from a Bantu perspective, as Bantu languages are typically seen as undergoing formal grammaticalization relatively fast (see discussion in 6.3.5). Perhaps as a consequence of this high degree of formal grammaticalization in Bantu languages, scholars of Bantu also tend to pay relatively less attention to periphrastic constructions and auxiliaries in comparison to formatives. Yet, as will be shown in the following chapter, not only do these auxiliaries form an important part of the TA paradigm of Manda, but they also provide valuable insights in the initial steps of grammaticalization of TA markers and the mechanisms behind a lexeme becoming a grammatical marker. This is, in turn, of value for further comparative work and reconstructions in Bantu.

To be able to offer a proper account of the grammaticalization of these auxiliaries, this chapter is divided into three main sections, concentrating on one auxiliary at a time. These sections start by describing the synchronic behavior of a specific auxiliary. This is followed by an account of the etymon and the lexical characteristics of the source verb. Next, the evidence for the conceptual and formal changes from the lexical source verb to its manifestation as an auxiliary is explained and further strengthened through comparison with the neighboring languages. Section 8.2 concerns the auxiliary *-mal-*, expressing the concept of ‘already’, which I have here chosen to call a completive. Section 8.3 deals with the proximative *-lond-*, expressing ‘be about (to)’. Section 8.4 is devoted to the third and final aspectual auxiliary, namely *-bɪt-* ‘going (to)’, which functions as a prospective. Finally,

section 8.5 gives a summary of this chapter, in which some additional conclusions are also offered.

8.2 Completive *-mal-*

The completive, i.e. a grammatical element expressing 'already', and its path of grammaticalization is well-attested cross-linguistically (see Heine & Kuteva 2002:134 for examples of languages from different parts of the world). A general tendency is that this function is derived from a source verb with the lexical meaning of 'finish'. The functions and grammaticalization paths of lexical verbs meaning 'finish' have thus been a well-studied and much-debated question in Bantuistics, not least in relation to a suggested further extension into perfect or perfective denotations. This has especially been an issue with regard to the suffix *-ili*, which has been argued to be derived from a lexical verb meaning 'finish' (Givón 1971; Voeltz 1979; Botne 2010; Crane 2012; but see Nurse 2008:266-267), see also 7.4.2.3 of this dissertation. The analyses have, however, primarily been devoted to the reconstruction of affixes, i.e. already highly grammaticalized linguistic items. (The development of the verb *-(kw)ish-* into a completive in (varieties) of Swahili is, however, a prominent exception to this; see for instance Lodhi & Otterbrant 1987; Nicolle 2012; Nassenstein 2015.)

In Manda, the verb *-mal-* with a lexical denotation of 'finish' has also developed into marking 'already'. As the lexical source verb and the source construction still surface synchronically in Manda, this analysis focuses on gradual changes still in progress and located in the earlier phases of the verb-to-affix cline (see 6.3.3), i.e. at the stage of the shift from lexical to auxiliary verb, rather than on the later stages of (morphonological) reduction and affixation. Fundamentally for this analysis, this means that various instances of change can be deduced from variation within Manda and in comparison, with the surrounding languages, where the original structures or other instantiations are found, as explained in chapter 3.

8.2.1 Form and function of *-mal-*

In Manda, the aspectual function of 'already' is expressed with the verb *-mal-*, which has the original lexical meaning 'finish, complete', restricted to an inflection in what transparently is the perfect form and with the full verb in the infinitive form. Following Nicolle (2012), I refer to this marker as the completive (and subsequently gloss it as COMPL).[155]

[155] The designation of this aspectual concept is a bit problematic, firstly because it is often expressed with an adverb in English and several other languages (and consequently often referred to and glossed merely as 'already'), and secondly because there is another 'completive' with a similar but distinct meaning, as will be apparent later in this section. An alternative would be to refer to this marker as a *iamitive* (< lat. *iam* 'already'; see Olsson (2013); Dahl (2014)). However, as will be apparent, the *-mal-* construction can be used to imply a sense of 'earliness'. As an iamitive typically does not seem to do that (see Vander Klok & Mathewson 2015:186), the former designation is preferred here.

(1) *amálí' kufíka kuLudéwa*
a-malili ku-fík-a ku-Ludewa
SM1SG-COMPL INF-arrive-FV LOC17-Ludewa
'she has already arrived in Ludewa'

(2) *nimálí' kupéléka*
ni-malili ku-pelek-a
SM1SG-COMPL INF-send-FV
'I have already sent (it)'

As defined by Nicolle (2012:374), the function of this aspectual marker is to express added focus or emphasis on the completion of an event. It is used to express that an action/event has been completed before the moment of speech and that, in contrast to a general perfect, it has reached a state where it is not expected to continue. As pointed out by Vander Klok & Matthewson (2015; see also Schadeberg 1990; Heine et al 1991a:202), the completive aspect also implies 'earliness', that is, that a situation has occurred earlier, either in relation to some contrasting relevant event coded in the discourse, or just earlier than the speaker or addressee expected.

(3) {'But I tell you that anyone who looks at a woman lustfully…}
amaliti kukita ukeme nako pa mwoyo wake
a-maliti ku-kit-a u-keme nako pa mu-oyo u-ake
SM1SG-COMPL INF-do-FV NCP14-adultery DEP2SG LOC16 NCP3-heart 3-POSS
…has already committed adultery with her in his heart' [NT (1937); Matthew 5:28]

(4) *amálí' kúnywa*
a-malili ku-nyw-a
SM1SG-COMPL INF-drink-FV
'he has already been drinking'
{Speaker comments about a passing police officer; the time of utterance is around noon}

In addition, there are examples found in the data where *-mal-* is used more like an aspectual marking expressing that an action has been carried out "thoroughly and to completion" (an alternative definition of the term 'completive'; see Bybee et al. 1994:318). In this example, Matekela refers to a valley (and a village in that valley) close to the Luhuhu river, which, according to the speaker, was flooded, or been "eaten" by Lake Nyasa, as metaphorically expressed here.[156]

(5) *Matékéla, yéne imálí' kúla nyánja*
Matekela yi-ene i-malili ku-l-a nyanja
Matekela ACP9-self SM9-COMPL INF-eat-FV NCP9.lake
'Matekela, it - the lake - has completely eaten it'

[156] Note that this specific function, albeit referred to differently as a "strong perfective", has been linked to the cognate of *-mal-* in Kagulu (G.12) as well (Petzell 2008:145).

As pointed out by Nurse (2008:162), it is indeed a semantic "fine line" between the completive as defined by Nicolle (2012) and as defined by Bybee et al (1994), as they both put the focus on the completeness of the event.[157] However, Bybee et al's completive is here considered more compositional, as it is more transparently the result of the lexical denotation of 'finish, complete' and does not share the more intricate readings of earliness.

8.2.2 Lexical use and etymology of source verb

As already mentioned, the etymology and structure of the completive auxiliary can be deconstructed as consisting of the verbal root *-mal-*, further inflected with the perfect form SM-B-ili.[158]

The source verb *-mal-* means 'finish, complete' in Manda. This cognate verb is widespread in the Bantu-speaking area. It is distributed in 14 of the Guthrie zones, all the way from group A to group R. It is also reconstructed for PB as **-mad-*[159] 'finish (tr.)' (Bastin et al 2002) and surfaces with an analogous denotation in several of the surrounding languages, as seen in Table 8.1. Note that despite this omnipresence cross-Bantu, a reflex of this verb is obsolete in the two neighboring languages Mpoto and Matengo (hence the dashes). Instead, the verb *-jomol-* 'complete, finish' (especially 'finish work' in Matengo; Yoneda 2006:55) is used.

Language	**Code**	**Translation**	**Sources**
Pangwa	G.64	'finish, complete' [= 'beendigen, abschliessen']	Stirnimann (1983:185)
Kisi	G.67	'cease, complete, finish'; 'finish'	Nurse & Philippson (1975); Ngonyani (forthcom.:203)
Nyakyusa	M.31	'finish'	Felberg (1996:71)
Ngoni	N.12	'finish'	Ngonyani (2003:107), Mapunda (2016:74)
Matengo	N.13	-	(Yoneda 2006)
Mpoto	N.14	-	(Nurse & Philippson 1975; field notes)

Table 8.1. Lexical denotation of Proto-Bantu reflex *-*mad*- in neighboring languages to Manda

[157] As described in 7.6.2.2 *-mal-* can also co-occur with the situative formative *-ka-* as a resumptive marker. As such, it is very similar to the temporal adverbial clauses described in section 8.2.2.
[158] This is apparent from the morphophonemic variations that correspond with the perfect~past suffix (7.4.2.1), i.e. the variation of the realization of the consonant as /l/ or /t/, as well as optional final syllable deletion.
[159] This reflex is reconstructed with a low tone. Thus an alternative representation would be <*-*màd*->.

In Manda (as elsewhere), lexical *-mal-* is a transitive verb. When taking a noun or noun phrase as its complement, whether a concrete noun like ‘peanuts’ or an abstract noun like ‘discourse’, in the examples below, it expresses the termination of that encoded entity. As seen in (8), *-mal-* can also be used metaphorically to denote concepts such as ‘extinguish’ or ‘kill’.

(6) *umálí’ málávi ghángu*
u-mal-iti ma-lavi ga-angu
SM2SG-finish-PRF NCP6-peanuts ACP6-POSS.1SG
‘you have finished my peanuts!’ {by eating them up}

(7) […] *pakamaliti malove gake goha*
pa-a-ka-mal-iti ma-love ga-ake ga-oha
REL16-SM3SG-P1-finish-P1 NCP6-sayings ACP6-POSS.3SG ACP6-all
‘when He had completed all His discourse’ [NT (1937); Luke 7:1]

(8) *likoko limala vandu*
li-koko li-mal-a va-ndu
NCP5-epilepsy SM5-finish-FV NCP2-human.being
‘epilepsy kills people (lit. finishes)’
[Haule (2008:24-25); ‘Mapunda’s funeral’]

The terminative semantics of lexical *-mal-* may also be emphasized with the addition of the ideophones *fyá* or *njwé*, roughly ‘finish completely/totally’. (This will be further discussed in section 8.2.3.2).

(9) *nimálí’ njwé kyakúla*
ni-mal-ili njwe kyakula
SM1SG-finish-PRF IDPH NCP7.food
‘I finished up the food (completely)’ (~ ‘I ate up all of the food’)

When *-mal-* occurs in constructions with a verbal complement, it denotes the final phase of an ongoing activity encoded in that verb. Notice how the *-mal-* with this lexical sense may occur in any temporal-aspectual conjugation, i.e. not only the perfect as in (10) but also the (distal) past and the future as in (11) and (12) respectively.

(10) *nimálí’ kusókóla lési,*
ni-mal-ili ku-sokol-a lesi
SM1SG-finish-PRF INF-pound-FV NCP14.finger.millet
‘I have finished pounding the finger millet,

kwa víla nilónda kuhemelésa
kwa vıla ni-lond-a ku-hemeles-a
CP17 DIST.DEM8 SM1SG-want-FV INF-sell-FV
so now I want to sell (it)’

(11) *namalí’ kukímbíla*
ni-a-mal-ili ku-kımbıl-a
SM1SG-P2-finish-P2 INF-run-FV

‘I finished running’

(12) *Cecília yamáláyi kulóla televishéni palóngólo*
Cecilia ya-a-mal-ayi ku-lol-a televisheni [Sw.] palongolo
Cecilia F1-SM3SG-finish-F1 INF-watch-FV NCP9.television LOC16.later
‘Cecilia will finish watching the television later’

Constructions with *-mal-* operating on a verbal complement appear to be especially common sentence-initially in complex clauses consisting of a subordinate temporal clause and a main clause. There, *-mal-* is used to indicate that the event of the adverbial clause predicate has happened before the action/event of the main clause, or to mark that what is described in the main clause happens as a result of what is happening in the adverbial clause.

(13) *nifyágíla munyúmba*
ni-fyagıl-a mu-nyumba
SM1SG-sweep-FV LOC18-NCP9.house
‘I sweep the house;

nikamála kufyágíla, nikósa móto kujíko
ni-ka-mal-a ku-fyagıl-a ni-kos-a mu-oto ku-jiko [ki-fínja (NCP7)]
SM1SG-SIT-finish-FV INF-sweep-FV SM1SG-light.up-FV NCP3-fire LOC17-NCP5.kitchen
when I have finished sweeping, I light up the fire in the kitchen;

nikamála kukósa móto…
ni-ka-mal-a ku-kos-a mu-oto
SM1SG-SIT-finish-FV INF-light.up-FV NCP3-fire
when I have finished lighting up the fire in the kitchen…’

This kind of discourse construction typically surfaces in narratives or in what Sakel & Everett (2012:104) have referred to as “procedural” discourse, i.e. discourse where a consultant explains a task or gives an insight into the procedures of a daily routine. It is similar to what has been described for other (Tanzanian) Bantu languages, e.g. for Ha (Harjula [Aunio] 2004).[160]

8.2.3 Diagnostics of auxiliation

The following section focuses on the grammaticalization of *-mal-* from a lexical verb, as described in section 8.2.2, into the completive marker described in section 8.2.1. What follows in this section is the account of the succession of stages of this development. It takes as a point of departure the strong hypothesis, supported by cross-linguistically induced generalizations, of the unidirectional change of a linguistic item from being less to more grammatical as discussed in 6.3.3 (see also Hopper & Traugott 2003:16). This hypothesis is further tested on a micro-comparative level in section 8.2.3.3.

[160] These kinds of constructions are similar to the resumptive discussed in 7.6.2.2 which consists of the *-mal-* inflected with the situative *-ka-* formative. There are two instances in the corpus where *-mal-* in this specific construction selects and operates on an accomplishment verb, which would indicate that there exists an additional deviant grammaticalized function of the *-mal-* verb (see also the discussion in section 4.1).

From the panchronic point of view discussed in chapter 3, the aim of this section is to describe the dynamic phenomena encountered in the data, i.e. the synchronic continuum between lexical and grammatical *-mal-*. Thus, the properties of the polysemous *-mal-* that are found in the data serve as diagnostics for or traces of what is fundamentally perceived as a chronologically framed process of change in Manda.

As will be apparent in the following analysis, there are indeed both semantic and formal indications as well as comparative ones for the auxiliation process and the hypothesized pathway of the development of *-mal-* into a marker of completive aspect.

8.2.3.1 Pathway of reconceptualization and semantic indications of change

As mentioned in the introduction, it is common for lexical verbs meaning 'finish, complete' like *-mal-* to develop into markers of completive aspect or similar concepts, both in Bantu languages and in other language families.

This reinterpretation falls out from a scenario where the sense of focus on the completion of the event expressed in the second verb gets generalized and gradually extended to new contexts. This further entails a "loss-and-gain" situation (Heine et al 1991b:110), where other semantic properties inherent in the lexical verb are simultaneously bleached, together with the loss of restrictions on its collocational range. Thus, a good heuristic for the lexical semantics of *-mal-* in Manda having been bleached is that the restrictions on which types of entities the grammaticalized version of *-mal-* can co-occur with have been relaxed, as described in 6.3.2.1 (see also Grossman & Polis 2014; Himmelmann 2004). In this case, the specific construction where this takes place consists of *-mal-* inflected in the perfect and with a second verb in the infinitive form. The major semantic diagnostic for a generalized use of the completive *-mal-* compared to the lexical 'finish, complete' is that it can collocate with achievement verbs, as pointed out by Nicolle (2012; see also Grossman & Polis 2014). As pointed out by Nicolle (2012), achievement verbs are typically punctual, i.e. they lack any inherent duration. Thus, as they are not ongoing activities they cannot be conceived as being able to finish. Therefore, a lexical reading of *-mal-* in the following examples would be odd or even inappropriate.

(14) *nimálí' kugéga*[161]
ni-mal-ili ku-geg-a
SM1SG-COMPL INF-marry-FV
'I have already married'

[161] This is the Matumba word used for marriage (of a man).

(15) *nimálí' kupáta mwávi*
ni-malili ku-pat-a mu-avi
SM1SG-COMPL INF-get-FV NCP3-luck
'I have already had luck/I'm already lucky'

(16) *nénga, nimálí' kustáfu lihéngu*
nenga ni-malili ku-staafu [Sw.] li-hengu
PERS1SG SM1SG-COMPL INF-retire NCP5-work
'Me, I have already retired (from) work'

Crucially, the target meaning of the completive aspect of *-mal-* can occur side by side with the lexical source meaning of 'finish, complete' in the same clause. According to Heine (2002), this is a clear sign of the conventionalization of a grammatical function word (here into an auxiliary) and its split with its lexical counterpart. This is because in its lexical meaning it is not only incompatible but even "violates or contradicts the source semantics" (Heine 2002:85; see also Brinton 1991:6 who uses this as a diagnostic to contrast the perfect auxiliary from the lexical 'have' in English).

(17) *amálí' kumála kutéléka gwáli*
a-malili ku-mal-a ku-telek-a gwali
SM3SG-COMPL INF-finish-FV INF-cook-FV NCP14.ugali
'she has already finished preparing the *ugali*'

(18) *máchi gamálí' kumálíka*
ma-chi ga-malili ku-mal-ık-a
NCP6-water SM6-COMPL INF-finish-NEUT-FV
'the water has already been finished'

According to Vander Klok & Matthewson (2015:186), citing Krifka (2000), it would be only at this later stage, as an already grammaticalized completive, that *-mal-* would have acquired the further senses of 'earliness' and 'unexpectedness'. Note, however, that the 'earliness' sense is also apparent for *-mal-* in examples like (13) in section 8.2.2, where *-mal-* is used in temporal adverbial clauses to structure repetitive discourse. That is, even at a more lexical stage it is used – in a highly iconic sense – to express that the event encoded in its verb complement occurred earlier than the main clause predicate.

Before turning to the formal indications of the grammaticalization of *-mal-* into a completive auxiliary, it should be noted that *-mal-* with a completive sense is already present in the older sources of Manda such as the translation of the New Testament (1937), as exemplified in (19) (see also (3) above).

(19) *mumaliti kutupila, mumaliti kuya wakafi*
mu-maliti ku-tupil-a mu-maliti ku-y-a wa-kafi
SM2PL-COMPL INF-be(come).satisfied-FV SM2PL-COMPL INF-be(come)-FV ACP2-rich
'You are already filled, you have already become rich' [NT (1937); 1 Cor. 4:8]

This means that there is no historical or diachronic evidence of a state in the language where there did not exist a grammaticalized completive *-mal-*, which would have supported the

suggested extension in usage from a lexical verb to an auxiliary. However, as will be seen in the following section, there is syntactic evidence of such a reconceptualization and its directional path.

8.2.3.2 Formal indications of change

There are additional formal (morpho-syntactic) indications of the changed status of *-mal-* from a lexical verb to an auxiliary. Firstly, *-mal-* is subject to paradigmaticization and subsequent categorical reanalysis. As with all auxiliaries in Manda, the completive *-mal-* is syntactically reduced in comparison with its lexical counterpart, in the sense that it is more closely bound to the second verb. This is particularly visible in ellipsis constructions, where *-mal-* with a completive reading cannot occur without the second verb. This is also a synchronically detectable indication of the reanalysis of the whole construction, as the second verb has moved from acting as a de-verbal noun complement to a full verb and main predicate. That is, in Manda, as well as in some neighboring languages such as Ndendeule (N.101) and Ngoni according to Ngonyani (2000, 2003:93) - a complement to a (main) verb is generally elided when a clause is reiterated, or in other kinds of anaphoric reference to previous discourse.[162] Unlike in many other Bantu languages, a reference back to the antecedent of this elided constituent is not marked with an object marker either (with the exceptions of animates). This is also the case with a de-verbal noun complement, where the reference to its antecedent must be inferred from the previous context. This can be illustrated with the question and answer in (20) below, with *-mal-* having the lexical reading of 'finish, complete' and *-tıny-* 'cut, chop' functioning as a de-verbal noun complement. In this case, the reiterated answer occurs with only *-mal-*, whereas the rest of the proposition is elided.

(20) *umálí' kutínya mbáwu?*
u-mal-iti ku-tıny-a mbawu
SM2SG-finish-PRF INF-chop-FV NCP10.wood
'have you finished chopping wood?'

A: *éna, nimálíti*
ena ni-mal-iti
yes SM1SG-finish-PRF
'yes, I have finished (it)'

However, when *-mal-* has a functional reading as a completive aspectual marker it may no longer occur in solitude in ellipsis constructions. Such a fact is best detected in examples like (21), where the lexical reading of *-mal-* can be ruled out as it would be infelicitous on semantic grounds (as 'lose' is usually not conceived as an ongoing activity and thus not as being able to finish). In this case, *-mal-* cannot stand alone but must occur together with the second verb which in this case cannot be elided.

[162] In fact, Ngonyani (2000, 2003:93) argues for that the main predicate verb in Ndendeule and Ngoni *has* to surface as an obligatory constituent in all ellipsis constructions. This does not seems to be the case in Manda with regard to negated pro-sentence construction as seen in (29) in chapter 11.2.1, where also the content verb is elided. In other constructions this seems to hold.

(21) *amálí' kuyása kitábu?*
a-mal-i ku-yas-a ki-tabu [Sw.]
SM3SG-COMPL INF-lose-FV NCP7-book
'has she already lost the book?'

A1: *Eh, amálí' kuyása*
Eh a-mal-i ku-yas-a
eh SM3SG-COMPL INF-lose-FV
'eh, she has already lost it'

A2: ***amali* 'she has lost (it)'

That *-mal-* with a completive denotation in examples such as (21) must appear with the second verb entails a syntactic reanalysis of the whole construction. To begin with, following Heine & Narrog (2009) and Hopper (1991), *-mal-* itself can be seen as being decategorialized, as it has lost the syntactic freedom of a lexical verb of occurring by itself in an ellipsis construction. Instead, it has to stand with and be dependent on the second verb. Simultaneously, examples like (21) also capture the reversal status of the second verb in this construction. That is, the status of the second verb has also changed from a removable de-verbal noun complement to a compulsory clausal constituent and a full verb expressing the main content of the proposition. This means that the semantically shifted status of *-mal-* as more formulaic in meaning relative to its etymon is also reflected in a more grammatical/grammaticalized status syntactically. It can thus convincingly be regarded as an auxiliary also formally, following Heine & Miyashita (2008) and Narrog & Heine (2011). (See also Bostoen et al. 2012, Kawalya et al. 2014 for a similar phenomenon and diagnostic tool in Rundi (JD.62) and Luganda (JE.15), respectively).

Another loss of verbal (lexical) properties of *-mal-* concerns the loss of paradigmatic variability, or "paradigmatic narrowing" (Lehman 2015). That is, compared to the lexical use of *-mal-*, which may co-occur freely with several TAM inflections (e.g. the past tenses in (7) and (11) and the present tense in (8)), *-mal-* can only be used/inflected in the perfect form when denoting the concept of 'already' (see also Heine 1993:60).

Finally, there is a more specific quality of lexical *-mal-* that has been lost in its auxiliary usage, pointing towards the grammaticalized status of the latter. As described in section 8.2.2 and illustrated in (9), the ideophones *fyá* or *njwé* may be added to put extra emphasis on lexical *-mal-* when acting as a main verb. However, it is not possible to explicitly highlight *-mal-* in this way when it functions as a completive marker. Consequently, a sentence like (22) below is considered ungrammatical by the consultants.

(22) ***amálí kufíka kuLudéwa fyá*
a-malili ku-fík-a ku-Ludewa fya
SM1SG-COMPL INF-arrive-FV LOC17-Ludewa IDPH
**'s/he has already arrived to Ludewa (completely)'

This can be seen more generally as a loss of the verbal and lexical properties of *-mal-* (cf. Heine & Narrog 2009). It also reflects the fact that, as *-mal-* has been reanalyzed as a grammatical item, it has also been the subject of "ancillization" (Boye & Harder 2012), i.e. the demotion from a more to a less salient part of the proposition. That is, in its acquired role as a more dependent, secondary and relational marker, the completive *-mal-* is also less salient in comparison to the lexical version of *-mal-* when functioning as the main predicate. That the auxiliary *-mal-* cannot be reinforced by ideophones, which are typically employed to modify main verbs in Manda can thus be taken as a consequence of this demotion to a more backgrounded position.

8.2.3.3 Comparative indications of grammaticalization

Summing up the two previous subsections, it is clear that there are both functional and formal indications in Manda that suggests that the construction with a lexical *-mal-* (in theperfect) + infinitive having been reanalyzed and split into a new grammaticalized form-meaning pair. Firstly, *-mal-* has been the subject of categorical reanalysis, i.e. a change in word class from a lexical verb to an auxiliary. Moreover, the whole construction has been exposed to what Heine & Reh (1982:93) calls constituent-internal reanalysis, as its segments have shifted from the status of predicate verb + complement to auxiliary + predicate verb. In this subsection we turn to the final set of evidence for the grammaticalization of completive *-mal-*, considering what can be deduced from the micro-comparative data.

Turning our attention to the comparative data in Table 8.2, however, it is evident that not all of the neighboring languages with *-mal-* in the lexicon have recruited the verb as a completive. Fundamentally, this stands in accord with the hypothesized directionality of a grammaticalization process as starting with a referential lexical verb developing into a relational grammatical auxiliary and not *vice versa*. Moreover, there is a pattern of semantic layering, as different manifestations of the degree of extension in use of *-mal-* in collocations with a second verb can be found in the different synchronic languages (see discussion in 6.3.3). In Pangwa and Nyakyusa, *-mal-* may be used in compound constructions with an infinitive verb. However, it seems that it may only be used to denote the phasal value of terminativity. Botne specifically claims (2009:97ff), for Nyakyusa's closest relative Chindali (M.301), that the cognate *-mal-* can only occur with activity verbs. That is, the use of *-mal-* is restricted to a compositional usage and to fewer contexts in these languages; *-mal-* has not expanded into contexts with second verbs with inherent semantics infelicitous to its lexical reading, as described for Manda in section 8.2.3.1.

LANGUAGE	CODE	Lexical verb (including + infinitive)	Conventionalized completive	Sources
Matengo	N.13	no	no	(Kayuni pers. comm., Yoneda 2000, Yoneda pers. comm. 23-12-16)
Mpoto	N.14	no	no	Makwaya (pers. comm.)
Nyakyusa	M.31	yes	no	Persohn (pers. comm.)
Pangwa	G.64	yes	no	Stirnimann (1983)
Ngoni	N.12	yes	yes?	Lwena (pers. comm. 03-08-16)
Kisi	G.67	yes	yes	Gray (forthcom.:119)
Manda	N.11	yes	yes	-

Table 8.2. Usage of *-mal-* in neighboring languages

Interestingly, Pangwa has not grammaticalized the source construction *-mal-* + infinitive into a completive. However, a similar concept is expressed with a pre-initial formative *me-* (Stirnimann 1983:100-103). Given its phonological shape and function, *-mal-* might also have been the source verb for this formative.

Note, finally, that in Mpoto and perhaps also in Matengo[163], which lacks a reflex of the verb *-mal-*, the verb *-jomol-* 'complete, finish' (as mentioned in section 8.2.2) can also be used to denote concepts related to 'already'. Thus, in Mpoto ***ajombw**i' kuhovela kitabu chela* 's/he has already lost that book' (Makwaya pers. comm. 10-01-16). (See section 8.3.3.3 for a similar phenomenon regarding the proximative.)

8.3 Proximative *-lond-*

The proximative aspect encompasses an aspectual category roughly translatable as 'be about (to)'. It has been attested in several languages across the world and its functional range has been a well-studied topic, often with an explicit focus on reconstructing its origin and subsequent pathway of development; see for example Ziegeler (2006, 2016) and Romaine (1999), as well as the various sources cited in Heine & Kuteva (2002:311-313). The concept of proximative aspect – and especially the circumstances around its evolution – is however mostly connected to the work of Heine (1992, 1994a, 1994b, 1997, 2002; Heine & Dunham

[163] My Matengo consultant provided examples with *-jomol-* with a completive meaning. However, according to Yoneda (pers. comm. 23-12-2016), *-jomol-* only occurs as a lexical verb in her (much more extensive) data on Matengo.

2010).[164] Drawing on data from African languages in general and Bantu languages in particular, he has shown that the typical origin of a proximative auxiliary is a volitional or desiderative verb denoting either 'want', 'wish' or 'desire' (or all of them). He has also reconstructed the typical stages of change involved in the grammaticalization process that turns a volitional verb into a proximative auxiliary (or affix), following in line with the set of parameters discussed in 6.3.2. Specifically, the parameter of (pragmatic-semantic) extension and its stages of context-induced reinterpretation as described in 6.3.2.1, examples (2) and (3), have been used to account for the evolution of the proximative, most prominently developed in Heine (2002).

As will be seen in the following section, Manda adheres to these typical Bantu patterns with regard to its proximative marker, marking this concept with an auxiliary verb *-lond-*, which also has a lexical etymon meaning 'want, wish, desire'. It will also be shown that the patterns of the grammaticalization of *-lond-* into a proximative auxiliary are retained as layers of semantic and syntactic variation in synchronic Manda. Consequently, the analytical tools and predictions of Heine can be applied very directly in this case. With this said, this study also shows that the etymon verb *-lond-* has a much more complex semasiological background than just being a desiderative verb, as it must have been the subject of a set of (re)lexicalizations and semantic changes. Moreover, the comparative data points toward interesting differences with regard to the realization of the proximative between Manda and the neighboring languages. As will be argued, however, these differences can still be traced to a common source construction consisting of a verb of volition and a de-verbal complement.

8.3.1 Form and function of *-lond-*

As mentioned in the previous section, Manda makes use of the desiderative or volitional verb *-lond-* 'want, wish, need' in collocation with a second verb in the infinitive as an auxiliary denoting proximative aspect. The proximative aspect has been defined by Heine (1997:6; see also Heine & Dunham 2010:35)[165] as denoting a temporal phase located immediately preceding or at the verge of the initial boundary of a situation or, more roughly, as 'be about to x'. This is illustrated for Manda in examples (23) - (25).

[164] Heine, although discussing the phenomenon in earlier texts, credits König (1993) for the specific designation "proximative". Note that, according to Ziegeler (2006:139), the term "approximator" for the similar adverbial element 'almost' in English had already been used by Quirk (1985).

[165] A similar verbal category is sometimes referred to as the "immediate future" for some Bantu languages (e.g. in Devos 2014:23-24); Nurse (2008:161, 164) refers to a similar aspectual category as the *inceptive*, or rather as a subcategory of the inceptive with the straggling term "state-just-before-or-at-its-inception" (!).

(23) *mwána alónda kuhogóléka*
mu-ana a-lond-a ku-hogolek-a
NCP1-child SM3SG-PROX-FV INF-be.born-FV
'the child is about to be born' {the head is outside already}

(24) *ilónda kutónya*
i-lond-a ku-tony-a
SM9-PROX-FV INF-rain-FV
'it's about to rain' {when the clouds are gathering on the sky}

(25) *kapécha alónda kuwʊ́ka, áh,*
ka-pecha a-lond-a ku-wʊk-a ah
NCP12-hare SM3SG-PROX-FV INF-leave-FV ah
'the hare is about to leave, ah!,

lilwífu amálí' kukwéla pang'kíla
li-lwifu a-mali ku-kwel-a pa-mu-kɪla
NCP5-chaemelon SM3SG-COMPL INF-climb-FV LOC16-NCP3-tail
the chameleon has already climbed up on the tail (of the hare)!'

As seen in the examples, the marker expresses the coming into being of a situation, when operating on a stative verb like 'be born' in (23), and the entry into a situation, when operating on a dynamic verb like (24) and (25), which is a common feature for such a marker (see Nurse 2008:161, 164).

Although proximative *-lond-* appears to prefer the present tense, as in the examples above, it is not sensitive to deictic time constraints (unlike a tense marker). Thus, it may also appear in constructions set in another temporal frame, whether implicitly from context as in (26) (see also examples (36)) or explicitly with a conjugation differing from the present tense as in (27) and (41)).[166]

[166] Although *-lond-* in this example is marked in the present form, it is in this case used to express an event as occurring in the past. As discussed in 7.4.1.2, this is a common function of the present conjugation in Manda and in several of the neighboring languages.

(26) *kwayi' mbépo sána, kíta ilónda kutónya,*

ku-a-y-ili	mbepo	sana [Sw.]	kıta	i-lond-a	ku-tony-a
LOC17-P2-be-P2	NCP9.wind	a.lot	like	SM9-PROX-FV	INF-rain-FV

'there was a lot of wind, like it was about to rain,

lakíni yatonyí' lépe

lakini	i-a-tony-ili	lepe
but	SM9-P2-rain-P2	NEG

but it did not (rain)'

(27) *kizéze kilóndéye kúgwa, kóma nikadakíti*

ki-zéze[167]	ki-lond-eye	ku-gw-a	koma	ni-ka-dak-iti
NCP7-fiddle	SM7-PROX-P.I1	INF-fall-FV	but	SM1SG-P1-catch-P1

'The fiddle was about to fall but I caught it'

When proximative *-lond-* is used with reference to events in the past, as in this example, the sense of imminence often comes with a strong implication of counterfactuality and negation, i.e. that the event expressed in the content verb, in this example 'rain', although it was on the verge of taking place, did *not*, in fact, do so. This "avertive" reading of "action narrowly averted" has been described for the proximative by several authors, e.g. Kuteva (2001:77-112), Ziegeler (2006, 2016), Romaine (1999), (see also Heine & Kuteva 2002:309-310). According to Ziegeler (2016), who also connects this avertive reading with intersubjective senses of avoidance of "undesired" events, it stems from the fact that the proximity to the situation expressed in the full verb also entails proximity to factuality and consequently to non-factuality. This reading is highlighted in a proposition set in the past (perfective), as it is typically viewed as completed. Thus, expressing the near-occurrence of a situation in an otherwise completed state of affairs is easily interpreted as signaling that the situation did not occur.

After describing the synchronic form and function of the proximative *-lond-*, the following sections will turn the attention to its pathway of development.

8.3.2 Lexical use and etymology of source verb

This section focuses on the source verb of the auxiliary-like *-lond-* and traces its semasiological background both in Manda and from comparative perspective, in an attempt to account for the initial reasons behind its recruitment as a marker of proximative aspect.

The verb *-lond-* is polysemous in Manda, not only in relation to a grammaticalized and a non-grammaticalized version of the same etymon, but also as a lexical verb. As further exemplified below, it has a diverse range of lexical meanings. This is also the case for several

[167]Manda does not have a /z/ in its consontant inventory. This stem has been reconstructed for Proto-Bantu as **-diedie* 'musical instrument, musical bow' (Bastin et al 2002). A sequence **di* would regularly renders in /s/ in Manda (cf. Nurse 1988:102). Thus, conceivably, this word is a borrowing from some other Bantu language. Interestingly, Matengo, which also lacks a phoneme /z/, has a cognate word *zeze* (Hill 2002:408).

of the neighboring languages, as shown in Table 8.3. The table, where the different slots represent different clusters of meaning and do not suggest an exact chronology of semantic development, shows that there are diverging denotations of *-lond-* not only within each language but also between the different languages. Interestingly, with the caveat that semantic traits presented with regard to Proto-Bantu etymons are often not sufficiently reconstructed (cf section 6.4.1.2), it seems that *-lond-* might have already been polysemous (or may even have consisted of a dual set of homonyms) in Proto-Bantu, as the reconstructed stem *-*dond-* is presented with the meaning of both 'follow' (for zone G) and as 'search for' (for zone G, M and N; Bastin et al 2002). Guthrie (1967-71.vol3:178), who gives both meanings for his Comparative Series (C.S), as C.S. 654 and 655 respectively, comments:

> "As [C.S. 655] is homophonous with C.S. 654, it is possible that they had a common origin, which could have been an item with the meaning 'to follow in order to find'. This might have been a hunting term, where 'to follow (an animal or its spoor)' could very easily transfer to 'to search for'."

As indicated in Table 8.3, in this area of Bantu languages, it seems that *-*dond-* has developed additional lexical senses beyond the reconstructed ones and sometimes appears to have lost the original senses. The table is organized with the vertical columns representing different clusters of meaning (without implying any historical pathway of development), where a hyphen represents the lack of a certain denotation in a language.The most prominent additional meaning and the one of most importance for the following discussion is the volitional meaning(s) expressed in the reflexes of *-*dond-*, as represented in column II in the table in several of these languages, including Manda.

LANGUAGE	CODE	I	II	III	IV	Sources
Proto-Bantu	G	'follow'	-	-	-	Bastin et al (2002)
	G, M, N	'search for (explain)'				Bastin et al (2002)
Pangwa	G.64	'search for, look for, hand around (to get)'	'love, want, need, wish'	'find'	-	Nurse & Philippson (1975)
Kisi	G.67	'look for, search'	'want, need, wish, desire'	-	-	Nurse & Philippson (1975), Ngonyani (2011:203)
Nyakyusa	M.31	'look for, enquire'	'need, want, wish, desire'	'find'	-	Felberg (1996:69)
Ngoni	N.12	'look for, ask for, search (for), hand around (to get)'	'require, like, want'	-	-	Nurse & Philippson (1975), Ngonyani (2003:106)[168]
Matengo	N.13	-	-	-	'guard'	(Yoneda 2006:6)
Mpoto	N.14	-	-	-	'guard'	Nurse & Philippson (1975)

Table 8.3. Lexical denotation of Proto-Bantu reflex *-*dond*- in neighboring languages

Note that the lexeme only denotes 'guard' in Matengo and Mpoto[169], Manda's southern neighbors. This is probably due to a semantic shift in the sense of 'follow'. Compare these languages for example with Yao (P.21; Ngunga 2000), a Rufiji-Ruvuma language spoken further (south)-east, where the cognate has the meaning 'follow *after*, keep watch'. As illustrated and further discussed in Table 8.4 in section 8.3.3.3, this restriction in meaning is conceivably a contributing factor as to why -*lond*- has not been grammaticalized into a proximative in Matengo and Mpoto, in contrast with Manda.

[168] Also 'extort' (?) (Spiss 1904:335).
[169] Apparently, this stem, when derived from a verb to an agentive noun, i.e. *Mlonda* 'guardsman', is a common surname in this particular language area (pers.comm. with John Oswald Makwaya 16-01-16).

For the case of Manda, as described above, the source verb *-lond-* is used frequently as a lexical verb. It is used both synchronically and in the older sources, with two major meaning(s). Firstly, it may be used to denote the (reconstructed) meaning of 'look/search for' as exemplified in (28) and (29).

(28) *Herode yaalonde-londe kamwana kukayananga*
Herode ya-a-londelond-e[170] ka-mu-ana ku-ka-yanang-a
Herod FUT-SM3SG-search.for.RED-FV NCP12-NCP1-child INF-OM12-break-FV
'Herod is going to search for the Child to destroy Him' [NT 1937; Matthew 2:13]

(29) *háya, kiláwu kávílı talakulónda timányáyi*
haya [Sw.] kilawu kavılı ti-(a)la-ku-lond-a ti-many-ayi
okay tomorrow again SM1PL-FUT-OM2-look.for-FV SM1PL-know-SBJ
'okay, tomorrow again, we will look for you so we get to know

háli ya ntámu
hali [ndɔ́mi] ya mu-tamu
condition CP9 NCP1-sick
the condition of the patient'

Moreover, *-lond-* may be used in Manda to denote various mental attitudes of volition, such as 'desire', 'want' and 'need', as ascribed to the subject and with a noun phrase complement which constitutes the entity desired.

(30) *nilonda lipyana, nakuya nyambiko*
ni-lond-a li-pyana nakuya nyambiko
SM1SG-desire-FV NCP5-mercy NEG.COP NCP9.sacrifice
'I desire mercy, and not sacrifice' [NT (1937); Matthew 9:13]

(31) *ngáti ulónda máyáwo, utóla mikóngo*
ngati u-lond-a ma-yawo u-tol-a mi-kongo
if SM2SG-want-FV NCP6-cassava SM2SG-take-FV NCP4-tree
'if you want cassava, you take the tree…'

(32) *nilónda ndáláma sichokópi kwa kyakúla*
ni-lond-a ndalama si-chokopi kwa kyakula
SM1SG-need-FV NCP10.money 10-little for NCP7.food
'I need some money for food'

That *-lond-* has developed denotations of 'wish', 'want' and/or 'need' is a quite transparent extension from the meaning 'search/look for', based on the inference that what one is looking for is subsequently something one wants (to have) or that one desires. As seen in the examples

[170] Although nothing in the translation explicitly reveals it, *-lond-* is probably reduplicated here to emphasize the pluractionality (and perhaps intensity) of this search, in line with what was described with regard to the typical notions conveyed with reduplication in Manda in 5.4.3.14.

above, what is desirable in these instances is a concrete referential entity represented as a noun phrase complement. However, *-lond-* with its volitional lexical meaning(s) may also occur in double verb constructions where the complement refers to a situation encoded in a verb in the infinitive.[171] (33) and (34) are examples of this.

(33) *ngáti ulónda kugóna ápa, wíchu*
ngati u-lond-a ku-gon-a apa wichu
if SM2SG-want-FV INF-sleep-FV PROX.DEM16 good
'if you want to sleep here, good!'

(34) *vilónda kuníkóma wáka*
va-i-lond-a ku-ni-kom-a waka
SM3PL-PRS-want-FV INF-OM1SG-kill-FV no.reason
'they want to kill me for no reason'

As argued by Givón (2001:304), verbs like *-lond-* are "inherent irrealis" and behave like modals in double verb constructions because "by default" they cast a scope of non-factuality over the state of affairs encoded in the collocated infinitive. That is, in both of the examples above, *-lond-* renders the conclusion that the sleeping and the killing expressed in the respective collocates have not taken place but are yet to be realized (to varying degrees of certainty). That the event encoded in the second verb will take place, if not now but at a later stage, is furthermore connected to the first participant's strong sense of intention to accomplish the event expressed by the second verb (cf. Ziegeler 2006:159). As will be argued below, it is these senses of intention and future realization that underlie the reanalysis resulting in the aspectual reading of *-lond-* as 'be about to'. That is, these double verb constructions with *-lond-* and another verb in the infinitive indicate the starting point or initial stage of a further semantic and grammatical development of auxiliation of *-lond-* into a proximative aspectual marker. It is this transition that will be reconstructed in the following section.

8.3.3 Diagnostics of auxiliation

The grammaticalization of *-lond-* into a proximative auxiliary is hypothesized to have consisted of reanalysis and conventionalization triggered by implications of intention and later predictions of future realization of an event encoded in the verbal complement. As pointed out by Ziegeler (2006) and Romaine (1999) (but see Heine (1994) for a conflicting view), this means that there are reasons to believe that its development and path of reconceptualization in many ways have been similar to those described for future tense markers originating from volitional verbs, e.g. in Bybee et al (1994:256) and Kuteva (2001:129-130). Recall, however, that we are dealing with an aspectual and not a (future) tense marker in this case; this is clear from the fact that *-lond-* is not locked to a specific temporal setting, but can also be used e.g. in the past, as in example (41).

The following section continues with the semasiological development of *-lond-* from a referential to a formulaic entity. It explores the pathway of grammaticalization of *-lond-* +

[171] Volitional *-lond-* may also stand in collocation with a verb inflected in the subjunctive. This construction, however, has not undergone grammaticalization in Manda.

infinitive from a volitional schema to a construction expressing proximative aspect on a full verb. The section starts with a reconstruction of the pragmatic-semantic pathway of its reconceptualization and continues with the formal evidence for such a change and its conventionalization into a new form-meaning pair. Finally, the findings and the suggested grammaticalization pathway of *-lond-* in Manda are compared with findings in the chronolect and the neighboring languages.

8.3.3.1 Pathway of reconceptualization and semantic indications of change

From cross-linguistically deduced generalizations (e.g. Heine 2002; Heine & Dunham 2010) and the synchronic variation in the data of Manda, it is possible to reconstruct the semantic transition and stages of change from the lexical verb *-lond-*, expressing volition, and the grammatical function word *-lond-*, expressing proximative aspect.

Note that the canonical diagnostics of extension or context-induced reinterpretation, as developed by Heine (2002), are exemplified with a special reference to the development of auxiliaries of this particular aspectual meaning. The pathway of change that has been suggested can be applied to the case of *-lond-* in Manda as well, as the different stages of the shift and reconceptualization of *-lond-* are reflected in the synchronic variation of the form(s) in the Manda data.

To begin with, there are examples of propositions that are vague between the more lexical volitional(-intentional) reading and a more proximative one, i.e. the bridging context (Heine 2002), where a proximative reading is a plausible inference.

(35) *bámbu óyʊ alónda kuyíva,*
bambu ʊyʊ a-lond-a ku-yɪv-a
mister PROX.DEM1 SM3SG-want~PROX-FV INF-steal-FV
'that man wants/is about to steal,

akwélí' palidilísha
a-kwel-ili pa-li-dilisha [Sw.]
SM3SG-climb-PRF LOC16-NCP5-window
he has climbed in through the window'

(36) *vakawóna ng'ómbi ilónda kuhícha papípi*
va-ka-won-a ng'ombi i-lond-a ku-hich-a papipi
SM3PL-CONS-see-FV NCP9.cow SM9-want~PROX-FV INF-come-FV close
'(…and) they see that the cow wants/is about to come close(r)'

The ambiguity of these examples, and the implication that comes into play, stems from the conceivable angle of interpretation where the speaker is perceived as not only reporting about the intentions of the first participant but also predicting that the first participant will realize the event encoded in the second verb, as has been described by Kuteva (2011:129) as well as Bybee et al (1994:256). Simultaneously, it is possible to infer an inceptive sense of 'be about to' in examples like the ones above. Timberlake (2007:319) claims that such a construction "presumes a discrepancy between the current reality and the future reality anticipated when the result of the final situation is achieved". Apparently, it is this semantic-pragmatic trait of

discrepancy between a current and future reality that persists in *-lond-* as it is re-conceptualized and comes to be used for marking proximative aspect. That is, at a certain point in time, this kind of ambiguity, or overlap in senses, has triggered the context-induced reinterpretation and conceptual shift of this construction. On the one hand, the volition and intention encoded for the first participant were bleached. On the other hand, the sense of prediction and future realization - i.e. the discrepancy to the current reality - became more prominent and generalized.

It is also possible to extract examples from Manda where the lexical meaning of *-lond-* is bleached and the (auxiliary) verb unambiguously expresses proximative aspect. This is what Heine (2002) refers to as the switch context (as also presented in 6.3.2.1). As pointed out by Heine (1994a, 1994b, 1997, 2002), there are two clear interrelated semantic diagnostics or parameters that account for the (re-)semanticalization of a previous volitional verb into a proximative aspectual marker. The common basis of both these diagnostics is that they demonstrate a relaxation in the restrictions of collocational range of the aspectual auxiliary *-lond-*, in comparison with its lexical etymon (i.e. expansion, as described in chapter 6.3.2.1). In other words, there are cases where this former volitional verb can be used in contexts where a sense of volition would clash with the semantics conveyed in the additional components of the clause.
The first of the two diagnostics shows that *-lond-* is able to occur together with a verbal collocate that conveys negative effects directly affecting the first participant. In these cases, as exemplified below, a lexical reading of *-lond-* as expressing a will inherent in the first participant is, if not ruled out altogether, at least strongly backgrounded and considered much less likely than the proximative one. It is for example unlikely that the boy in (38) wants or intends to get gored by the cow.

(37) *méne ilónda kúfwa*
mene i-lond-a ku-fw-a
NCP9.goat SM9-PROX-FV INF-die-FV
'the goat is about to die'

(38) *mónga alónda kututíwa na ng'ómbi*
mu-monga a-lond-a ku-tut-iw-a na ng'ombi
NCP1-one SM3SG-PROX-FV INF-gore-PASS-FV COM NCP9.cow
'one is about to get gored by the cow'

The second parameter is related to the first, as it also concerns a sort of context expansion. However, the selectional relaxation of *-lond-* in this case is not connected to the semantic range of the second verb but rather to its extended possibility in selecting a first argument. That is, in the same way that proximative *-lond-* may occur with a second verb conveying a situation that the first participant does not want or intend to do, it might also stand with an inanimate first participant, i.e. a first participant without any inherent volition at all. The

subjects of the clauses of the following examples can hardly be seen as volitional participants, acting with intention. Thus, a volitional reading is infelicitous here.[172]

(39) *gáli lilónda kuhícha*
gali li-lond-a ku-hich-a
car SM5-PROX-FV INF-come-FV
'the car is about to come'

(40) *ilónda kúya sáa kúmi*
i-lond-a ku-y-a saa [sw.] kumi [kómi]
SM9-PROX-FV INF-be(come)-FV clock ten
'it is about four o'clock'

There are also examples from the diachronic data on Manda where *-lond-* is used *contra* a volitional reading, indicating the semantic split from its source verb. One such example is (41). Note that the English version and paraphrase of the same proposition has a clearly proximative (/inceptive) denotation rather than that of volition (arguably it also has the sense of counterfactuality discussed in section 8.3.1). More crucially, *-lond-* stands together with a second verb of the "negative effect" type, i.e. the first of the two diagnostics discussed above.

(41) {'[…]and was imploring Him to come down and heal his son; for…}
alondaga kufwa
a-a-lond-aga ku-fw-a
SM3SG-P.I2-PROX-P.I2 INF-die-FV
'…he was at the point of death' [NT (1937); John 5:48]

As seen in this section, it is already possible to account for the change in meaning from *-lond-* into a formulaic and auxiliary-like element on the pragmatic-semantic level. There is also at least one indication for further conventionalization in the sense that *-lond-* as a proximative has been the subject of formal reanalysis as well. We will turn to this evidence in the following section 8.3.3.2.

8.3.3.2 A formal indication of change

It may also be determined syntactically that the sense of "about-ness" in *-lond-* has indeed been conventionalized and that it has split from its etymon. There is evidence of decategorialization of the auxiliary *-lond-* in comparison to its lexical counterpart. Just as described in for *-mal-* in section 8.2.3.2 above and as will be seen for other auxiliaries in Manda as well, this restriction in the verbal properties of proximative *-lond-* can be detected in ellipsis clauses. Thus, in a reintroduced proposition in discourse, like the answer in (42), it is ungrammatical to elide the second verb when *-lond-* has a proximative aspectual meaning,

[172] There is an exception to this generalization, namely when an inanimate argument is used as a metaphor or metonym for (an) animate(s), e.g. *fyáma fíngi […] fi-lónd-a kupáta uráis* 'many parties want to get (hold of) the presidency'. However, see Coussé (2013) who argues that exactly such constructions have served as bridging contexts facilitating the grammaticalization of *have* + past participial into a perfect in Dutch.

as the second verb expresses the main content of the proposition and consequently serves as a compulsory constituent that must be retained from the antecedent clause.

(42) *mbúya ilónda kúfwa?*
mbuya a-i-lond-a ku-fw-a
grandmother SM3SG-PRS-PROX-FV INF-die-FV
'Is grandmother about to die?'

A1: *éna, ilónda kúfwa*
ena a-i-lond-a ku-fw-a
yes SM3SG-PRS-PROX-FV INF-die-FV
'yes, she is about to die'

A2: ***ena, ilonda* 'yes, she is about to'

This syntactic restriction simultaneously marks the demotion of *-lond-* into a more dependent, more clitic-like entity, and the subsequent promotion of the second verb collocate into the status of a full verb.

8.3.3.3 Comparative indications

With regard to the comparative data, presented in Table 8.4 below, further patterns can be detected in support of the analysis of the previous subsections. Firstly, and fundamentally, it can be seen that there is a pattern that corroborates the expected unidirectional progression from lexical and referential meaning to a grammatical and formulaic one, where a surrounding language may have a lexical source verb *-lond-* without it being recruited as an aspectual auxiliary, but not vice versa. Crucially, this points towards the fact that in the languages where the lexical cognate verb *-lond-* lacks a volitional meaning – i.e. Mpoto and Matengo – it has not expanded into denoting a grammatical function.

LANGUAGE	CODE	Volitional sense in source verb	Proximative		Sources
			Conceptual reanalysis	Formal reanalysis	
Mpoto	N.14	no	no	no	Makwaya (pers. comm.)
Matengo	N.13	no	no	no	(Yoneda 2000, 2006)
Ngoni	N.12	yes	no	no	Ngonyani (2003)
Nyakyusa	M.31	yes	yes?	no	Persohn (pers. comm.), Lusekelo (pers. comm.)
Pangwa	G.64	yes	yes	yes?	Stirnimann (1983:145)
Kisi	G.67	yes	yes	yes?	Gray (pers. comm.)[173]
Manda	N.11	yes	yes	yes	

Table 8.4. The degree of extension of *-lond-* in neighboring languages

However, this does not entail that the languages that have not grammaticalized *-lond-* as a proximative would lack a strategy to express proximative aspect. Instead, there are alternative tactics, which require a short comment.

Starting with Mpoto, which have only a non-volitional reflex of *-lond-* it is instead the basic verb for expressing volition, namely *-pal-* 'love, like, want', which has been recruited into denoting proximative aspect. Thus, for example: *imbuyi i-**pal**-a kuwa* 'the goat is about to die' (Mpoto; Makwaya, pers. comm. 10-01-16).[174] In Matengo, where *-lond-* also only surfaces without volitional meaning, the markers *kiti* (< *-kɪt-* 'do'?) and *takia* (from *-tak-* 'want'?) appear to be used instead (Yoneda 2000:203; Yoneda pers. comm. 23-12-16).

Next, in Ngoni, *-lond-* does exist with volitional meaning. However, the proximative is not expressed with this verb. Instead, the verb *-fun-* is used. (The verb *-fun-* appears to also surface with the lexical meaning 'want, need'; see Mapunda 2016). Although it is beyond the

[173] According to Gray (pers. comm. 13-09-16) "the proximative marker appears to be *-londa"*.
[174] Interestingly, in other Rufiji-Ruvuma languages, the same verb has been grammaticalized into a pure future tense marker, e.g. in Ndengeleko (P.11; Ström 2013:238-240).

scope of this study to properly examine the reason behind *-fun-* being used as the proximative rather than *-lond-*, it should be mentioned that this is conceivably due to a superstrate influence from "Alt-kingoni" (see 3.2.2.1; see also chapter 9.3 for a description of another grammatical marker originating from contact with "Alt-kingoni"). According to Doke (1930:212; see also Heine 1994:44; 1997:7) in South African Zulu (S.42), the cognate of *-fun-* has both the lexical meaning 'want, look for' (i.e. the same as *-lond-*) and has also been grammaticalized into expressing the proximative function. Also in a Ngoni variety spoken in Malawi, *-fun-* is described as being used to express "be on the point of doing something" (Elmslie 1891:45), i.e. a function in accordance with the characteristics of a proximative.

In Nyakyusa, it seems to be the case that another construction has been recruited to serve as the marker of proximative aspect. Instead of *-lond-* + infinitive, the canonical construction for expressing proximative aspect consists of a collocation involving the copula verb *-j-* 'be(come)'[175] and a second verb inflected with *pa-* and the infinitive (Persohn 2016). However, according to Bastian Persohn (pers. comm. 26-07-16) and Amani Lusekelo (pers. comm. 10-01-17) - both researchers of Nyakyusa and the latter also a native speaker - it is also possible, although rare, to use *-lond-* to express the concept of 'about to'. In fact, *-lond-* is even able to occur with an inanimate and thus a non-volitional first participant (i.e. the second of the two diagnostics for semanticization (discussed in section 8.3.3.1). Hence, it is possible that Nyakyusa is on its way of recruiting and re-inventing *-lond-* as a proximative as well.

Furthermore, it should be noticed that Pangwa also uses *-lond-* in a similar way to Manda, i.e. both with a volitional sense and as a proximative auxiliary (although there is a lack of data corroborating the formal reanalysis). Interestingly, it also appears that *-lond-* has been recruited to cover yet another grammatical function in this language. Stirnimann (1983:145) refers to this function as the negative future conditional ("*Conditionalis des Futurums*"), roughly paraphrasable as 'if X will Y', X referring to the first participant and Y to the main verb of the protasis.

(43) *pendisilonda xutova…*
pe-ndi-si-lond-a xu-tov-a
COND-SM1SG-NEG-will-FV INF-hit-FV
'if I will not hit…' ['falls ich nicht schlagen würde'; Pangwa (G.64); Stirnimann (1983:145)]

Still, this is a grammatical category that also encompasses the senses of irrealis and a temporal focus on an event set in the future, just as discussed for *-lond-* as a proximative aspect marker. In addition, it is not unusual cross-linguistically for the same source schema to give rise to different grammatical concepts – as stressed by Heine (1993:46) - especially when these concepts are as closely related in meaning as they are in this case.

[175] This copula, just as in Manda, is an inchoative verb and thus inherently inceptive in its semantics (Persohn 2016).

In conclusion, although the comparative data provide a rather scattered picture to some extent, with different tactics for expressing proximative aspect, they do in fact feed back to the more general hypothesis that a volitional verb (taking an infinitive verb complement) is the typical source for the development of a marker of this aspectual notion.

8.4 Prospective *-bɪt-*

The grammaticalization of a verb meaning 'go' into a marker of future tense is indeed the "textbook example" of grammaticalization (see e.g. Hopper & Traugott 2003; Traugott 2015; Fischer 2007; Kuteva 2001:116-121; Heine et al 1991:70-1). The reconceptualization of a "motion schema" (Heine 1993:31) consisting of a 'go'-verb operating on a second verb constitutes a well-attested and well-described pathway of change cross-linguistically, as seen in works such as Bybee et al (1991, 1994:251-253, 266-270), Bybee & Dahl (1989) and for the various languages cited in Heine & Kuteva (2002:161-163). There is also an abundance of cases reconstructed as the result of such a grammaticalization process for African languages, including from the Bantu language family, in for example Heine et al (1993:104-106; see also Botne 2006). Indeed, 'go'-verbs were even employed as examples for the general description of grammaticalization in chapter 6 in this thesis.

However, literature on specific Bantu languages, such as Devos (2014), Devos & van der Wal (2010) Nicolle (2002, 2003, 2007) and Emanatian (1991, 1992), has also put a focus on the fact that elements originating from 'go'-verbs often develop into other functional categories rather than future tense markers. This is arguably the case in Manda, with the 'go'-verb *-bɪt-* 'go (to)'. In collocation with a second infinitive verb, *-bɪt-* tends to behave differently from a regular lexical motion verb, pointing toward the fact that it has been grammaticalized. At the same time, however, the functions covered by *-bɪt-* in such contexts are not those of a typical future tense marker but rather of a prospective aspectuality. Nonetheless, what I propose and will argue for in the following section is that the grammatical functions of *-bɪt-* found in synchronic Manda represent an intermediate stage in the pathway of grammaticalization from a lexical movement verb to a fully grammaticalized future tense auxiliary. This viewpoint, in turn, contributes to developing a deeper understanding of the functional range that this marker exhibits in synchronic Manda.

8.4.1 Form and function

As mentioned above, in Manda there is a complex construction consisting of the motion verb *-bɪt-* 'go (to)' operating on a second verb in the infinitive form. In such constructions, *-bɪt-* behaves like a prospective aspectual marker. As described by Comrie (1973:64-65) and also Emanatian (1992), the prospective contrasts to a future tense in denoting an event as happening in the future, or with reference to future time, but with relevance for the time of reference, typically the deictic 'here and now' of the present. According to Jendrascheck (2014:158), the prospective often conveys that "preparations" already commencing at the time of reference will lead to a certain state of affairs in the future. That is, the future event is also related to something that happens at reference time. As pointed out by Dahl (2000), it thus differs from a future tense marker in not covering a wider notion of prediction or assertion that a situation will hold at a later stage in time.

Fundamentally, *-bɪt-* is used to indicate that the event expressed in the second verb will take place at a distance from the deictic center, by which I mean - following Nicolle (2007) - the referential locus of the speaker or the notional locus of a narrator. This distance from locus may be framed either spatially or temporally, but typically these notions coincide, as shown in the examples below.

(44) *kiláwu nibí' kuhícha kuLwílu kuwonángána na Mahúndi*
kilawu ni-bɪt-a ku-hich-a ku-Lwilu ku-wonangan-a na Mahundi
tomorrow SM1SG-PROSP-FV INF-come-FV LOC17-Luilo INF-meet-FV COM Mahundi
'Tomorrow, I am going to come to Luilo to meet with Mahundi'

(45) *nibíta kuwóya kiláwu*
ni-bɪt-a ku-wɔy-a kilawu
SM1SG-PROSP-FV INF-go.home-FV tomorrow
'I'm going to return (home) tomorrow"
{speaker at Ludewa at the time of utterance}

The element of preparation inherent in a prospective entails that there is a connection to the notion of intention (and purpose). This is reflected in Manda in the fact that the subject is usually the first person singular and thus coincides with the speaker, as seen in (44) and (45) above and further illustrated in (46) below. There are, however, exceptions to this tendency, as seen in (47). However, this example still reports on preparations on behalf of the1st participants of the proposition (animals like birds arguably also having intentions).

(46) *ngáti itónyi fúla lılínu nibíta kulíma angaláu*
ngati i-tony-i fula lılınu ni-bɪt-a ku-lım-a angalau [haka]
if SM9-rain-SBJ NCP9.rain today SM1SG-PROSP-FV INF-cultivate-FV at.least
'if it rains today, I'm going to cultivate at least

makímba muháno
ma-kimba muhano
NCP6-terrace five
five terraces'

(47) *fídége fíbíta kugúlúka*
fi-dege fi-bɪt-a ku-guluk-a
SM8-bird SM8-PROSP-FV INF-fly-FV
'the birds are going to fly'

Note from the examples above that prospective *-bɪt-* is typically conjugated in the present tense. However, *-bɪt-* may be inflected for other tenses as well. Indeed, as argued by e.g. Jendracheck (2014) this is another important indication that it functions as an aspectual marker, rather than as future tense marker. Not only may aspectual *-bɪt-* occur with other tense morphology, but it may itself be inflected for future tense.

(48) *vándu va mishéni kuléta díni*
va-ndu va misheni ku-let-a dini [Sw.]
NCP2-people CP2 NCP9.mission INF-bring-FV NCP9.religion
'the missionaries that brought the religion,

vála vabɪtí' kujénga paLítúhi
vala va-a-bɪt-iti ku-jeng-a pa-Lituhi
DIST.DEM2 SM3PL-P2-PROSP-P2 INF-build-FV LOC16-Lituhi
those, they built (there) at Lituhi' {speaker in Nsungu at utterance time}

(49) *wóna niwóka ápa, yanibíti kugénda*
wona ni-wɔk-a apa ya-ni-bɪt-i ku-gend-a
when SM1SG-depart-FV PROX.DEM16 F1-SM1SG-PROSP-F1 INF-walk-FV
'when I leave here, I will walk (there)

na kulóngela na vayángu
na ku-longel-a na va-yangu
COM INF-discuss-FV COM NCP2-fellows
and talk with my friends'

In these cases the notion of temporal distance from the deictic center is already represented in the tense marking. As seen in the examples, *-bɪt-* instead contributes either the intentional sense or the sense that the event encoded in the second verb takes place at a location away from the speaker. In this sense, it is reminiscent of the function of a "deictic explicator" as described by Devos (2014:311). Alternatively, *-bɪt-* may contribute both of these senses.

8.4.2 Lexical use and etymology of source verb

In order to understand the development of *-bɪt-* into a prospective requires a deeper insight into the lexical behavior of the source verb. As mentioned earlier, the lexical verb *-bɪt-* means 'go (to)' in Manda, encoding physical motion in space, as represented in example (50) below.

(50) *nénga nikúhéga: 'níbíta kuÍléla'*
nenga ni-ku-heg-a ni-bɪt-a ku-Ilela
me SM1SG-answer-FV SM1SG-go-FV LOC17-Ilela
'I'm answering you: "I'm going to Ilela"'

Lexical *-bɪt-* is the basic motion verb in Manda conveying movement away from the deictic center (together with *-lʊt-*, further discussed in section 8.4.2.1).

Interestingly, the verb itself has a significant lexical background, reflecting both a phonological and probably also a semantic shift. It can be traced to the common Bantu motion verb, reconstructed for Proto-Bantu as **-pít-* 'pass, surpass, go ahead, go' (Bastin et al 2002; Guthrie 1967-71.vol4:61). At some point in time this root underwent a sound change where the initial plosive became voiced, conceivably due to a case of Dahl's law, i.e. a sound change of voicing dissimilation, where "[...] a voiceless stop becomes voiced if the consonant in the next syllable is also voiceless" (Hyman 2003:56). As pointed out in 2.2, this sound change is used as a diagnostic by Nurse (1988) to separate the Southern Highland group, i.e. the G.60

languages and Manda, from the (Rufiji-)Ruvuma group (including the other N.10 languages of this study), as the former group has (partial) traces of such a conditioned sound change whereas the latter does not.

As seen in Table 8.5, there is also a sharp division between the N.10 and the G.60 languages with regard to whether the plosive is voiced or not, with Pangwa and Kisi (and also other G.60 languages, e.g. Bena (G.63); Morrison 2011) siding with Manda in having /b/ as an initial consonant, whereas Mpoto, Matengo and Ngoni all have /p/.[176] Moreover, the cognates found in the Southern Highland languages are also more similar in meaning to Manda, as they convey a more basic meaning of 'go', whereas the N.10 languages use the reflex of *-*pít*- to denote more specialized senses of motion, typically 'pass', 'surpass' and (in extension) comparison. Note that Nyakyusa lacks a reflex of this verb and that both Pangwa and Ngoni have vowel inventories consisting of only 5 vowels, which means that semi-high *ɪ has coalesced with the high *i into /i/.

Language	Code	Reflex	Meaning	Source
Proto-Bantu	-	*-*pít*-	'pass; surpass; go ahead; go'	Guthrie (1967-71.vol4:61), Bastin et al (2002)
Pangwa	G.64	-*bit*-	'go, leave, go away'	Nurse & Philippson (1975)
Kisi	G.67	-*bɪt*-	'go', 'pass (?)'	Ngonyani (2011:203)
Nyakyusa	M.31	-	-	(Felberg 1996)
Ngoni	N.12	-*pit*-	'pass, surpass'	Nurse & Philippson (1975)
Matengo	N.13	-*pɪt*-	'pass'	Yoneda (2006:52)
Mpoto	N.14	-*pet*- (?)	'pass, surpass'	Nurse & Philippson (1975)

Table 8.5. Lexical denotation and phonemic representation of Proto-Bantu reflex *-*pít*- in neighboring languages to Manda

Thus, the root -*bɪt*- with its voiced initial consonant appears to represent a pivotal example in favor of Nurse's hypothesis that Manda is of Southern Highland origin. However, this would be a problematic conclusion given the fact that there is also a verb -*pɪt*- 'pass, go out' in Manda as well, as exemplified in (51) below. (It is also represented in the collection of Manda vocabulary in the Tanzania Language Survey (Nurse & Philippson 1975).)

[176] Fascinatingly, it appears that at least Manda, Matengo and Mpoto have a "false friend". That is, there is a verb similar in both form and meaning to *-*pít*-, namely °-*piit*- 'come out, go away (from)'. Compare Manda -*pit*- 'go out (from)', Matengo -*piit*- 'to go out, to come out' (Yoneda 2006:53) and Mpoto -*pit*- 'go out, go away (of house)' (Nurse & Philipsson 1975). However, as the vowel of the latter verb is high (and long in Matengo, which discriminates between long and short vowels), I do not believe it is a cognate. Why this verb has not undergone spirantization remains an enigma.

(51) *pasáka imálí' kupíta*
pasaka [Sw] i-maliti ku-pɪt-a
NCP9.easter SM9-COMPL INF-pass-FV
'Easter has already passed'

The fact that (the unvoiced) *-pɪt-* surfaces in both diachronic and synchronic data pronounced with a semi-high vowel means that it is probably an inherited verb and not a borrowing. This is inferred from the fact that the two most likely donor languages in the case of borrowing, namely Ngoni and Swahili, both have 5 vowel systems and thus lack semi-high vowels (and consequently a loan from any of these languages would have been adapted into Manda with a high vowel /i/). It is also unlikely that a homonymic pair with a voiced and an unvoiced variant of **-pít-* stems from a language-internal innovation, as I do not know of any other cases of such phonemic developments in Manda. Thus, in contrast to the direction of diffusion suggested by Nurse (1988), I suggest that the most likely scenario for this specific case is actually that *-bɪt-* is originally a borrowing from the Southern Highland languages into Manda rather than being inherited as part of a Proto-Southern Highland heritage.

As a lexical verb, *-bɪt-* conveys motion toward a goal and away from the deictic center. The latter sense is most transparent in subjunctive and imperative forms like (52) and (53), where the speaker expresses a desire for the first participant to move away from his/her point of reference.

(52) *bítáy' kunyúmba*
bɪt-ayi ku-ɲyumba
go-SBJ LOC17-NCP9.home
'go home!'

(53) *'mikate yilinga muyii nayo?' 'mubitaye, muwone'*
mi-kate yi-linga mu-y-ili nayo mu-bit-aye mu-won-e
NCP4-bread ACP4-how.many SM2PL-be-PRF DEP4 SM2PL-go-SBJ SM2PL-look-SBJ
''How many loaves do you have?' 'Go (and) look!'' [NT (1937); Mark 6:38]

However, there is usually an allative component attached to the *-bɪt-* predicate signaling the purpose of the motion (as also seen in (52) above). That is, there is a locative goal, either explicitly mentioned or deduced from the context, toward which the first participant moves. Most typically, this locative argument or complement is a noun explicitly coded with one of the three additive locative noun prefixes found in Manda (cf. 5.3.1.10).

(54) *vakabɪtí' kung'ónda kumálávi*
va-ka-bɪt-iti ku-mu-gɔnda ku-ma-lavi
SM3PL-P1-go-P1 LOC17-NCP3-farm LOC17-NCP6-peanut
'they went to the farm, to the peanuts'

The lexical semantics of *-bɪt-* in Manda are relatively unusual from a cross-Bantu perspective. Although Guthrie (1967-71.vol4:61) reconstructs both the meanings 'pass' and 'go (to)' for

*-*pít*-, he concludes that the former is comparatively a much more common and more widespread denotation than the latter. It is thus possible that 'go (to)' is a later lexicalized extension of -*bɪt*- in Manda (or at some earlier proto-stage). If that is the case here, it would reflect what appears to be a wide tendency among motion verbs in general in Bantu, according to Devos (2014:296), namely a bias towards developing meanings of orientation towards a locative goal.[177]

8.4.2.1 A note on the lexical-sematic difference between -bɪt- and -lʊt-

It should also be mentioned that there is another basic motion verb in Manda, namely -*lʊt*-, which is used just as frequently as -*bɪt*- (although there is variation between different speakers). This verb can also take locative and de-verbal complements. It is beyond the scope of this study to account for this verb in detail. However, as its semantics are so close to those of -*bɪt*-, and as the two can often be used interchangeably, some reflections on the differences are required. The stem -*lʊt*- has also been reconstructed for Proto-Bantu as *-*dʊt*- 'pass, surpass' (Bastin et al 2002; Guthrie 1967-71.vol3:193). Thus, it originally referred to a more specific sense of motion (although similar to that described for *-*pít*-[178]). A remnant of this suggested original sense of 'pass, surpass' is reflected in -*lʊt*- when it is derived. That is, when the stem is suffixed with the applicative or the continuative extension morpheme (see 5.4.3.1 and 5.4.3.12), the meaning conveyed is 'surpass'. The verb -*lʊt*- with these extension is also used as the comparative marker in Manda. This is illustrated in (55).

(55) *nénga na ntáli kulʊtálíla wénga*

nenga	na	mu-tali	ku-lʊtalɪl-a	wenga
PERS1SG	SM1SG.a	NCP1-tall	INF-surpass-FV	PRON2SG

'I am taller than you'

There appears to be another major difference between -*bɪt*- and -*lʊt*-, although it is only a tendency rather than a sharp, discrete division. This difference is that -*bɪt*-, although also conveying movement away, puts emphasis on the goal, whereas -*lʊt*-, although it can take a locative goal, is more often used to emphasize the movement away (see Devos 2014 for a more extensive discussion of a similar division of labor between two basic 'go'-verbs in Shangaci P.312)[179]. As a result of this difference, -*bɪt*- is often interpreted as movement involving a shorter time span in comparison to -*lʊt*-, and consequently with an underlying

[177] Other (Eastern) Bantu languages where the cognate verb also denotes 'go (to)' include Chewa (N.31) with the reflex -*pit*- (Botne & Kulemeka 2004:39; Devos 2014:296) and the reflex -*phiy*- in Digo (Nicolle 2007:167).

[178] Guthrie suggests that this synonymic relationship may be due to the reflexes of *-*dʊt*- being a later innovation in a smaller area of languages (perhaps in those languages where *-*pít*- did not convey the meaning of 'pass, (surpass)').

[179] Note that Manda also have a designated motion verb for 'leave, depart', namely -*wʊk*-. Peculiarly, it surfaces as the basic 'go'-verb in Nyakyusa (see Persohn 2016; Devos 2014). This once again corroborates Devos' hypothesis, discussed in the previous section, that motion verbs in Bantu exhibit a goal-oriented bias.

notion of returning. The verb *-lʊ́t-* is instead preferred when expressing a longer departure (of a journey for example) and where there is no inference of a return. This difference is most apparent in the fact that *-lʊ́t-*, unlike *-bɪt-*, can be used metaphorically to express that someone has died, viz. *a-lʊ́t-iti* 's/he is gone'.

8.4.3 Diagnostics of auxiliation

8.4.3.1 Pathway of development

The previous section offered a description of the semasiological background of the lexical verb *-bɪt-*. In this section, I will account for how this lexical verb was recruited into a marker of prospective aspect.

The various usages of *-bɪt-* (+ infinitive verb) suggest that it has ended up along the well-attested grammaticalization path, where a motion verb in collocation with an infinitive comes to denote future time reference. However, it is important to point out that, while *-bɪt-* in this construction is different from its lexical counterpart, it is not a future tense marker in Manda either. Indeed, as the analysis will show, although there are clear semantic diagnostics that indicate a reconceptualization and schematicization of lexical *-bɪt-* and an infinitive second verb, the evolution is not very advanced in relation to the compositional meaning of the construction. Instead, *-bɪt-* shows qualities reminiscent of the typical preceding stages of a motion verb that will end up as a dedicated future tense form as described in e.g. (Traugott 2015) and (Dahl 2000). Thus, the construction with *-bɪt-* in Manda can be seen as a pre-stage, or as an early stage in the grammaticalization pathway towards a future tense. This conclusion is strengthened by the micro-variation found in the comparative data presented in section 8.4.3.3.

8.4.3.2 Language-internal indications

The main manifestations of the grammaticalization of the *-bɪt-* construction are retrievable from the conceptual domain and the comparative data rather than from the morphosyntactic domain. That is, there are no formal indications of reanalysis to be discussed.

The catalyst for the grammaticalization of *-bɪt-* is constructions where this verb occurs with an infinitive as a complement rather than collocates with a locative. As described by Heine (1993:56), this means taking an activity or an event instead of a concrete place or locative noun as its complement. This puts emphasis on other non-locative senses, which in turn triggers a reanalysis. In synchronic Manda it is possible to deduce a polysemic pattern, or a pattern of overlap as it is referred to in e.g. Heine (1993) or bridging context as in Heine (2002), where the sense of motion encoded in *-bɪt-* goes from being foregrounded and primary to being backgrounded, and is eventually demoted entirely.

For a first stage, there are plenty of examples where *-bɪt-* takes an infinitive as a complement and where the event encoded in the infinitive complement does not contradict the spatial motion encoded in this verb. In example (56), the action '(to) fish' even coincides with a concrete location, 'the lake'. Thus there is a conflation of spatial movement towards a concrete goal 'the lake', with the intention to carry out an action, 'to fish', having arrived there. Similarly, in example (57), *-bɪt-* in the second clause refers back to the movement to a locational goal specified in the previous clause.

(56) *hínu nibíta kumuhánga kulóva*
hınu ni-bıt-a ku-muhanga ku-lov-a
now SM1SG-go-FV LOC17-NCP3-lake.shore INF-fish-FV
'now, I'm going to the lake (shore) to fish'

(57) *nibíta kung'ónda; nibíta kuyála*
ni-bıt-a ku-mu-gɔnda ni-bıt-a ku-yal-a
SM1SG-go-FV LOC17-NCP3-plot SM1SG-go-FV INF-move.around-FV
'I'm going to the farm; I'm going (there) to move around (the soil)'

However, already at this stage there is a reading of intention, as the subject (in this case the speaker) expresses an intention to carry out the activity conveyed in the second verb. This is seen clearly in (57), where the *-bıt-* construction in the second clause explains the purpose and the intention behind going to the location, as introduced in the initial clause. Moreover, as the activities conveyed in both (56) and (57) are yet to be executed, there is also an implication of temporality invoked. That is, there is an inference from the spatial meaning itself "as movement in space requires movement in time" (Bybee et al 1994:269).

Interestingly, there are no indications in the historical sources of *-bıt-* going beyond this stage of extension in meaning, i.e. there is no example in which *-bıt-* does not denote spatial motion towards a locative goal. Even though most of the examples from the New Testament contain *-bıt-* together with a noun (phrase) complement, as in (58) and (59), there are also a few examples of constructions where *-bıt-* stands in collocation with an infinitive, as in (59). However, the reading of *-bıt-* is always lexical and thus similar to examples (56) and (57) above. This strengthens the hypothesis that there is a chronological staging in the polysemic pattern suggested in this section.

(58) *wakabiti ku Galilaya*
wa-ka-bit-iti ku Galilaya
SM3PL-P1-go-P1 LOC17 Galilee
'[…] they went to Galilee' [NT (1937); Matthew 28:16]

(59) *[…]abita kulilonda lila litagiki[…]*
a-bit-a ku-li-lond-a lila li-tag-ik-i
SM3SG-go-FV INF-OM5-look.for-FV DIST.DEM5 SM5-lose-NEUT-PRF
'(and) go after the lost sheep'[NT (1937); Luke 15:4] [180]

At a second stage, there are examples where a motion reading of *-bıt-* is backgrounded. Although it cannot be ruled out for these cases that *-bıt-* expresses physical movement, this is a less likely interpretation when inferred from the surrounding context. For instance, while there is no reference made to any location in (60) and (61), both of these clauses contain

[180] The usual meaning of *-tag-* is 'throw away'.

adverbs denoting a specific temporal reference, “harmonic” (to use Lyons’ (1977) term) with an interpretation of the state of affairs as taking place at a temporal distance (in the future).

(60) *saa kúmi tibí’ kúya na mpíla ngáti ya*

saa	kumi [Sw.]	ti-bɪt-a	ku-y-a	na	mu-pila [Sw.]	ngati	ya
clock	ten	SM1PL-PROSP~go-FV	INF-be-FV	COM	NCP3-football	between	CP9

‘at four we are going to have (a game of) football between

ténga na vanafúnsi va kusóma kusekondári

tenga	na	va-nafunsi [Sw.]	va	ku-som-a [Sw.]	ku-sekondari [Sw.]
PERS1PL	COM	NCP2-student	CP2	INF-study-FV	LOC17 NCP9.secondary.school

us and the students studying at the secondary school’

(61) *nibíta kusóma kímíhi*

ni-bɪt-a	ku-som-a [Sw.]	ki-mihi
SM1SG-go-FV	INF-study-FV	NCP7-evening

‘I’m going to study in the evening’

At a final stage, there are examples which clearly exhibit the de-semanticalization of the sense of movement from *-bɪt-* and where an interpretation of spatial movement of the first participant is no longer viable. This demotion of factual motion is apparent from the expansion of the collocational range of *-bɪt-*, which, in turn, entails a more non-compositional and more schematic meaning. To begin with, *-bɪt-* may occur in collocation with another motion verb. As exemplified in (62), a mere compositional and lexical reading of the construction of *-bɪt-* and the second infinitive verb would be redundant, as the sense of motion is already expressed in the second verb (see also examples (45), (47) and (49)).

(62) *nibí’ kukɪláwóka ku-Dár*

ni-bɪt-a	ku-kɪlawɔk-a	ku-Dar
SM1SG-PROPS-FV	INF-travel-FV	LOC17-Dar-es-Salaam

‘I am going to return to Dar-es-Salaam’

Furthermore, and more crucially, *-bɪt-* may also co-occur with a venitive verb, i.e. a verb expressing movement towards the deictic center and thus containing a lexical meaning in direct opposition to the source meaning of *-bɪt-*, of movement away. This is exemplified in (63), but see also (44) above.

(63) *vándu vóha vabí’ kuhícha vakósi vángu*

va-ndu	va-oha	va-bɪt-a	ku-hich-a	va-kosi	va-angu
NCP2-people	2-all	SM3PL-PROSP-FV	INF-come-FV	NCP2-friend	NCP2-POSS1SG

‘all the people who are going to come (are) my friends’

In these examples, *-bɪt-* does not encode any factual movement with regard to the first participant. Rather, it expresses the intention of the 1st participant(s) but also that the (finalization of the) event described in the second verb is intended to take place at a locus distant from the speaker.

Except for the bleaching of movement, *-bɪt-* as a prospective marker is still relatively strongly constrained by its original meaning. For example, the speakers do not allow *-bɪt-* to collocate with its own etymon, unlike e.g. the completive auxiliary (as illustrated in (17) and (18) in section 8.2.3.1). Moreover, the prospective is generally not allowed with a non-animate and hence non-intentional subject or with verbs of mental experience like 'know', both described as typical indications of the grammaticalization of a 'go'-verb by Hopper & Traugott (2003:89); see also 6.3.2.1. There are a few examples in the data where *-bɪt-* occurs with an inanimate, and thus a non-intentional, first participant. (64) is an example, which even resembles a "raising"-like construction with an arguably expletive subject marker.

(64) *pabíta lépe kúya na lihéngu*

pa-bɪt-a	lepe	ku-y-a	na	li-hengu
LOC16-PROSP-FV	NEG	INF-be-FV	COM	NCP5-work

'there is not going to be (any) work'

This example points towards a more straightforward future tense meaning of assertion/prediction for *-bɪt-* (very similar to that of neighboring Kisi, as illustrated in (65) in section 8.4.3.3 below). However, examples like this are not only very scarce in the data, but are even refuted as ungrammatical by some Manda speakers. Alternatively, they are seen as necessarily referring to an event occurring away from the deictic center and *-bɪt-* thus still more as "deictic explicator". Nonetheless, their existence in the corpus suggests that there might be further ongoing developments with regard to *-bɪt-* in Manda.

8.4.3.3 Comparative indications

As seen above, there are indications in the Manda data that *-bɪt-* has evolved from a lexical verb expressing movement away from a deictic center and towards a locational goal, and that in a construction with a second content verb in the infinitive it denotes a more schematic meaning of prospective aspect. A comparative look at the patterns of micro-variation with regard to this verb in data from neighboring languages adds important supplementary insights to the conclusions of the previous sections.

To begin with, this variation – as summarized in Table 8.6 – indicates that it is only in the languages where a reflex of **-pít-* has a goal-oriented lexical-semantic sense where it has also grammaticalized. As seen in Table 8.5 in section 8.4.2, the lexical-semantic denotation of **-pít-* varies across the languages, and it is only in the cases where it typically takes a locative goal as a lexical verb where it has also developed further relational functions. In other words, in those cases where a reflex of **-pít-* denotes 'pass' rather than 'go (to)', it has not developed further into a grammatical marker. (Note that this also includes the "unvoiced" reflex *-pɪt-* 'pass' in Manda.) It thus corroborates Devos' (2014:313) finding that "motion verbs that take a (locative) Goal as a core argument are especially prone to grammaticalization".

Language	Code	Goal-oriented motion verb	Aspectual prospective	Future Tense	Source
Nyakyusa	M.31	-			(Nurse 1979)
Matengo	N.13	no	no	no	(Yoneda 2000, pers. comm.)
Mpoto	N.14	no	no	no	(Makwaya, pers. comm.)
Pangwa	G.64	yes	yes (?)[181]	no	Stirnimann (1983:226)
Manda	N.11	yes	yes	no	
Kisi	G.67	yes	yes	yes	Ngonyani (2011:101)

Table 8.6. Extension in usage of Proto-Bantu reflex *-*pít*- in Manda and neighboring languages

The most interesting comparative data comes from Kisi, however, where -*bɪt*- has developed into a full future tense marker. As noted in the typological literature such as Dahl (2000) and Bybee et al (1991), it is common cross-linguistically for a prospective (especially a prospective marker occurring in the present tense) to be further grammaticalized into a future marker. For example, according to Dahl (2000:319), prospectives – or what he calls "de-andatives" – are typically "early futures" in European languages. In other words, a prospective sense might reflect an initial stage of grammaticalization of an element that will eventually continue to develop into a future tense marker (see also Jendraschek 2014**)**. This adheres, in turn, to the general conceptual pathways of change within the domain of TA, described in e.g. Heine & Reh (1984:129), where a lexical verb typically acquires an aspectual meaning at an initial stage, before extending further into a later (or secondary) stage of marking tense distinctions. See also Hopper (1991), who refers to the intentional reading connected to a prospective, as discussed in section 8.4.3.2 and illustrated in (56) and (57), as a typical kind of "retention" surfacing in future tense markers.

Importantly, in Kisi this construction appears to have grammaticalized further syntactically. According to Ngonyani (2011:137), the standard negator, which normally comes immediately after the main predicate verb, may not occur between -*bɪt*- as future tense auxiliary and the

[181] Stirnimann (1983) does not specifically discuss -*bit*- as an aspectual marker. However, there are some examples from his text collection that imply such a function, e.g. *avanu vabitake xutovana na vadachi* '[…] people were going to fight the Germans' (Stirnimann (1983:226)). Moreover, my Pangwa consultant at least seems to accept constructions like *ndi-bit-a xu-hich-a xilawo* 'I'm going to come tomorrow'.

second verb, as in (65). (Note that Kisi has the same tendency to delete final syllables as Manda. The reduction of *-bɪt-* here is thus conceivably not a case of erosion exclusively connected to its reanalysis as a grammatical marker.)

(65) *tibɪ kulʊta he kumanga*

ti-i-bɪ	ku-lʊt-a	he	ku-manga
SM1PL-PRS-FUT	INF-go-FV	NEG	LOC17-beach

'we will not go to the lake' [Kisi (G.67); Ngonyani (2011:137)]

This shows that the verb in the infinitive has been syntactically reanalyzed as the full verb of the clause and, furthermore, that there is strong boundedness between the auxiliary *-bɪt-* and the second verb in Kisi (see Lehmann 2015:157-167 who refers to it as "bondedness"). That is, there is a stronger dependence and cohesion between *-bɪt-* and the second verb in the auxiliary construction than in the predicates with *-bɪt-* as a lexical verb. This also indicates that there is a stronger formal grammaticalization in relation to Manda, where the negator may still occur between *-bɪt-* and the second verb (see e.g. (64) above).[182]

8.5 Summary and conclusions

In this chapter I have described three auxiliaries expressing various aspectual meanings and how they have developed into such aspectual markers. The auxiliaries under study were the completive *-mal-*, the proximative *-lond-* and the prospective *-bɪt-*. The study showed that these auxiliary verbs on the whole have developed in similar ways, being subject to parallel mechanisms of change that fit into wider generalizations of auxiliation and of verb-to-affix grammaticalization. These mechanisms apply both with regard to meaning and to form.

To begin with, the respective semantic shifts from source verb to target auxiliary are typologically generalizable. That is, they coincide in all three cases with more general pathways of change, as deduced from cross-linguistic studies such as Heine (1993) and Bybee et al (1994). Thus, a completive typically originates in a verb meaning 'finish', a proximative typically originates in a verb meaning 'want' and a prospective typically originates in a verb meaning 'go (to)'. Recall, however, that it was shown that both *-lond-* and *-bɪt-* (but not *-mal-*), although expressing the basic meanings of 'want' and 'go (to)', also exhibited a more complex semasiological background and polysemic network on the lexical-semantic level. Interestingly, these general pathways were corroborated further through comparison with Manda's neighboring languages. Crucially, the comparative data regarding any of the three aspectual categories clearly showed that: a) in a language where the cognate verb did not denote the specific lexical sense, it did not develop into an aspectual marker either; and b) in the cases where a neighboring language used an alternative way of expressing the same function, it had still almost always recruited a verb with analogous lexical denotations.

[182] Note, however, that according to Gray (forthcom.), stress is still placed on both *-bɪt-* and on the second infinitive verb in Kisi, which is a sign of a less extensive formal grammaticalization. Moreover, it appears to be the case that in the Sumba variety of Kisi, it is *-lʊt-* and not *-bɪt-* which has grammaticalized into a future tense marker (Gray, pers. comm. 2016-11-08).

Furthermore, the similarity in the syntactic context where these verbs convert to auxiliaries should also be highlighted (not least given the fact that it is a whole construction that undergoes grammaticalization rather than a verb *per se* (see Himmelmann 2004)). Thus, it should be noted that all these auxiliary verbs developed from constructions with the second verb in the infinitive form. This entails that all three instances of grammaticalization adhere to the more general schema of reconceptualization and abstraction as described by Heine (1993), where a verb takes an event as expressed in a de-verbal noun, rather than a concrete noun phrase, as its complement, thus triggering the reconceptualization and reanalysis from predicate verb + complement to auxiliary + predicate verb.

These similarities aside, there are also differences between these auxiliaries, suggesting that they are at varying stages of development. On this comparative continuum, *-mal-* is the most entrenched auxiliary, both semantically and formally, *-lond-* is somewhere in between, while *-bɪt-* is the least developed, with relatively few indications of auxiliation. Interestingly, this low degree of grammaticalization of *-bɪt-* stands in contrast to the data from neighboring Kisi, where the cognate verb has undergone a more advanced grammatical development into a syntactically more bounded future tense marker.

9 Copular constructions

9.1 Introduction

This chapter is about copula and copula constructions found in Manda. As pointed out by Dryer (2007), although a copula acts in many ways like a verb, it typically has a more relational function and is thus more reminiscent of a function word rather than a lexeme. For example, in non-verbal predicates it serves the function of syntactically marking a structure where another part of speech is the predicate and is thus the main topic of the proposition. In Bantu languages, the copula also typically serves a similar function in constructions with a predicate verb. That is, a typical construction in Bantu languages consists of a copula in a "compound" with another verb expressing the main event of the proposition (Nurse 2008:29-30). There are several such construction types in Manda, employed for expressing an array of aspectual notions.

In Bantu, one typically finds two canonical copula verbs, both reconstructed for Proto-Bantu. The first is *-*b*- 'dwell, be, become' and the second is the so called "defective" *-*dɪ* 'be' (Nurse 2008:60; Bastin et al 2002)[183]. Typically, both exist in a single language but with some differentiation in their usage patterns. Manda is an atypical Bantu language in this regard. Firstly, a reflex of the copula *-*dɪ* is lacking from the linguistic inventory of Manda. Secondly, there is no direct reflex of *-*b*- either (which, based on the phonological rules of Manda, should have surfaced as a voiced labio-velar fricative). Instead, the canonical "un-defective" or "variable" copula – that is, the copula that behaves like a regular verb with regard to inflectional patterns – most commonly has a stem of the shape -*y*-. Although this is a shape seemingly far from Proto-Bantu *-*b*-, I will argue that there are nevertheless indications pointing towards a historical connection between these two verbal stems.

In addition, Manda makes use of what I refer to, following Nicolle (2007:293), as an "aspectual copula". This copula, or quasi-copula, has the form -*(a)kona*, and more specifically denotes the aspectual category of persistence, both on non-verbal predicates and in compound constructions with a second, main verb. It will be argued that -*(a)kona*, despite its behavior, is not of verbal origin.

This chapter is organized in the following way. Section 1 concerns the -*y*- copula verb. It is first introduced in a general way, in order to get a deeper understanding of its behavior and functional range outside of periphrastic TA constructions. Secondly, I will account for its use in periphrastic compound constructions, and describe the functions these constructions convey. Finally – after a brief note on some additional functions this verb has acquired – I will also explain how the original etymon of -*y*- may stem from the more common *-*b*- stem.

In section 2, I will, in a similar fashion, introduce another copula(-like) element -(*a)kona*. I will both present its function in non-verbal predicative clauses and with verbal predicates,

[183] The designation as "defective" stems from the fact that is has been reconstructed as lacking some typical inflectional properties of a canonical verb.

where it expresses (affirmative and negative) persistive aspect. I will also trace the unusual origin and development path of this element.

Finally, before the summary and conclusions in section 9.5, section 9.4 contains a short note on some additional tactics employed for marking non-verbal predication in Manda.

9.2 The regular copula verb *-y-* 'become'

The most common copula in Manda is the verb *-y-* 'be(come)'. Although the phonological realization of this verb is usually *-y-*, it may fluctuate between *-y-* and *-vy-*, the latter being typical of the north(eastern) Matumba variety. (This will be important for the analysis of the origin of this verb in section 9.2.1.)

As mentioned initially, the verb *-y-* behaves like a regular verb. It may be inflected accordingly, including the whole paradigmatic set of TAM markers. This means that it can occur in all temporal contexts outside of the "here and now", and thus form predicates representing state of affairs that hold in another time than the time of utterance, as well as appearing in utterances representing a lower degree of factivity. (1) is an example of a predicative clause in the past and (2) of a predicative clause that will hold in the future. (3) is an example of an irrealis predicative clause, marked with *-y-* inflected in the subjunctive.

(1) *vángi váyíli kíta muhánu*
va-ngi va-y-ili kɪta muhano
NCP2-other SM3PL-be(come)-PRF COMP five
'the others, they are like five'

(2) *yalíyi lihéngu linónóno nyamuhópi*
ya-li-y-i li-hengu li-nonono nyamhupi
F1-SM5-be(come)-F1 NCP5-work ACP5-hard very
'It will be very hard work'

(3) *ayáyi mukanísa*
a-y-ayi mu-kanisa [Sw.]
SM3SG-be(come)-SBJ LOC18-NCP9.church
'he should be in church'

This possibility of being able to carry inflections from the whole paradigmatic set of TAM markers distinguishes *-y-* from the other copulas and copula-like constructions that exist in Manda (as will be discussed in the subsequent sections).

Even though there apparently exist alternative ways to express non-verbal predicate clauses in the present realis, as accounted for in section 9.3 and also section 9.4, the copula *-y-* is still found remarkably often in such constructions in Manda.

(4) *ílɪ líyíli lihímba*
ɪlɪ li-y-ili li-himba
PROX.DEM5 SM5-be(come)-PRF NCP5-lion
'this is a lion'

(5) *Kristo ayili Mutwa witu Alleluya*!
Kristo a-y-ili mu-twa u-itu alleluya
Christ SM3SG-be(come)-PRF NCP1-lord ACP1-POSS1PL hallelujah
'Christ is our lord, Hallelujah!'
[Missa Mbalafu (n.d.); Hymn 109]

(6) *na nénga níyí' pamónga na wénga*
na nenga ni-y-ili pamonga na wenga
COM PERS1SG SM1SG-be(come)-PRF together COM PERS2SG
'and me, I am together with you'

Note that *-y-* in these examples occur inflected in the presentperfect conjugation with *-ili* when making reference to a present state.[184] This is further illustrated in examples (7) - (9) below.

(7) *kipambíku kíyíli kikéle*
ki-pambiku ki-y-ili ki-kele
SM7-fruit SM7-be(come)-PRF ACP7-red
'the fruit is red'

(8) *yǒngi áyí' kunáni, yǒngi átémi páyi*
yɔ-ngi a-y-i kunani yɔ-ngi a-tam-ili payi
ACP1-other SM3SG-be(come)PRF LOC17.up ACP1-other SM3SG-sit-PRF LOC16.down
'one is up (on the roof), one sits below'

(9) *tínywa na vána, ngáti kíyí' pála*
ti-nyw-a na va-ana ngati ki-y-ili pala
SM1PL-drink-FV COM NCP2-child if SM7-be(come)-PRF PROX.DEM16
'we drink with the children, if it is there (i.e. something to drink)'

The reason to this is that the verb *-y-* is lexically an inchoative verb, i.e. it means 'become' rather than 'be'. This is also the reading conveyed when *-y-* is inflected in the present tense conjugation, i.e. with an indicative final *-a*, as illustrated in (10) and (11). In addition, the reading of such clauses often conveys a habitual or generic meaning (cf. 7.4.1.2). Occasionally, the latter reading is the only one conveyed when *-y-* occurs in the present form, as is most transparent in example (12).[185]

(10) *ukamála kugehéléla lyási, ng'ǒnda úya wíchu*
u-ka-mal-a ku-gehelel-a li-asi mu-gɔnda u-y-a wichu
SM2SG-SIT-finish-FV INF-weed-FV NCP5-grass NCP3-plot SM3-be(come)-FV good
'when you have finished weeding grass, the plot becomes clean'

[184] Note that Nurse (2008:141) analyzes this syntagmatic string differently for neighboring Mpoto.
[185] Notice that there is an irregular agreement pattern of the adjective *-sisimu* with the NCP in example (12).

(11) *ndáva ngáti uvaléli' fívi vána,*
ndava ngati u-va-lel-ili fivi va-ana
because if SM2SG-OM2SG-raise-PRF badly NCP2-children
'because if you have raised the children badly,

gáya kítá' manyáma ga mudási
ga-y-a kɪt-ayi ma-nyama ga mu-dasi
SM6-be(come)-FV do-SBJ NCP6-animalCP6 LOC18-NCP9.bush
they become like wild animals'

(12) *máchi gáya masísímu*
ma-chi ga-y-a ma-sisimu
NCP6-water SM6-be(come)-FV NCP6-cold
'the water is (usually) cold'
??'the water becomes cold' (elicited example from Dahl's (1985) questionnaire)

As will be further described in section 9.2.2., this habitual-generic reading of *-y-* in the present tense conjugation also surfaces in the structure of a complex double verb construction.

9.2.1 Use of *-y-* in non-verbal predicates

The copula *-y-* is employed in the whole set of what Dryer (2007) describes as typically non-verbal predicate clauses cross-linguistically. Note that there is no additional morphological marking of *-y-* in any of the following constructions, except for the regular indexing of participants and marking of TA(M).

Firstly, *-y-* is employed in clauses with a nominal predicate, including "true" equational predicates as in (14) – i.e. in propositions where the subject and the predicate are truly interchangeable – as well as adjective constructions.

(13) *áyí' ngáti ndóngɷ wángu*
a-y-ili ngati mu-lʊngɷ u-angu
SM1SG-be(come)-PRF like NCP1-relative ACP1-POSS1SG
'he is like my brother'

(14) *katíbu wángu áyí' pádíli*
katibu [Sw.] u-angu a-a-y-ili padili [Sw.]
NCP1a.secretary ACP1-POSS1SG SM3SG-P2-be(come)-P2 NCP1a.priest
'my secretary was the priest' ~ 'the priest was my secretary'

(15) *mwána áyíli ntáli*
mu-ana a-y-ili mu-tali
NCP1-child SM3SG-be(come)-PRF NCP1-tall
'the child is tall'

The copula *-y-* is also employed in quantification, i.e. where the predicate is a numeral, a quantifier or the question word 'how many', similar to e.g. Makwe (P.231; Devos 2008a:366-368). However, in these constructions, *-y-* has to co-occur with the special additive agreement

marker *-a*, marked for 1st and 2nd person singular/plural, as illustrated in example (17) (see also 5.3.2.4.1).

(16) *basikéli síyíli sidátu*
basikeli [Sw.] si-y-ili si-datu
NCP10.bicycle SM10-be(come)-PRF ACP10-three
'there are three bikes' (lit. 'the bikes are three').

(17) N: *mwayíli mwa valínga?*
mu-a-y-ili mwa va-lɪnga
SM2PL-P2-be(come)-P2 SM2PL.a ACP2-how.many
'how many were you?'

T: *kuhúma kuMánda tayíli ta vavílɪ,*
kuhuma ku-Manda ti-a-y-ili ta va-vɪlɪ
from LOC17-Manda SM1PL-P2-be(come)-P2 SM1PL.a ACP2-two
'from Manda (i.e. Nsungu), there were two of us,

né' na njángu Míshéki
nenga na mu-yangu Misheki
me COM NCP1-companion Misheki
me and my companion Misheki'

The copula is used together with the comitative *na* - occasionally heightened to *ni*, e.g. in (20) - to express accompaniment and possession. This construction can alternatively be expressed with *na* fused with a pronoun, consisting of the class prefix and a vowel *-o*, referring to the possessed item of the clause as in (21) (see also section 5.3.2.4.3).

(18) *Kapécha ayíli na lafíki Kahúngu*
ka-pecha a-a-y-ili na lafiki [Sw.] ka-hungu
NCP12-hare SM3SG-P2-be(come)-P2 COM NCP1a.friend NCP12-civet
'Hare was with his friend Civet'

(19) *limbeléle lalikayíli na mágólɔ gadátu lífwíli*
li-mbelele la-li-ka-y-ili na ma-gɔlɔ ga-datu li-fw-ili
NCP5-sheep REL6-SM6-P1-be(come)-P1 COM NCP6-leg ACP6-three SM5-die-PRF
'the sheep which had three legs has died'

(20) *payí' lukúmbi*
pa-a-y-ili lu-kumbi
LOC16-P2-be(come)-P2 NCP11-time
'there was a time

vayí'ni njála sána
va-a-y-ili ni njala sana [nyamuhopi]
SM2SG-P2be(come)-P2 COM NCP9.hunger very
(when) they were very hungry'

(21) *akatagiti mumu fyoha akayili nafyo*

a-ka-tag-iti	mumu	fi-oha	a-ka-y-ili	nafyo
SM3SG-P1-put-P1	in	ACP8-all	SM3SG-P1-be(come)-P1	DEP7

'[she] put in everything – all she had (to live on)' [NT (1937); Mark 12:44]

The copula *-y-* is also used with the connective particle (5.3.2.6) to mark genitive and other associative predicates, as in (22) and (23) below.

(22) *mabóma ága gayí' ga vajerumáni*

ma-boma [Sw.]	aga	ga-a-y-ili	ga	va-jerumani
NCP6-fort	PROX.DEM6	SM6-P2-be(come)-P2	CP6	NCP2-german

'these forts (/administration buildings) belonged to the Germans'

(23) *shúli síngi sóha sayí' sa mishéni*

shuli	sɪ-ngi	si-oha	si-a-y-ili	sa	misheni
NCP10.school	ACP10-other	ACP10-all	SM10-P2-be(come)-P2	CP10	NCP9.mission

'all other schools were missionary schools'

There is no special marking of locative and (affirmative) existential clauses in Manda (see 11.4 for the differing negative existential). When copula *-y-* is used for marking locative predication, the predicative complement is marked for location. However, the copula verb itself occurs without any additional marking.

(24) *áyíli mugáti ǿmʊ*

a-y-ili	mu-gati	ʊmʊ
SM3SG-be(come)-PRF	LOC18-inside	LOC18

'he is there inside'

(25) *mwana ayili kuChihulu, kusoko la vahavi*

mu-ana	a-y-ili	ku-Chihulu	ku-soko [Sw.]	la	va-havi
NCP1-child	SM3SG-be(come)-PRF	LOC17-Chihulu	LOC17-NCP5.market	CP5	NCP2-witch

'the child is at Chihulu, [at] the witches' /wizards' market'
[Haule (2008:21); Mourning song "Magunga afiha mwana"]

The existential clause in Manda is also expressed with the copula verb *-y-*, without any additional modifications. However, this specific clause may be expressed with a more dummy-like locative prefix as subject marker. Moreover, the word order is regularly switched, with the verb in the initial position and the (grammatical) subject or the first participant in a position immediately following it.

(26) *kulóva kavílɪ sípa, páyí' mbóga…*
ku-lov-a kavɪlɪ sipa pa-y-ili mboga
INF-fish-FV again NCP14.sardine SM16-be(come)-PRF NCP10.food.stuff[186]
'to fish sardines again, when there are (other) things to eat (is a hard thing to commit to)'
{Speaker expresses his reluctance to fish for sardines again, after getting caught in bad weather and almost killed}

However, it is more common for the subject marker of the copula to agree with the first participant of the proposition. Note that in example (27) it is the singular 'man' that agrees with the verb, even though the subject is post-verbal and arguably is constituted by a conjoined noun phrase referring to a plural entity.

(27) *mwándi ayí' múndu na vádála vavílɪ*
mwandi a-a-y-ili mu-ndu na va-dala va-vɪlɪ
far.past SM3SG-P2-be(come)-P2 NCP1-man COM NCP2-wife NCP2-two
'a long time ago there was a man and his two wives'
(lit.'a long time ago he was a man and his two wives')

(28) *palóngólo yáki, ayí' múndu mónga*
pa-longolo yi-aki a-y-ili mu-ndu mu-monga
LOC16-front ACP9-POSS3SG SM3SG-be(come)-PRF NCP1-person NCP1-one
'in front of it, there is a person'

In addition, it should be pointed out that this switch in word order is not restricted to existential clauses or to the copula verb. According to Dryer (2007), the pragmatic function of an existential clause is primarily to introduce a new participant into the discourse. However, the presentational function of a shift in word order is just as common with other verbs in Manda, as long as the intent is to introduce or present a new participant. This reflects the more general tendency in Manda and indeed cross-Bantu - as work like Downing & Hyman (2016), Marten (2013) and Marten & van der Wal (2014) show - to place a focused element after the verb.

9.2.2 Periphrastic constructions

As seen in the description above, the verb *-y-* is employed as a copula in several different clause types. When *-y-* stands in double verb constructions, with a second finite verbal complement expressing the main event, it typically functions as a "shifter". That is, it is used in order to "establish one locus of the temporal framework in which the event is to be interpreted" (Botne 1986:312). Thus, it shifts the temporal or aspectual setting for the second verb, i.e. the verb expressing the main event of the proposition. Most typically this is seen in constructions rendering a pluperfect or future perfect reading.

The pluperfect (or past perfect) is used to convey that a situation held at a point in time that occurred before a reference time set in the past (Comrie 1985:64). It is transparently

[186]Although reflexes of **boga* typically means 'vegetable' (cf. Bastin et al 2002), *mboga* in Manda refers to all foods that may accompany the starch (typically cassava *ugali*) of a meal, e.g. fish, beans or a relish of the leaves of cassava or other vegetables.

expressed in Manda in complex constructions where the TA marking of the respective verbs contributes a layer to the composition as whole. That is, as a first verb, *-y-* is inflected in any of the past tense conjugations, providing the temporal setting of the construction. The second verb – representing the main event – is inflected in the perfect.

(29) {when we arrived…}
ayíli awɔ́kili
a-a-y-ili a-wɔk-ili
SM3SG-P2-be(come)-P2 SM3SG-depart-PRF
'…s/he had departed'

(30) *símu yikayíli iyanángíki, kóma tikatendakísi*
simu [Sw.] yi-ka-y-ili i-yanangik-ili koma ti-ka-tendakis-ili
NCP9.phone SM9-P1-be(come)-P1 SM9-broken-PRF but SM1PL-P1-repair-P1
'the phone had become broken, but we repaired it'

A construction analogous to the expression of pluperfect is also employed in Manda to express future perfect. In this case, the second verb is still marked with the perfect, whereas the copula *-y-* is instead inflected in a future tense conjugation. The construction conveys that an event will hold prior to a reference time set in the future.

(31) *nihɔválíla wikéndi yaníyi nikɪláwíki kuLitúhi*
ni-hɔvalɪl-a wikendi [Sw.] ya-ni-y-i ni-kɪlawɔk-ili ku-Lituhi
SM1SG-believe-FV NCP9.weekend F1-SM1SG-be(come)-F1 SM1SG-return-PRF LOC17-Lituhi
'I believe that I will have returned next week to Lituhi'

(32) *kiláwu yaníyi nijéngíti*
kiláwu ya-ni-y-ili ni-jeng-iti
tomorrow F1-SM1SG-be(come)-F1 SM1SG-build-PRF
'(by) tomorrow I will have built (it)'

Interestingly, the data also contains examples of both a past and a future completive form, i.e. a triplex construction consisting of the copula inflected for tense and the completive auxiliary *-mal-* (see 8.2), which is inflected withperfect morphology and governs the main verb in the infinitive.[187]

(33) *patahíkáyi,*
pa-ti-a-hik-ayi
LOC16-SM1PL-P.I2-arrive-P.I2
'when we arrived,

[187]In fact, the triplex construction appears to gain momentum to the standard past/future perfect constructions, which suggests an extension in its function. However, this is an impressionistic conclusion, in need of further research and analysis.

ng'óma yaví' yimálí' kuwánja

ng'oma	yi-a-vy-ili	yi-mali	ku-wanj-a
NCP9.trad.dance	SM9-P2-be(come)-P2	SM9-COMPL	INF-begin-FV

the dance had already begun'

(34) *yaniyáyi nimálí' kubíta kuLudéwa*

ya-ni-y-ayi	ni-mali	ku-bɪt-a	ku-Ludewa
F1-SM1SG-be(come)-F1	SM1SG-COMPL	INF-go-FV	LOC17-Ludewa

'I will have already gone to Ludewa'

{response to a question: "Can I visit you at home tomorrow?"}

In a similar way to the pluperfect and the future perfect, it is also possible to combine the copula, in various tense conjugations, with the main second verb conjugated in the present tense (marked with the indicative final vowel *-a*). Typically, these constructions convey a progressive reading of relatively long duration as taking place either in the past or in the future. Thus, they put a more explicit focus on the internal view of an ongoing action in relation to the past imperfective, which, as the name implies, also expresses habituality (see 7.4.7.2). In relation to the locative construction discussed in 9.2.2.1 below, the compound of the copula verb and a second verb in the present conjugation also encompasses a longer duration of the ongoing event.[188]

(35) *nikayíli nigóna pandángáti*

ni-ka-y-ili	ni-gon-a	pa-ndangati
SM1SG-P1-be(come)-P1	SM1SG-lie.down-FV	LOC-NCP9.bed

'I was lying on the bed'

Finally, the copula and a finite complement can be used to express a present habitual meaning (although this is more commonly expressed with the simplex present conjugation; see 7.4.1.2)[189]. More specifically, this construction consists of the copula *-y-* inflected in the present tense conjugation. It occurs with a second verb which is marked in a similar fashion.

[188] It should be noted that these kinds of constructions, where the second verb is inflected in the present tense are, although acceptable, not frequent in Manda. It should also be noted that, typically, they occur in data generated through translation elicitation. This means that there is a risk that the data is biased, reflecting an influence from the translation sentences in Swahili. Swahili makes particular use of double verb constructions with the present (imperfective) in order to express similar meanings, as it lacks designated past (and future) imperfective morphology.

[189] It appears that this construction can also have a more generic, "lawlike" reading. For instance it was used to translate a "typical" generic proposition as given in the questionnaire by Dahl (1985:97): *gá-y-a ga-líl-a nyáwu* 'cats cry "meow"' {what do cats do when they are hungry?}.

(36) *táa síya sipátána lépa na mbalamwési*

taa [nyali]	si-y-a	si-patan[gánán]-a	lepa	na	mbalamwesi
NCP10.lamp	SM10-be(come)-FV	SM10-cooperate-FV	NEG	COM	NCP9.full.moon

'the lamps (usually) don't function in (lit. cooperate with) full moon'

(37) *túya tuhéméla ligólówi, tihemelésa*

tu-y-a	tu-hemel-a	li-gɔlɔwi	ti-hemeles-a
SM1PL-be(come)-FV	SM1PL-buy-FV	NCP5-pig	SM1PL-sell-FV

'Usually, we buy a pig (and) we sell (the meat)'

As seen in the examples, and discussed in section 9.2, this construction reflects the habitual reading inherent in the copula when conjugated in the present tense.[190]

9.2.2.1 The (narrow) progressive construction

There is a progressive construction in Manda which is also constituted by a double verb construction involving the copula verb *-y-*. However, it differs from the other constructions described above in that the second (main) verb is infinite. It also carries additional morphology from the locative paradigm. As it is also interesting from a typological and comparative perspective, it will be given extra focus in this section.

As work like Bybee et al (1994:129) and Heine & Kuteva (2002:97-99, 202) shows, it is very common universally for a construction consisting of a copula, some kind of locative marking and an infinite, de-verbal noun to render a progressive meaning. This cross-linguistic pattern is also reflected in the Bantu family.[191] Examples of studies of this phenomenon in Bantu include Bastin (1989a, b; cited in e.g. Nurse 2008:249), Kershner (2002:169-174) and de Kind et al (2015). In fact, 60% of the sample of languages in Nurse & Philippson's (2006:193) cross-Bantu study of tense-aspect markers have such a construction with a progressive (or equivalent) meaning. In Bantu languages, the construction is reconstructed as consisting of a tripartite collocation of a finite copula, a locative prefix (from either class 16 or class 18) and finally the lexical verb in the infinitive or in noun class 15 (cf. 5.3.1.9). Often the construction has grammaticalized further in a language, both semantically and formally, in different ways, as shown by Nurse (2008:139-140, 292). Firstly, it may extend in scope along the pathway progressive > present > future. That is, it expands from a narrower to a broader time span. Secondly, parts of the (morpho-)phonemic material often coalesce and erode.

Although quite rare, a reflex of this construction is also found in Manda. Interestingly, however, with regard to the general picture portrayed above, it shows a very low degree of additional development from its source construction. This lack of development is reflected both formally and functionally in Manda, which is interesting from a comparative point of view.

[190] Consider also neighboring Pangwa, which has a similar construction. According to Stirnimann (1983:180): 'Wenn das Hilfszeitwort *va* mit einem Verb verbunden wird, hat dies die Bedeutung: gewohnt sein zu, gewohnlich tun' ("If the auxiliary word *va* is linked to a verb, it has the meaning: to be used to, usually do"; my translation).

[191] Furthermore, it is a wide-spread phenomenon across the whole Niger-Congo phylum (Welmers 1973:324; cited in Nurse 2008:249) and in Africa in general (Heine et al 1991a).

Thus, in Manda, progressive aspect may be expressed with the use of a complex construction consisting of the copula *-y-*, as discussed in the previous sections, a locative prefix and the main verb in the infinitive. With regard to form, the realization of this construction may vary. To begin with, there is free variation between employing the locative marker from class 16 or class 18. Moreover, the marker of class 18 may shift between the realization /*mu*/ or /*mwa*/, i.e. with an additional vowel *-a*. (For obvious reasons it is not transparent whether this is the case for *pa-* as well.)[192]

(38) *áyíli **pa**kulémba*
a-y-ili pa-ku-lemb-a
SM3SG-be(come)-PRF LOC16-INF-write-FV
'she is writing'

(39) *áyíli **mu**kulémba*
a-y-ili mu-ku-lemb-a
SM3SG-be(come)-PRF LOC18-INF-write-FV
'she is writing'

(40) *áyíli **mwa**kulémba*
a-y-ili mwa-ku-lemb-a
SM3SG-be(come)-PRF LOC18.a-INF-write-FV
'she is writing'

This construction marks the event conveyed in the infinitive verb as unbounded, i.e. as ongoing at the time of reference without having any clear demarcation of a beginning or end. Unlike the progressive in e.g. English, this construction conveys a very narrow interpretation of duration more similar to the function described by Kershner (2002:168-172[193]; see also Botne 1986). Typically, in relation to another situation described in the same sentence or in the near context, it refers to the first participant as being 'in the midst of' or 'in the middle' of the situation encoded by the second verb (41). In other words, it conveys a "snapshot" of an event, focusing on a particular point or a narrow string of time in a continuing event.

[192] It is possible that this is a similar *-a* as described in other parts of this thesis (e.g. in the following section 9.3).
[193] Kershner discusses this function with regard to a construction consisting of similar elements in the Sukwa variety of Chindali (M.301), spoken across the other side of Lake Nyasa, in Malawi. It is possible that this narrow reading of *be* + LOC + infinitive meaning thus reflects more of an areal feature. My hypothesis, further elaborated below, is that the narrower conceptualization is a reflection of a less formulaic and more literal reading of the parts that constitute this construction. However, the one need not exclude the other.

(41) *Sonobía akayíli mukutéléka gwáli*
Sonobia a-ka-y-ili mu-ku-telek-a gwali
Sonobia SM3SG-P2-be(come)-P2 LOC18-INF-cook-FV NCP14.*ugali*
'Sonobia was (in the middle of) cooking *ugali*

lukúmbi Ngolibáha akachíti
lu-kumbi Ngolibaha a-ka-hich-iti
NCP11-time Ngolibaha SM3SG-P1-come-P1
at the time Ngolibaha came'

(42) {As Jesus was walking beside the Sea of Galilee, he saw two brothers, Simon called Peter, and his brother Andrew.}
wayili mu kulekela lwafu pa luchi
wa-y-ili mu ku-lek-ıl-a lu-afu pa lu-chi
SM3PL-be(come)-PRF LOC18 INF-leave-APPL-FV NCP11-net LOC16 NCP11-deep
'They were casting a net into the lake' [NT (1937); Matthew 4:18]

Moreover, this construction in Manda most often conveys an additional reading of location, typically in the sense that the first participant is physically involved in the situation encoded in the second verb. For instance, a proposition like (43) below is claimed to have a specific reading of joining in and being a part of the dancing. Similarly, the response in example (44) not only conveys that it is the activity of 'fishing' itself which renders the meeting impossible, but rather the fact that the activity is taking place somewhere out on the lake: that is, at an unreachable location for the addressee.

(43) *yaníyi mukuhína*
ya-ni-y-i mu-ku-hin-a
F1-SM1SG-be(come)-F1 LOC18-INF-dance-FV
'I will be dancing' ~ 'I will be in the dancing'

(44) {Question: "Can we meet at 10 tomorrow?"}
lépa, sáa nchéche kiláwu yaníyi pakulóva
lepa saa [Sw.] ncheche kilawu ya-ni-y-i pa-ku-lov-a
NEG clock four tomorrow F1-SM1SG-be(come)-F1 LOC16-INF-fish-FV
'no, tomorrow at 10, I will be (in the middle of) fishing' ~ 'I will be at the fishing'

The copula verb can be inflected with any tense marking. It may also occur with different types of verbs. Typically, it occurs with dynamic activity verbs like the examples given above. As is typical for a progressive (see e.g. Comrie 1976:35), it cannot collocate with verbs of more stative aspectuality.

(45) ***níyí' pakumánya*
ni-y-ili pa-ku-many-a
SM1SG-be(come)-PRF LOC16-INF-know-FV
'I'm knowing'

However, it can be combined with inchoative verbs.[194] In this case, it marks the event as being in the midst of the transition phase before it culminates. Or, to put it another way, that the transition encoded in the lexical verb is ongoing (cf. the discussion in Bybee et al 1994:139-140). This is seen in examples (45) and (46) with *-tond-* 'be(come) tired' below.

(46) *áyí' pakutónda*
a-y-ili pa-ku-tond-a
SM3SG-be(come)-PRF LOC16-INF-become.tired-FV
'she is getting tired'
{'it's one o'clock and she has been cultivating since morning'}

(47) *váyí' pakutónda*
va-y-ili pa-ku-tond-a
SM3PL-be(come)-PRF LOC16-INF-become.tired-FV
'they are getting tired'
{of a fight between two equally strong persons that has been going on for a long time}

As pointed out by Heine & Kuteva (2007:98-105), infinitives and other de-verbal nouns are typically "exploited" cross-linguistically for encoding an event rather than an entity within expressions originally reserved for nominals. This is most probably what has happened in the case of the progressive in Manda. Compare the constructional similarities between a non-verbal locative clause in (47a) and the progressive in (47b) in Manda.

(48) a. *áyí' mukanísa*
a-y-ili mu-kanisa [Sw.]
SM3SG-be(come)-PRF LOC18-NCP9.church
'she is in church'

b. *áyí' mukusáli*
a-y-ili mu-ku-sali [Sw.]
SM3SG-be(come)-PRF LOC18-INF-pray
'she is praying'

As indicated in the previous paragraphs, this literal meaning of 'being in the place of verbing' (Bybee et al 1994:136) still persists in the progressive in Manda. An additional indication of this retention of locative meaning is reflected in how these propositions are paraphrased and back-translated into Swahili. For example, one informant translated the clause *ni-y-i mu-ku-gend-a* into Swahili as *ni-po kutembea*, which basically just means 'I am at walking' or 'I am at the place of walking'. (Note that this is considered ungrammatical or infelicitous in standard Swahili.)

What is interesting from a cross-Bantu and cross-linguistic perspective is the low degree of grammaticalization that this construction exhibits in Manda, i.e. there are few signs of the typical additional semantic or formal changes described by Nurse (2008:139-140, 292). First, it has been subject to a low degree of semantic change, as it retains the original locative sense. Moreover, the temporal viewpoint is construed narrowly. This is also a sign of an early stage of development, given the fact that both cross-linguistic studies such as Bybee et al (1994:136-137) as well as specific cross-Bantu studies such as Nurse (2008:140) show that the typical semantic expansion of this kind of construction moves from encompassing a more

[194]It should be mentioned that one speaker did find these sentences ill-constructed.

to a less contracted time span. Moreover, the free variation in forming the construction with either of two locative prefixes points towards a low degree of specialization (Hopper 1991). As far as I know, there are no other reports of such variation in a progressive construction of this kind within other Bantu languages.[195]

Taken together, this means that there is still a high degree of compositionality in this construction, both from a semantic and a morpho-syntactic point of view. This fits well with Nurse & Philippson's (2006) claim that this kind of construction is often re-innovated in Bantu. With this said, however, it should also be pointed out that the progressive construction in Manda surfaces both in the older sources of the language, as seen in example (42) above, and in at least the neighboring languages, Ngoni (Ebner 1939:22) and Mpoto (Nurse 2007b). This suggests that although the construction is not evolving further in Manda, it actually does not appear to be a recent innovation either.

9.2.3 Additional functions

It should be mentioned that alongside this multifunctionality of the copula verb *-y-* within the domain of non-verbal predication and compound constructions, it is also employed for additional functions in other parts of the clause. Firstly, it can be used as a complementizer, as in (49), in which case it takes the infinitive form *ku-*.

(49) *yóla ataví' kúya yahíchi*

yɔla	a-a-tav-ili	kuya	ya-a-hich-i
DIST.DEM1	SM3SG-P2-say-P2	COMP	F1-SM3SG-come-F1

'she said that he will come'

Secondly, it may also occur as a marker of a protasis clause in counterfactual conditional constructions.[196]

(50) *kuvyáyi uhíkáyi kuMbóngo, ngauvawéne vánu*

kuvyayi	u-hik-ayi	ku-Mbongo	nga-u-won-ili	va-anu
COND	SM2SG-arrive-SBJ	LOC17-Mbongo	COND-SM2PL-OM3PL-see-PRF	NCP2-people

'If you had come to Mbongo, you would have seen the people'

As shown by Hopper & Traugott (2003:186) and Heine & Kuteva (2002:94-95), to develop into a conditional marker is a common pathway of change for a copula verb. According to Hopper & Traugott (2003:186), this cross-linguistically replicated pattern reflects "the fact that conditionality presupposes an extant (durative) condition". Güldemann (2008:303-304) also mentions the extension of a copula to become a complementizer as a regular path of functional development.[197] Furthermore, Güldemann (2003) claims that complementizers placed in a pre-posed subordinate clause often get reanalyzed to conditionals in Bantu

[195] Interestingly, all the progressive constructions in the New Testament (1937) have the *mu*-variant.
[196] Note that *-pılık-* is the Matumba word for 'listen, hear'. The suffix *-ayi* most probably stem from a complex construction *-ag-a*, similar to the past imperfective 2 (7.4.7.3) and the situative (7.6.2.3).
[197] One language that has recruited a copula verb as a complementizer is Swahili. It can thus not be discarded that this function of *-y-* in Manda is due to calquing. The more common complementizer in Manda is *kukíta* or *kítáyi*, derived from the verb *-kɪt-* 'do' (< *-*kít-*'do').

languages, which would suggest that there is a connection between the two additional functions of the copula verb.

9.2.4 Origin

This section will focus on the question of the origin of the *-y-* verb. To have a main copula of the shape *-y-* is quite idiosyncratic from a cross-Bantu perspective. As mentioned initially, the typical markers of 'be, become' in Bantu are the reflex of **-b-* (e.g. *-b-* 'be' in neighboring Matengo in Table 9.1 below) and/or (the "defective") **-dɪ*. In addition, if a language does have an exceptional copula verb it is according to Nurse (2008:60, 142) typically derived from **-yikal-* 'sit, dwell, remain' which is not a plausible source here either.

As seen in Table 9.1, however, Kisi and Nyakyusa also have copula verbs of a palatal shape, namely *-y-* and *-j-* respectively.[198] While this seems to be the regular form in Kisi, it is described as a "suppletive form" in Nyakyusa by Nurse (1979:124). However, according to Persohn (2016:239-240), the copula *-j-* may be used in all contexts except a zero-marked present and the (affirmative and negative) past. Ngoni does not have this palatal copula. However, the reflex of **-b-* stands in free variation, either being pronounced as *-v-* or, alternatively, as *-vy-*, i.e. together with a palatal approximant. As mentioned above, this latter pronunciation is the regular regional variant in the Matumba dialect of Manda. That is, in every context where a southern Manda speaker would exclusively use *-y-*, a Matumba speaker may also use *-vy-*. Thus, it is possible to trace *-y-* from **-b-* through the set of sound changes, as reflected (from left to right) in the language-internal and external variation in Table 9.1.

[198] It should be mentioned that Persohn (2016:239) traces the Nyakyusa copula *-j-* to the reconstructed stem **-gɪ-* 'go'. This verb, however, is obsolote in Manda and its neighbors. Spiss mentions a reflex of this verb in his description of Alt-Ngoni (Spiss 1904:298), but not with any functions beyond its lexical meaning. Note that Nyakyusa, which also has the defective copula **-dɪ*, the division in distribution between *-j-* and **-dɪ* is analogous to neighboring languages with a clear reflex of **-b-* (Persohn 2016:239). For the reasons provided above, I believe that it is more plausible that the copula is a reflex of **-b-* in Manda.

			Source
PB		**-b-*	Bastin et al (2002)
Matengo (N.13)		*-b-*	Yoneda (2006:99)
Pangwa (G.64)		*-v-*	Stirnimann (1983:180)
Ngoni (N.12)		*-w(y)-*	Ebner (1939:28)
Manda (N.11)	**Matumba variety**	*-(v)y-*	
	Nyanja variety	*-y-*	
Kisi (G.67)		*-y-*	Nurse & Philippson (1975)
Mpoto (N.14)		*-y-*	Makwaya (pers. comm.)
Nyakyusa (M.31)		*-j-*(?)	Persohn (2016:239-240), Nurse (1979)

Table 9.1. Variation in copula realization in Manda and neighboring languages

It is not clear where this additional glide stems from. One plausible explanation is that it originates from a derivation of **-b-* with **-i-*, the causative extension, that in addition may convey an intensive (rather than a ditransitive) reading (see 5.4.3.2). Nurse (2008:142) claims that it is common across the Bantu-speaking area that reflexes of **-b-* appear in less usual forms. He exemplifies this with Lega (D.25) *-bez-* and Sukuma (F.21) *-bhiiz-*. Note that both of these forms also look like instantiations of the original root and an intensive derivation (albeit the longer reconstructed variant; see Schadeberg 2003).

9.3 The "aspectual copula" *-(a)kona*

This section focuses on the copula-like element *-(a)kona* '(be) still', which is used for marking the notion of persistence in Manda. According to Nurse (2008:145), the persistive or the "still aspect" is a wide-spread category in Bantu. Unlike Indo-European and other language families, which typically mark the concepts of 'still' and 'yet' with adverbs/particles, Bantu languages tend to mark this category with a prefix within the verbal word. Typically, it is marked with a formative that can be derived from the shape *-k*V-, as shown by Maho (2008). A persistive formative **-kɪ-* has even been reconstructed for Proto-Bantu by Meeussen (1967).[199] However, Manda does not adhere to this canonical Bantu structure. Manda – together with all N.10 languages – instead expresses this function with the

[199] See also the discussion about this marker in section 7.6.2.3.

use of the element -(*a)kona*, inflected for subject indexation and occurring in a complex construction. In this construction -(*a)kona* carries the persistive meaning and operates on the main situation encoded in the lexical verb. The lexical verb appears either inflected or in the infinitive form, depending on which specific meaning the proposition intends to convey. As a consequence, -(*a)kona* can be employed to express both affirmative 'still' and negative 'not yet'. However, -(*a)kona* not only operates on verbal predicates, but may also be used as an "aspectual copula" (Nicolle 2007:293), encoding persistive aspect on non-verbal predicates. This section will begin by describing this latter function (in section 9.3.1) before describing the periphrastic construction in section 9.3.2. In section 9.3.3, some additional functions of *-(a)kona* are also described.

Before embarking on a description of the use of *-(a)kona*, it should be mentioned that the construction itself may vary between different languages as well as within a single language. This variation is syntagmatic, i.e. there are some differences between these languages with regard to the patterns of collocation with the main verb in forming the persistive (as further described in section 9.3.4.1). However, there is also variation in the realization of the form of -(*a)kona* itself. That is, in all the languages that have this element, and also in the diachronic data for Manda, there is a fluctuation between its morphophonological realization as *-akona* and as *-kona* and thus the subject marker may either occur by itself, as in (51) or may coalesce with an underlying /*a*/, as in (51).

(51)	a. *yi**kona**…*	b. *ya**kona**…*
	yi-**kona**	yi-**akona**
	SM9-PERS	SM9-a.PERS
	'it is still…'	'it is still…

Where this /a/ comes from is not clear. However, this reflects a common variation with regard to several morphemes in Manda and the surrounding languages. Note that both constructions have the exact same function and there is thus no semantic difference between these realizations. In synchronic Manda, however, the far more prevalent tactic is to form the persistive construction(s) as *-akona*, i.e. with the /a/ included. This will be exemplified in the following two sections.

9.3.1 Use of *-(a)kona* in non-verbal predications

As mentioned above, -(*a)kona* typically operates on a verbal predicate, thus functioning as an aspectual marker of persistence, i.e. 'still' or 'not yet'. When -(*a)kona* operates on non-verbal predicates it functions instead similarly to what Nicolle (2007:293) has referred to as an "aspectual copula" in the sense that this element both takes verbal inflections (subject marking) and contributes the meaning of persistence. These constructions are especially common in locative clauses like (52) and (53). However, *-(a)kona* can also occur with adjectives, as in (54).

(52) *nákóna kuSongéa, kóma koma nipangi' kuséléla*
ni-akona ku-Songea koma ni-pang-iti ku-selel-a
SM1SG-PERS LOC17-Songea but SM1SG-plan-PRF INF-descend-FV
'I'm still in Songea, but I have planned to descend (to the lake littoral)

lukúmbi luchókópi
lu-kumbi lu-chokopi
NCP11-time ACP11-soon
in soon time'

(53) *nénga nákóna lépa kuNsúngu*
nenga ni-akona lepa ku-Nsungu
me SM1SG-PERS NEG LOC17-Nsungu
'I'm still not in Nsungu'

(54) *ng'kóngo gɔ́la gwákóna guchóko*
mu-kongo gɔla gu-akona gu-choko
NCP3-tree DIST.DEM3 SM3-PERS 3-small
'that tree is still small'

9.3.2 Use of *-(a)kona* as a persistive aspectual marker

As seen above, *-(a)kona* may operate on a non-verbal predicate. More typically, however, it collocates with a verbal predicate. In this case, it functions as an aspectual marker, coding persistive aspect. [200]

The affirmative persistive indicates that a situation has held since a point in the past and is still holding at the time of reference (and, in extension, that it probably will hold into the future as well, as pointed out by Muzale 1998:163; see also Rose et al 2002:64). To express this function in Manda, -(*a)kona* collocates with a lexical verb inflected for tense and aspect and with an equal subject indexation.

[200] I refer to the persistive as an aspect, as it refines the internal constituency of the event described in the predicative second verb. However, it should be noted that Comrie (1985:53-55) has referred to a similar functional category in Luganda (JE.15) as marking tense, and Plungian (1999) as belonging to an independent semantic area of "phasal values".

(55) *nákóna nilɔ́ta*
ni-akona ni-lɔt-a
SM1SG-PERS SM1SG-go-FV
'I'm still going'

(56) *vákóna vayímba nyímbɔ mukanísa*
va-akona va-yɪmb-a nyɪmbɔ mu-kanisa [Sw.]
SM3PL-PERS SM3PL-sing-FV NCP10.songs LOC18-NCP9.church
'they are still singing songs in church'

Interestingly, the same word, -(*a)kona*, can be used to convey the opposite or polar meaning of 'not yet';[201] that is, that a situation that did *not* hold in the past does *not* hold at the time of reference either. At the same time, however, it conveys a strong implication that the situation is expected to take place at some time in the future, as has been pointed out for similar constructions by Nurse (2008:197).

(57) *ákóna kúya muhána wángu*
a-kona ku-y-a mu-hana u-angu
SM3SG-PERS INF-be-FV NCP1-wife ACP1-POSS1SG
'she is not my wife yet'

(58) *ng'káti gwákóna kúpya bwína*
mu-kati gu-akona ku-py-a bwina
NCP3-bread SM3-PERS INF-be.baked-FV well
'the bread is not well-baked yet'

As inferred from these examples, the main verb is in the infinitive. This means that although the meaning conveyed is negative, no explicit negative marking surfaces in the construction. (The reason for this synchronic situation is further explored in section 9.3.4.2.) What this further implies is that there is a complementary distribution between an affirmative and a negative persistive reading, which depends solely on the form of the main verb. Thus, there are two separate formal constructions encompassing two different meanings. Compare the minimal pairs below:

[201] This function is sometimes referred to with a specific term, e.g. "tardative", "cunctative", "(negative) inceptive" (see e.g. Schadeberg 1990; Plungian 1999; Ngonyani 2003; Nicolle 2013) and treated separately from the persistive. However, due to the similarity with 'still', with regard to both form and conceptualization in Manda, there are good reasons for treating them jointly and as interrelated in this thesis.

(59) *ákóna alémba*
a-akona a-lemb-a
SM3SG-PERS SM3SG-write-FV
'she is still writing'

(60) *ákóna kulémba*
a-akona ku-lemb-a
SM3SG-PERS INF-write-FV
'she hasn't written yet'

While (59) conveys that the first participant is already performing the action of writing, (60) expresses that the action has not begun (but probably will at some point in the future).

As pointed out in the literature (Schadeberg 1990; see also Heine et al 1991a:202; Nurse 2008; Nichols 2011:131) and also reflected in the Manda data, there is an additional inference of "counter-expectation" in both the affirmative and the negative persistive. That is, -(*a)kona* typically implies that the event encompassed in the main verb stands in opposition to some expectation (which typically belongs to the addressee). These expectations correspond to the differences in phasal focus exemplified in (59) and (60) above. Thus, whereas the affirmative persistive implies that an expected closure of the event is delayed, the negative persistive instead implies that the beginning and duration is delayed, as pointed out by Heine et al (1991:202). For instance, example (61) is an answer to the remark 'oh, so he is a police officer now?!'. The proposition in (61) corrects the false expectation of the addressee, based on the misinterpretation that the first participant (in this case the informant's son) was a police officer at the time of speaking.

(61) *lépa, ákóna kúya polísi*
lepa a-akona ku-y-a polisi [Sw.]
no SM3SG-PERS INF-be-FV NCP1a.police(officer)
'no, he is not a police (officer) yet'

As the son in question is studying to become a police officer, this is actually also a good example of the other implication of the negative persistive, i.e. that the state of affairs – although not holding at the moment – most likely will hold in the future.

Moreover, the two constructions with -(*a)kona*, i.e. with either an inflected or an infinitive second verb, also interact with standard negation. This results in interesting shifts in nuances of meaning. To begin with, it is possible to form a sentence with -(*a)kona* and an inflected verb – i.e. the affirmative persistive – together with the standard negation marker.

(62) *nákóna nimbwéne lépe*
ni-akona ni-mu-won-ili lepe
SM1SG-PERS SM1SG-OM3SG-see-PRF NEG
'I still have not seen him'

(63) *ákóna ilípa lépa*

a-akona	a-i-lıp-a	lepa
SM3SG-PERS	SM3SG-PRS-pay-FV	NEG

'he is still not paying'

In this case the reading is similar to the -(*a)kona* + infinitive construction – i.e. the negative persistive – as it portrays an event as not having taken place in the past nor at reference time. However, this construction puts more focus on the neglect itself. That is, propositions like these highlight the ongoing non-implementation of the situation encompassed in the main verb, rather than on the situation itself. Once again, this stands in relation to the focus on different phases of the affirmative and the negative persistive. Thus, unlike (64), where the implementation of the act is delayed but there is an intention to fulfil it, (65) instead conveys that it is exactly the intention not to fulfil the act which persists.

(64) *tákóna kubíta kushelélhe*

ti-akona	ku-bıt-a	ku-shelehe [kuyangala]
SM1PL-PERS	INF-go-FV	LOC17-party

'we haven't gone to the party yet'
{'but we intend to go there, we are just late'}

(65) *tákóna tibíta lépa kushelélhe*

ti-akona	ti-bıt-a	lepa	ku-shelehe [kuyangala]
SM1PL-PERS	SM1PL-go-FV	NEG	LOC17-party

'we are still not going to the party'
{'we have decided not to go and we are keeping that promise (still)'}

Secondly, although not part of the spontaneous data, speakers also confirm that it is possible to add the standard negator to a construction consisting of *-akona* + infinitive. In that case, it renders a reading similar to an immediate future (or adverbial 'just, right now'). As seen from the glossing of example (66), it can be paraphrased as something similar to 'NOT still X' (or perhaps 'have not yet NOT X').

(66) *nákóna lépe kuhícha*

ni-akona	lepe	ku-hich-a
SM1SG-PERS	NEG	INF-come-FV

'I'm not still to come'
⊃ 'I'm coming right now'

Furthermore, the particle -(*a)kona* may also stand on its own, i.e. without operating on a verb or another predicate. Here, it functions as a pro-sentence or a negative answer particle, referring back to a previous proposition.

(67) *nilímí' hé ng'ónda wángu; nákóna*
ni-lɪm-ili he mu-gɔnda u-angu ni-akona
SM1SG-cultivate-PRF NEG NCP3-plot 3-POSS1SG SM1SG-PERS
'I have not cultivated my farm; not yet'

(68) {Q: "can I take the phone?"}
yákóna
yi-akona
SM9-PERS
'not yet (it is still charging)'

(69) *wihótó' kugésa kuwóna kítá' ng'káti gúpíli*
u-i-hotol-a ku-ges-a ku-won-a kɪtayi mu-kati gu-py-ili
SM2SG-PRS-POSS-FV INF-try-FV INF-see-FV COMP NCP3-bread SM3-be.baked-PRF
'you can try to see whether the bread has been baked

au gwákóna
au gu-akona
or SM3-PERS
or not (yet)'

It is possible that this is an influence from adverbial *bado* in Swahili, which has similar functions and syntactic possibilities. However, unlike *bado*, which is invariable, *-(a)kona* has to agree with a head noun subject, whether explicitly in the aforementioned clause or implicitly from the context which it refers back to.

9.3.3 Additional functions

Finally, it should be mentioned that *-akona* can be used in Manda for other functions than persistive aspect, expressing other, albeit related, meanings. Firstly, it may occur as the subjunction 'before' in subordinate clauses.[202]

(70) *nikachíti kupolísi, lukúmbi nákóna kukamólíka*
ni-ka-hich-iti ku-polisi [Sw.] lu-kumbi ni-akona ku-kamɔl-ık-a
SM1SG-P1-come-P1 LOC17-police NCP11-time SM1SG-PERS INF-arrest-NEUT-FV
'I came to the police before I was arrested' (~'(at) the time I was not yet arrested')

[202] Cf. Lodhi (1994; 2000:104) who explicitly mentions this function of -(*a)kona* for neighboring Ngoni, in a discussion on how Arabic borrowing has affected Swahili, which in turn has affected other East African languages. Thus, in Ngoni the Swahili loan *kabla (ya)* (from Arabic *qabl*) appears to have been borrowed and occurs in free variation with -(*a)kona* to express 'before'. This is actually also the case in Manda, i.e. 'before' is just as often expressed in the data with *kabla* (*ya*) as it is with -(*a)kona*.

(71) *ilóndéka Jóhni alóndáyi nála, ákóna kughoghólóka*
i-londek-a Johni a-lond-ayi mu-dala a-akona ku-ghogholok-a
SM9-NEC-FV Johni SM3SG-find-SBJ NCP1-woman SM3SG-PERS INF-become.old-FV
'It is necessary that Johni finds a woman before he gets (too) old'

Moreover, *-(a)kona* occurs in a construction together with *-choko(pi)* 'small, little', inflected in class 16.

(72) *nákóna pachokópi kulɔ́ta kuhemelésa*
ni-akona pa-chokopi ku-lɔt-a ku-hemeles-a
SM1SG-PERS LOC16-small INF-go-FV INF-sell-FV
'soon I'm going to sell (it)'

(73) *yausóvi pákóna pachokópi*
ya-u-sov-i pa-akona pa-chokopi
F1-SM14-be.lost-F1 LOC16-PERS LOC16-soon
'it will soon be lost (the flour)'

As seen in these examples, this construction specifically expresses the adverbial meaning 'soon'.

9.3.4 Origin and path of development

As described in the previous sections, persistive aspect in Manda is marked by the element -(*a)kona* and a verb appearing either in an inflected form or as a de-verbal noun (expressing the main event of the proposition), resulting a separate affirmative or negative meaning respectively. In this section, I will account for the history behind this construction. The discussion will first touch on the composition and intriguing origin of the element -(*a)kona*. Secondly, I will turn my attention to the evolution of the specific aspectual constructions with the different verb forms. This discussion will particularly focus on the negative 'not yet' construction.

9.3.4.1 Origin and development of °kona

The "aspectual copula" -(*a)kona* has quite a peculiar form. It is inflected for subject indexation just like a verb. Yet it does not allow for any other kind of verbal inflection. My hypothesis is that -(*a)kona* is not a verb but was originally composed of two parts, including an element °*kona* that is of non-verbal origin but nonetheless became associated with verbal properties and inflected with verbal subject agreement marking. (Recall from section 9.3 that the additional phoneme /a/ is semantically empty.) The reasons behind this stance will be further elaborated in the following section. Before that, however, it should be noted that in the synchronic variety of Manda, the meaning of *kona* on its own is opaque; it is not perceived as an entity that can stand alone. This is reflected in the facts that *kona* cannot occur without verbal subject marking and that nothing may stand between the subject marker and *kona*. It is also clear that -(*a)kona* is viewed and treated as a single word by the speakers. This is also reflected in the orthographic representation, where -(*a)* is always written as a single entity, including in the historical sources.

Thus, there is no transparent etymon for °*kona* in diachronic or synchronic Manda. That is, it can never stand independently and it cannot convey any meanings beyond the ones described in the previous section. However, through comparison with the neighboring languages it is possible to trace the origin of this element. As will be described in the rest of this section, it appears that the etymon of *-(a)kona* has a rather distinctive origin that can be traced all the way back to South African Nguni.

As seen in Table 9.2, a persistive construction involving *-(a)kona* is restricted to members of the N.10 subgroup. Thus, Manda's neighboring languages use other means to express this aspectual category. Nyakyusa, Kisi and Kinga have a construction involving a more prototypical morpheme *-k*V-. Pangwa (and other G.60 languages) also uses a different construction to express this concept.

Language	**Code**	**Use as a persistive**	**Negative marked 'not yet'-constructions**	**Sources**
Ngoni	N.12	yes	yes	Ngonyani (2003:87)
Matengo	N.13	yes	yes (?)	Häflinger (1909:184), Yoneda (2006:99)
Mpoto	N.14	yes	yes	Makwaya (pers. comm.)
Pangwa	G.64	no	no	(Stirnimann 1983)
Kisi	G.66	no	no	(Ngonyani 2011)
Nyakyusa	M.31	no	no	(Nurse 1979)

Table 9.2. The use of *-(a)kona* in neighboring languages to Manda

One of the languages that does use *-(a)kona* as a persistive marker is neighboring Ngoni. However, it is not data from the usual variety of Ngoni which is of most interest in this case. Instead, the most revealing comparative data with regard to *kona* is found in the sources on the so-called "True Ngoni" or *Alt-kigoni* ("Old Ngoni") variety, in particular Spiss (1904). In fact, there are several factors that point towards *-(a)kona* having originated from contact with Alt-kingoni. As more extensively described in 3.2.2.1, Alt-kingoni was originally a South-African Nguni variety (Bantu S.40). This variety was spoken by the invaders and later rulers of parts of Southern Tanzania in the 19th century, who subjugated and intermarried with the local ethnic groups and provided the ethnonym and glossonym for the Ngoni community that lives there now. The subjugated people and their descendants, however, did not switch to the medium of communication of their rulers. Instead, there existed a kind of diglossic situation where Alt-kingoni was a super-stratum variety, while the common man spoke *Ki-Sutu* –

literally “the slaves’ language”– a variety mostly consisting of Southern Tanzanian Bantu elements. It is the latter variety that became the “Neu-kingoni”, i.e. “New Ngoni”, which constitutes the Tanzanian Ngoni language of today. Alt-kingoni is basically extinct and, with some few exceptions, it is conceived of as having had only a limited impact on the Tanzanian Ngoni language (see e.g. Nurse 1988; Ngonyani 2001). However, there are strong indications that the specific source of *-(a)kona* stems from Alt-Ngoni and that it also spread further to Manda.

Crucially, in Spiss’ (1904) grammar on Alt-kingoni – which was still vividly spoken in Southern Tanzania around the publish date – there is an explicit reference to an element *kona* with adverbial functions. The meaning of *kona* is claimed by Spiss (1904:303, 371) to be both ‘here’ and ‘now’, but also specifically ‘still’. Furthermore, it appears that this element is able to occur in a copula construction analogous to the one discussed in the previous section.[203]

(74) *kuse kuwa ukona*
kuse kuwa u-kona
be.good that SM2SG-here
‘it is good that you are here’ [Alt-Kingoni (S.40); Spiss (1904:305)]

Manda and the other N.10 languages do not usually allow a locative predicate to be inflected with a verbal subject marker as in example (74) above Thus, an analogous proposition in Manda would require the copula verb *-y-*, i.e. *mbánga kukíta* ***ú-y-ili*** *ápa* ‘it is good that that you are here’.

The adverbial *kona* in Alt-kingoni can be further traced to an independent pronoun, the “*betonten*” (‘stressed’ or ‘emphasized’) stem *-ona* ‘it(self), the very’, as described by Spiss (1904:283). This pronoun takes agreement in the different noun classes, e.g. *chona* (*ki-ona*) ‘it(self)’ referring to *ki-muti* ‘tree’. Thus, the meaning of *kona* is ultimately the result of this pronoun *-ona* being inflected with the locative class prefix of the noun class 17 *ku- ku-ona* > *kona* ‘(the place/time) itself’ ~’here, now’.[204] As far as I know, this kind of pronoun and its inflectional paradigm does not exist in Manda (or in other Southern Tanzanian languages). In Manda, an analogous construction would in stead by formed with the form *-ene* (see 5.3.2.7). It does not even appear to have existed in Neu-kingoni, i.e. the diachronic substratum variety of Ngoni that became Tanzanian Ngoni, judging from Ebner (1939) (although he does mention the persistive aspectual function of *kona*). In fact, Ebner (1987:160) even makes explicit reference to this pronoun when exemplifying the difference between Alt-kingoni (which has it) and Neu-kingoni (which has *-ene*).

[203] This is an additional example of the alternative SM-*kona* construction, i.e. where the copula consists solely of the SM, without *-a*.
[204] In this respect, it is interesting to note that the persistive marker utilized in Pangwa (Stirnimann 1983:114) and other G.60 languages (e.g. Bena G.63; Morrison 2011:271) also seems (partly) to consist of a locative marker, namely *pa-* from class 16. This is, however, only a tentative observation in need of further scrutiny.

However, this pronoun paradigm does exist in Zulu (S.42), both as spoken around the time of the invasion in Southern Tanzania (Grout 1859) and in these times (e.g. Cope 1984).[205] As described in these sources, Zulu, *kona* (*~khona*)[206] also has the additional deictic-adverbial functions that were described for Alt-kingoni above. Of additional importance is the fact that Zulu, unlike Manda and its neighboring languages, more productively forms a predicate by adding a subject marker directly onto an adverbial or another non-verbal stem, including on *kona* (*~khona*), as shown in e.g. Nyembezi (1978:396), Doke et al (1990:401), Cheng & Downing (2010). (75) is an example of this taken from Cope (1984).

(75) *ngikhona*
ngi-khona
SM1SG-here
'I am here' [Zulu (S.42); Cope (1984:85)]

What this points towards, then, is firstly that the element *kona* itself is not an inherent element in Manda (and the other N.10 languages), but originally a borrowing from Nguni ("Alt-Ngoni"). The rather idiosyncratic construction of a non-verbal element carrying verbal (subject) inflection could also be explained as a case of grammatical replication or pattern borrowing (Sakel 2007). That *-(a)kona* originates from Alt-Ngoni could also explain the fact that the extension of the use of this element is restricted to the N.10 group, as the members of this subgroup constitute the speech communities geographically closest to and thus most affected by the Nguni invasion.

Finally, the suggested origin is compatible with typological generalizations on the grammaticalization of a persistive. There are no indications either in the historical or in the more recent Zulu sources that *kona* is used with this aspectual meaning. However, Heine & Kuteva (2002:218) particularly mention an adverbial with the meaning 'now' (one of the senses of *kona*) as a common source for development into aspectual/adverbial 'still' cross-linguistically. It is, for example, the source meaning for the cognate 'still' particle *nog/noch* in Dutch and German respectively according to van Baar (2011). More generally, both copula(-like) and locative markers (whether referring to location in space or time) attached to a verbal phrase are a typical tactic for expressing durative or continuative aspect (in which the notion of persistence is included), both cross-Bantu and cross-linguistically, as work like Nurse & Philippson (2006) and Bybee et al (1994) shows. (See also the discussion of the progressive in section 9.2.2.1). Recall, furthermore, that the meaning of 'still' for *kona* was already present in Alt-kingoni. This suggests that although the sense of persistence of *kona* is not present in Zulu it must have arisen already in Alt-kingoni. It was this particular sense, together with the original source construction, that was transferred to Manda (and its neighbors).

[205] Judging from the grammar by Elmslie (1891), *kona* also existed (exists?) in the Ngoni variety in (modern) Malawi, e.g. *ni-kona* 'I am present' (Elmslie 1891:41).
[206] The <h> marks aspiration (Doke et al 1990:xi). This is a non-contrastive feature in Manda, Neu-kingoni as well as in the other N.10 languages. It is not marked in Spiss' grammar either.

9.3.4.2 Origin and development of the negative persistive

As suggested above, the persistive -(*a*)*kona* stems from a schema consisting of a copula and an ultimately locative pronoun whose meaning evolved into 'be still'. The affirmative persistive can thus be seen, quite straightforwardly, as being composed of this form operating on the main event encompassed in a second verb predicate.

With regard to the whole construction, however, it is still peculiar that the negative persistive ('not yet') is not composed of any negative marking even though it conveys a negative meaning. This is especially peculiar in comparison with its neighbors, which do mark this construction with a negator (see (76) below). There are two possible explanations for this. Either the negative reading stems from a future-like purposive or proximative reading of the infinitive, i.e. 'still to' was reinterpreted as 'not yet'.[207] Indeed, according to Nurse (2008:145), there are attestations of other Bantu languages where the affirmative persistive construction with a bare verbal noun has shifted into the negative one. A competing explanation is that there was a negative marker historically that has disappeared in synchronic Manda. Although the first explanation should not be ruled out, I consider the latter explanation more plausible. This conclusion is based on the comparative and the diachronic data, and will be further explained in the following paragraph.

Firstly, with regard to the (micro-)comparative data, it is a fact that the other N.10 languages mark their negative persistive with a negator, as seen in Table 9.3.

Language	**Code**	***-(a)kona* as persistive marker**	**'not yet' construction marked with negative prefix**	**Source**
Manda	N.11	yes	no	
Ngoni	N.12	yes	yes	Ngonyani (2003:87)
Matengo	N.13	yes	yes (?)	Häflinger (1909:184)
Mpoto	N.14	yes	yes	Makwaya (pers. comm.)

Table 9.3. Marking of the negative persistive aspect in Manda and its neighbors

More precisely it is marked with a negative prefix attached to the second, infinitive verb. (76) is an example from Ngoni.

[207] This reinterpretation may, in addition, have been triggered by constructions with a change-of-state verb as the main verb (like the ones in examples (57) and (58)). These verb types are inherently inceptive and thus encode a situation as unaccomplished.

(76) *wakona nakugega chidengu*
u-akona na-ku-geg-a chi-dengu
SM2SG-PERS NEG-INF-carry-FV NCP7-basket
'you have not yet carried the basket' [Ngoni (N.12); Ngonyani (2003:87)]

More intriguingly, this is also how the negative persistive is marked in the older Manda sources.[208]

(77) *ndawa saa yake yakona nakuhicha*
ndawa saa [Sw.] yi-ake yi-akona na-ku-hich-a
because hour ACP9-POSS3SG SM9-PERS NEG-INF-come-FV
'because his hour had not yet come' [NT (1937); John 7:30]

Note that this negative prefix is identical to an archaic negator discussed in 11.2.3.1. Thus, this kind of data strongly suggests that the negative persistive actually used to contain an additional negator. However, along with the more general disappearance of this negator from Manda, it is conceivable that it also vanished from the negative persistive construction. For this particular case, the attrition may have been additionally fueled by the phonological context. That is, the final syllable of -(*a)kona* and the negative prefix are tautophonic. As described elsewhere in this thesis (e.g. chapter 5.2.3.1), there is a general tendency in Manda for haplology, i.e. the deletion of one of two consecutive similar syllables.

9.4 A note on some additional marking of non-verbal predicates

Except for the regular copula *-y-* and the aspectual copula *-(a)kona*, there is a set of other tactics used in Manda to create non-verbal predicative clauses. To begin with, nominal (identificational) predicates can be expressed just with juxtaposition. This, however, is rare, and typically requires additional deictic marking, like the demonstrative in example (78). Similarly, possessive clauses can be expressed with only the comitative marker.

(78) *ísɪ kalámu sángu*
ISI kalamu [Sw.] si-angu
PROX.DEM10 NCP10.pencil ACP10-POSS1SG
'these (are) my pencils'

[208] In connection to this discussion of the historical data it should be noted that in the older texts (i.e. the hymn book and the NT) there also exists an alternative persistive construction. It has the form *-(a)ngali*, e.g. *wangali ku-hoka* 'they have not yet commit sin'. This form and function exists in other Tanzanian Bantu languages as well, e.g. in (semi-archaic and/or dialectal) Swahili (G.42; Ashton 1947) and Kagulu (G.12; Petzell 2008:146), but it seems to have disappeared in synchronic Manda. Two older informants recognize this construction and its meaning. They claim, however, that *-(a)ngali* is old and is not used much anymore. Instead *-akona* is preferred. It is possible that this was the original marker in Manda that was ousted under the influence of Ngoni. Note that there is also a similar variation in the realization of this marker, with either just SM or SM coalescing with /a/.

(79) *nína pléni ya kujénga nyúmba*

ni-na	pleni [Sw.]	ya	ku-jeng-a	nyumba
SM1SG-COM	NCP9.plan	CP9	INF-build-FV	NCP9.house

'I have a plan to build a house'

Finally, an invariable *ni* or *ndo* (the latter for extra emphasis) is sometimes used.

(80) *yóla ndo ng'kósi wa nénga*

yɔla	ndo	mu-kosi	wa	nenga
DIST.DEM1	EMPH.COP	NCP1-friend	CP1	PERS1SG

'he (that one) is really my friend'

Whereas the former of this set of copulas are considered to be borrowed from Swahili the latter is consider indigenous to Manda (see also e.g. Novotná 2005, who treats a similar form as indigenous to Ndamba (G.52)).

9.5 Summary and conclusions

This chapter has been dedicated to the copula markers and copular constructions found in Manda. It has been shown that Manda typically makes use of a verb *-y-* as copula. However, there also exist other strategies of expressing copula-like constructions in Manda, the most prominent of these strategies being the persistive *-(a)kona*. Both *-y-* and *-(a)kona* may, in turn, occur with verbal predicates. The verb *-y-* may be used for expressing several different (complex) TA meanings, and *-(a)kona* is used for specifically marking both affirmative and negative persistive aspect, i.e. both the concepts of 'still' and 'not yet'.

In addition, the origin of these two elements has been reconstructed. Although of a peculiar shape, it was shown that *-y-* can be accounted for as originating from the Bantu canonical copula verb **-b-* via a set of sound changes, as reflected in the synchronic variation of this verb stem in the surrounding languages and in the dialects of Manda.

It was also shown, through historical comparison, that the uncharacteristic formal qualities of *-(a)kona* can be ascribed to the fact that it has its origin in South African Nguni, i.e. "Alt-Ngoni". This element (which was originally a locative pronoun) was borrowed into Manda, together with the structural possibility of inflecting it with subject marking and thus treating it as a verb. This furthermore suggests that the Nguni might have had more linguistic impact in this area than has hitherto been noticed.

10 Modality

10.1 Introduction

Modal (auxiliary) verbs form a salient linguistic category in many Indo-European languages, not least English. They are therefore a well-studied topic (see Ziegeler 2011 for an exposé). There are also thorough cross-linguistic studies devoted to this subject (e.g. Bybee et al 1994:chapter 6; van der Auwera & Plungian 1998; and various chapters in Nuyts & van der Auwera 2016). However, as stated by Devos (2008b; forthcom.) there has traditionally been little attention in the literature of Bantu languages concerning the domain of modality and modal auxiliary verbs. Bantu grammars often give very little information on the etymology of such verbs nor on the modal domains that they cover, their development, or even whether they exist. Modal verbs are not discussed in Nurse (2008), the most crucial cross-Bantu work on verbal conjugations. Yet we know from recent studies from various different areas of the Bantu family such as Devos (2008b) on Shangaci (P.312), Bostoen et al (2012) and Mberamihigo (2014) on Rundi (JD.62), Kawalya et al (2014) on Luganda (JE.15) and Gluckman et al (2017) on Luhya (JE.32), that modal verbs appear to be a prevalent category across the Bantu family as well. This is also the case for Manda, which contains a set of modal verbs with diverse meanings and at different stages of grammaticalization. The aim of this chapter is primarily to account for the behavior of these modal verbs and their semasiological background.

In order to account for modality in Manda, I follow Nurse & Devos (forthcom.), who in turn follows van der Auwera & Plungian (1998) in conceptualizing modality as “expressions that can be characterized in terms of possibility and necessity”. This study also follows Bybee et al (1994:176) in proposing that a real understanding of modality requires studying it as a set of diachronically related functions. Thus, the study reconstructs the semasiological history and development of these modal verbs from pre-modal lexemes to a verb expressing notions of modality, and their subsequent development and conceptual shift(s) within the domain of modality. This also includes change triggered by subjectification, i.e. the extension in semantic scope from coding more objective concepts relating to the subject’s innate abilities, to expressing the speaker’s subjective view on the situation (Traugott 2010b).

Section 10.2 will provide an initial description of the categories and concepts used in capturing the expression of modality in Manda. The following sections deal with how these categories of modality are expressed in Manda, focusing on modal (auxiliary) verbs and their recruitment and further development within this domain. Section 10.3 accounts for the expression of possibility, which basically consists of the auxiliary verb *-hotol-*, the main marker of possibility in Manda and the most subjectified and grammaticalized one of the modal verbs. As this is the most semasiologically evolved modal verb it is therefore also given the most attention in this chapter. Section 10.4 deals with the concept of necessity. In opposition to the expression of the concept of possibility, necessity is expressed with several less developed modal verbs. Although this chapter focuses mainly on verbs, some additional grammatical elements expressing modal notions will briefly be addressed in section 10.5.

Section 10.6 summarizes the findings of the previous sections. This section also includes some further remarks and conclusions.

10.2 Modality and grammaticalization within the modal domain

Before embarking on the description and analysis of the verbs expressing modality in Manda, it is necessary to set out the underlying conceptualization of modality used in this study, as well as how this conceptualization feeds in to the bigger notion of grammatical change as investigated in this thesis. Thus, this section will, firstly, describe the different types of modal categories used in the analysis, in order to delimit the concept under study and also to be able to properly capture and account for the different modal meanings a marker may convey. Secondly, this section will link up the categorization of modality with how these categories interact with grammaticalization/auxiliation, and specifically with regard to the semantic mechanism of subjectification as a driving force for the reanalysis of a verb as a polysemic modal auxiliary.

10.2.1 The categories of modality

This study fundamentally follows Nuyts (2006) in regarding modality as a subfield of a wider TAM domain. With regard to the categorization of modality, this analysis is based on the taxonomy developed by van der Auwera & Plungian (1998), which in turn is based on the diachronic-synchronic and cross-linguistic study of Bybee et al (1994). van der Auwera & Plungian (1998) have chosen to delimit the term modality as referring to a semantic space divided into two core modal concepts, also referred to as "forces" by e.g. Vander Klok (2013). The first concept is possibility, typically expressing notions such as capability, ability and potentiality. The second concept is necessity, typically expressing need and necessities. As pointed out by Coates (1983; see also Verstraete 2005; Bybee et al 1994:195), these concepts stand in a scalar relationship to each other, where possibility/potentiality is used for relatively weaker expressions. In addition, these two concepts intersect with four different (sub)domains, also referred to as "flavors" by e.g. (Vander Klok 2013), generating different modal meanings. In van der Auwera & Plungian (1998), these flavors are shown to constitute a unidirectional and interrelated cline both diachronically and synchronically, i.e. a path along which the same form or construction extends in meaning from the left onwards, as roughly sketched in Table 10.1 below.[209] The authors treat deontic modality as a special instantiation and thus as part of participant-external modality. As will be argued below, however, there are reasons to single out the deontic expressions in Manda, and therefore also in this table. As a consequence, the term participant-external possibility/necessity is delimited to refer to expressions that are non-deontic in this study.

[209] This pathway of change is slightly more complex in the original version. For example, participant-external/deontic markers of possibility may spread to become markers of participant-external/deontic necessity and vice versa. As this is not relevant for the Manda data, it is not included in this presentation. Note also that a pre-modal source may be recruited as encompassing any flavor and may consequently enter the domain of modality at any stage. One example is 'be supposed (to)' in English, which went straight into being a marker of participant-external modality (in this case participant-internal necessity) without ever denoting participant-internal modality. This will important for the discussion about Manda necessity verbs in section 10.4.

	Part.-internal	**Part.-external**	**Deontic**	**Epistemic**
Possibility	Part.-internal possibility	Part.-external possibility	Deontic possibility	Epistemic possibility
Necessity	Part.-internal necessity	Part.-external necessity	Deontic necessity	Epistemic necessity

Table 10.1.Modal categories as a result of the intersection of modal forces and flavors

The following paragraph contains examples from English, in order to illustrate the different categories and meanings conveyed when the four flavors intersect with the two fundamental concepts of possibility and necessity.[210]

Firstly, van der Auwera & Plungian (1998) discusses participant-internal modality, which denotes properties inherent to the first participant in a proposition. (The first participant is the first argument or main participant in a proposition, typically the subject/agent.) Co-occurring with the concept of possibility, it expresses capacities, abilities or potentials, as in (1). With necessity, it expresses needs and necessities, as in (2).

(1) Johni-Johni **can** drink a whole gallon of *pombe*.
(2) Bwana Ngululayi **needs** to rest during the day.

van der Auwera & Plungian (1998) contrast the participant-internal domain with the participant-external domain, which instead denotes circumstances (partly) beyond the control of the first participant, making the state of affairs either possible, as in (3), or necessary, as in (4).

(3) Rahela folded the mat and squeezed it into my bag. Now I **can** take it with me.
(4) The bus to Songea leaves early. You **have to** get up at 5.30 am.

As touched on briefly above, van der Auwera & Plungian (1998) treat the third flavor, i.e. deontic modality, as a special subtype of participant-external modality where the external circumstances depend particularly on some socially created circumstance, e.g. a person's authority or a prevalent norm, rather than the more physical circumstances portrayed above. Typically, deontic possibility denotes permission (5) and deontic necessity obligation (6).

(5) If you want to, you **may** start telling me the story.
(6) The cat **must** be silent when we are recording.

Of importance for this discussion is the fact that it is typically the speaker who represents this social authority, imposing the permission or obligation on the first participant and thus allowing the situation encoded in the verb phrase to hold. Thus, a deontic proposition often reflects the subjective attitudes of the speaker. As will be further discussed below, this degree

[210] These English examples with "local color" from the Manda-speaking area are inspired by and to some extent calqued on the examples found in Kawalya et al (2014).

of subjectivity forms an important cut-off point with regard to the status of the modal verbs in Manda.

The final flavor constitutes the sub-domain of epistemic modality, as exemplified in (7) and (8). Epistemic modality qualifies the truth of the conditions encompassed in a proposition (van der Auwera & Plungian 1998). While epistemic possibility conveys the speaker as being relatively uncertain about the truth of the state of affairs expressed, epistemic necessity indicates that the speaker is relatively certain.

(7) There is a funeral today. Mama Kisota **may** be over there.
(8) The motorcycle is not here. Tito **must** be away.

Epistemic modality, just like deontic modality, encompasses a more attitudinal and speaker-oriented subjective category. As pointed out by Verstraete (2001), the degree of probability or necessity expressed in the examples above is based on the judgement or estimation of the speaker rather than on the qualities of the first participant.

10.2.2 Subjectification-cum-grammaticalization and the concept of core modals

The previous section accounted for the different modal categories and their specific characteristics. As touched upon in that section, these categories can be seen as occurring on an ontogenetically and diachronically related cline of semantic extension. Moreover, as pointed out by van der Auwera & Plungian (1998:115), there is also an implicational cline that connects the semantic development of a modal verb with the degree of formal grammaticalization. That is, cross-linguistic data imply that a more advanced semantic extension is typically accompanied by morpho-syntactic changes. This leads to the underlying hypothesis that the polysemic patterns of modal verbs in Manda are due to historical and thus chronologically staged processes of change. Following Traugott & Trousdale (2010; also Heine 2002), it is presumed that gradience in their synchronic behavior reflects diachronic gradualness of change in these cases moving from participant-internal and participant-external to deontic and finally epistemic modality.

As proposed by Traugott (1989, 2006, 2010b) and as shown for Bantu languages of the Great Lakes in Kawalya et al (2014) and Bostoen et al (2012), an important structural threshold with regard to the development of a modal verb is whether it is subjectified or not; that is, whether the proposition marked by this verb is viewed as being event-oriented and more objective or whether it is subjective, i.e. reflecting the speaker's own attitude or belief with regard to the state of affairs. As proposed by Nuyts (2006, 2015, 2016) and as also touched upon in the previous section, a more subjective/subjectified meaning manifests itself in the flavors of deontic and epistemic modality, as they are more "attitudinal", i.e. expressing whether the state of affairs "exists or not, or is morally acceptable or not, or is 'agreeable' or not" (Nuyts 2015:109). Thus, they typically convey the speaker's own viewpoint rather than describing the state of affairs more objectively. Nuyts & Byloo (2015) argues that there is a relationship between this widening on the perspective of the state of affairs, to a widening in the semantic scope, which in turn may have an effect on the grammatical behavior of the linguist expression.

As it can be hypothesized that the notion of subjectivity has consequences for the structural level and the status of a modal verb, it is important to delimit and pin-point this nuance within the domain of modality, as well when analyzing the modal markers of Manda from a historical perspective. Following Traugott & Dasher (2002) and Munro (2006), I refer to these two larger diverging sets of meaning as "pre-core" and "core" modals.[211] As seen in Table 10.2, this categorization depends on the interplay of a) semantic criteria and b) structural criteria. That, is an item is considered a "core modal" in Manda, if a) it is subjectified, and b) if there are other semantic and structural characteristics of the item that differentiate it from its lexical and pre-core modal counterpart, defining a new form-meaning pair with a status more similar to the other auxiliaries in Manda (as e.g. the ones discussed in chapter 8). (The first category, "pre-modal", refers to the status of a verb before it gets recruited into the modal domain.)

	Pre-modal	**>**	**Pre-core modal**		**>**	**Core-modal**	
			part.-internal	**part.-external**		**deontic**	**epistemic**
Grammatical status	lexical verb	>	collocation with infinitive		>	indications of formal auxiliary status	
Semantic characteristics	X does Y [Y= object]	>	X does Y [Y=action/event] event-oriented		>	X does Y (according to speaker's subjective beliefs/attitudes)	

Table 10.2. Suggested path of subjectification-cum-grammaticalization of modal verbs

Based on Traugott & Dasher (2002:120) and Munro (2006), the two sets of "pre-core" and "core modal" as indicated in the demarcation above, discriminate between the more event- and participant-oriented, more referential pre-core modals and the more subjective and speaker-oriented, procedural core-modals. As argued in the following sections - and as argued in a similar way for other Bantu languages (Bosoten et al 2012; Kawalya et al 2014) - there is not only a semantic difference between these pre-core modals - or dynamic modals (Palmer 2001:9-10) - and the core modals, but also a difference in grammatical status. That is, a core modal is more grammaticalized and thus auxiliary like also structurally, as it is both more formulaic in meaning and shows a larger syntactic dependence on the second verb. Thus, it shows indications of being both functionally and formally divergent from a lexical verb, as argued by Traugott & Dasher (2002:120, 147) and Munro (2006). Thus, whereas the pre-core modal appears to have extended in meaning only, the pre-core modal behaves more similarly to the other Manda auxiliaries as described in chapter 8 also formally. As pointed out in e.g.

[211] The term "core modal" is a label often used for the traditional set of modal auxiliaries in English, like 'can' and 'must', which form more of a cohesive and diverging paradigm in relation to "quasi"-modals like 'have (to)' and 'ought (to)'. However, as used by Traugott & Dasher (2002) and Munro (2006), it refers more generally to any modal marker with the specific criteria referred to above.

Cuyckens et al (2010), crucially these formal differences entail more strongly in relation to a pre-core modal that a core modal is both reanalyzed and forms a new form-meaning pair (see the discussion in 6.3.4).

It will therefore be argued that the polysemy of the verbs under scrutiny originates from the recruitment of an originally non-modal or "pre-modal" lexical verb into the domain of modality, which in turn has facilitated additional changes spurred by the mutual process of subjectification and grammaticalization. The focus is thus on the processes of change, i.e. the arrows and the shift from left to right in Table 10.2, from: 1) the recruitment of a full lexical verb to a pre-core modal verb, and 2) any additional change from a pre-core modal verb to a core modal verb, and the indications, in that case, of a process of subjectification-cum-grammaticalization. As will be seen in the following sections, different modal verbs have evolved differently with regard to these parameters in Manda.

10.3 The possibility verb *-hotol-*[212]

The description and analysis of modal verbs in Manda will start with possibility, one of the two fundamental modal concepts. Notions of possibility and potentiality are marked in synchronic Manda with the modal verb *-hotol-* (glossed here as POT) in collocation with an infinitive verb. In Manda, *-hotol-* (occasionally exposed to stem contractions or modifications) is the only possibility verb and it can be used with all of the flavors of modality as laid out in Table 10.1 described above, signaling that the event expressed by the second verb is possible or permitted. Thus, *-hotol-* may be used in Manda firstly to denote participant-internal possibility, i.e. abilities, capacities or potentials as inherent or innate in the first participant of the proposition, such as the ability of the coded subject to drive, in example (9), and to find the way home unaccompanied, in (10).

[212] Note that the deletion of the final syllable of *-hotol-*, present in several of the examples in this thesis, does not seem to correlate with a process of more advanced grammaticalization (unlike the secondary negator *-kotok-* discussed in 11.3). As mentioned in chapter 5.2.3.1, it is a general phonetic trait in this area that the final syllable of a verbal word with a coronal onset is optionally deleted when this verb occurs in clause-medial position. This is of course often the case with *-hotol-*, including in its role as a pre-core modal verb, as it usually occurs together with a complement of some kind. There does seem to be a tendency for informants given ambiguous meanings to prefer to ascribe the longer, original form with a dynamic or lexical reading and the shortened form with core modal readings. For example, *mwána a**hótóla** kugénda* would be preferred with a pre-core reading, i.e. 'the child is able to walk', whereas *a**hótó'** kugénda* would be preferred with a core modal reading, i.e. 's/he might walk'. This is an observation in need of much further elaboration, however, as the pattern is not consistent.

(9) *ahótó' kugendésa gáli*

a-hotol-a	ku-gendes-a	gali	[li-geléda
SM3SG-POT-FV	INF-drive-FV	NCP9.car	NCP5-car]

'she can drive the car'

(10) *nikahótó' kuséléla kunyúmba nákápi*

ni-ka-hotol-a	ku-selel-a	ku-nyumba	na=kapi
SM1SG-CONS-POT-FV	INF-descend-FV	LOC17-NCP9.home	SM1SG.a=alone

'I was able to get home by myself'

However, *-hotol-* can also be used to denote participant-external possibility. In example (11), the speaker, who is simultaneously the first participant of the proposition, expresses that the act of playing football was enabled by him bumping into some old friends, as expressed in the first clause. In example (12), it is the lexical content of the full verb, 'be born', which indicates that the enabling factor coded in *-hotol-* is outside the innate abilities of the first participant.

(11) *nawonangíni na vándu bahápa paLudéwa gólo*

ni-a-wonang-an-ili	na	va-ndu	bahapa	pa-Ludewa	golo
SM1SG-P2-meet-REC-P2	COM	NCP2-people	EMPH.LOC	LOC16-Ludewa	yesterday

'I met with some people here in Ludewa yesterday

ndáya yáke nahotwíli kukína mpíla

ndaya yi-ake	ni-a-hotol-ili	ku-kin-a	mu-pila [Sw.]
reason ACP9-POSS.3SG	SM1SG-P2-POT-P2	INF-play-FV	NCP3-football

(and) because of that I could play football'

(12) *ahotola wuli mundu kuhogoleka pakuya ngogolo?*

a-hotol-a	wuli	mu-ndu	ku-hogolek-a	pa-a-ku-y-a	mu-gogolo
SM3SG-POT-FV	how	NCP1-person	INF-be.born-FV	LOC16-SM1SG-INF-be-FV	NCP1-old

'How can someone be born when they are old?' [NT (1937); John 3:4]

Moreover, *-hotol-* can be used to express deontic possibility, i.e. permission given to the first participant. As seen from the examples, the source of this permission may be either someone else, as in (13), or the speaker, as in the case of (14).

(13) *máwu anjóvéla mwána kukíta*

mawu	a-mu-jovel-a	mu-ana	kukıta
NCP1.mother	SM1SG-OM3SG-tell-FV	NCP1-child	COMP

'mother tells the child that

ahótó' kusígála panyúmba

a-hoto	ku-sigal-a	pa-nyumba
SM3SG-POT	INF-remain-FV	LOC16- NCP9.home

'she can stay at home'

(14) *uhótó' kuyíngíla*
u-hoto ku-yingil-a
SM2SG-POT INF-go.in-FV
'you may come in'

Finally, *-hotol-* is also used in Manda to express epistemic possibility. Thus, rather than marking qualities of the first participant, it may also be used to cast a sense of uncertainty over the proposition as a whole. Note that in (15) *-hotol-* also collocates with an epistemic adverb *kwali* 'perhaps', further discussed in section 10.5.1.1.

(15) *kwáli nihótó' kuhícha*
kwali ni-hoto ku-hich-a
perhaps SM1SG-POT INF-come-FV
'perhaps, I might come'

(16) *ahótóla kúya kunyúmba; niwóna baiskéli yáki*
a-hotol-a ku-y-a ku-nyumba ni-won-a baiskeli yi-aki
SM3SG-POT-FV INF-be-FV LOC17-NCP9.home SM1SG-see-FV NCP9.bicycle ACP9-POSS3SG
'he might be at home; I can see his bicycle'

As seen in these examples, the modal verb *-hotol-* covers the whole subdomain of possibility, as defined by the four flavors summarized in Table 10.1 in section 10.2.1. This also means that *-hotol-* covers both pre-core and core modal domains of both more objective and more subjective states of affairs. In section 10.3.2, I will account for how this development happened and how it has affected *-hotol-* structurally. Before that, however, we will turn our attention to the pre-modal history of *-hotol-*, that is, what the origin of this modal verb is and how it ended up as a modal verb in the first place.

10.3.1 Origin of source verb & recruitment as a modal verb

This section traces the source lexeme of the modal verb *-hotol-* and offers an account of how it may have come to be recruited to mark possibility in Manda in the first place.

It is possible to trace the modal verb *-hotol-* to the Proto-Bantu verb stem **-cotʊd-* 'pierce', as reconstructed by Guthrie (C.S. 839; Guthrie 1967-71.vol3:114; see also Bastin et al 2002) via the sound law that holds for Manda, namely that PB **c > h(s)* and **d > l* respectively (see 5.2.2).

As pointed out by Nurse (1988:102-103), this sound law is a widespread feature in the area. As seen in Table 10.3, all the neighboring languages to Manda have a verb *-hotol-* (pronounced *-sotol-* in Nyakyusa) with an attested denotation of 'pierce' (or similar). What this table furthermore indicates is that *-hotol-* is polysemic even as a lexical verb, suggesting that the original meaning of 'pierce' has extended into a variety of other meanings. (Recall that the different columns in the table and their numbers merely represent different (clusters of) meaning and do not imply an exact relationship or chronology of semantic extension.) Moreover, as reflected in the perforated column to the far right of the table, in several neighboring languages *-hotol-* is also recruited as a dynamic or pre-core

modal verb expressing notions of possibility. However – and as will be further described in section 10.3.2.3 – there is a difference between the role of *-hotol-* in the neighboring languages compared to its role in Manda. It appears that there is a relatively stronger association with the non-modal lexical meanings of *-hotol-* in several of the neighboring languages, and a preference for using it with a concrete referential noun (phrase) complement. In my data on Manda, however, *-hotol-* occurs predominantly as a modal verb in collocation with a secondary verb.

LANGUAGE	CODE	I	II	III	IV~ Dyn. modal	Sources
Proto-Bantu	-	'pierce'				Bastin et al (2002)
Pangwa	G.64	'pierce'	'be frank, honest' (?)			Mwasanga (pers. comm.)
Kisi	G.67	'pierce, perforate'		'overcome, win, vanquish'	'be capable of'	Nurse & Philippson (1975), Ngonyani (2011:203)
Nyakyusa	M.31	'pierce, drill, bore a whole'				Felberg (1996:92)
Ngoni	N.12	'perforate'	'criticize, say hard but just things'	'overcome, win, vanquish'	'be able'	Ebner (1953:29), Nurse & Philippson (1975), Ngonyani (2003:103) Lwena (pers. comm.)
Matengo	N.13	'pierce, stab'			'be able (to)'	(Yoneda 2006:113)
Mpoto	N.14	'pierce, bore a hole'			'be able'	Nurse & Philippson (1975), Makwaya (pers comm.)

Table 10.3. Lexical reflexes of PB *-*cotɔd*- 'pierce' in languages neighboring Manda

Although -*hotol*- is predominantly used as a modal verb in the Manda data, there also exist examples of a more referential pre-modal use. One of few examples in which -*hotol*- is used with a similar meaning to that of the reconstructed stem is (17) below.[213] As exemplified

[213] Peculiarly, in both the Tanzania Language Survey (Nurse & Philippson 1975) and the New Testament (1937), there is a verb <-*holot*-> with the meaning 'pierce; penetrate'. This verb does not

here, *-hotol-* seems to have a specialized meaning in Manda, referring to the act of drilling or carving into wood.[214]

(17) *nihótóla mbéta*
ni-hotol-a mbeta
SM1SG-penetrate NCP3.bamboo.tree
'I'm drilling into the bamboo tree' {to get sap}

The use of *-hotol-* with an extended lexical meaning of 'overpower, overcome' is preferred in Manda. As seen in Table 10.3 above, this meaning or similar meanings surfaces in several neighboring languages as well. In Manda, this meaning of *-hotol-* is especially prevalent in the chronolect of the New Testament (1937).

(18) *milyango ya pandu pa mahoka yayilihotole lepa*
mi-lyango ya pa-ndu pa ma-hoka ya-yi-li-hotol-e lepa
NCP4-door CP4 NCP16-some CP16 NCP6-hell FUT-SM4-OM6-overpower-FV NEG
'[...] the gates of Hades will not overpower it (i.e. the church)' [NT (1937); Matthew 16:18]

(19) *mukihotole kiwifu pa kukita kinofu*
mu-ki-hotol-e ki-wifu pa ku-kit-a ki-nofu
SM2PL-OM7-overcome-FV ACP7-evil LOC16 INF-do-FV ACP7-good
'[…] overcome evil by doing good' [NT (1937); Romans 12:21]

How, then, might *-hotol-* have been recruited into a modal verb? Interestingly, 'pierce' as a source verb for the expression of possibility has not been attested elsewhere, as far as I know. It is not attested as a potential source element in large cross-linguistic works like Bybee et al (1994), van der Auwera & Plungian (1998) or Heine & Kuteva (2002). However, the extended denotation of 'overcome, overpower' is close in meaning to what has been reconstructed as the lexical source of a verb with similar modal use in Luganda (JE.15). According to Kawalya et al (2014:74-78), the modal possibility verb *-sóból-* originates in a lexical verb with the meaning(s) 'be able to cope with, tame, master, succeed', but also specifically 'overcome' (and 'defeat').[215] Moreover, although 'pierce' has not been reconstructed as a source verb for a possibility marker, it can still be argued that this meaning, together with the other various denotations of lexical *-hotol-* in Manda, reflects a common cross-linguistic pathway of semantic generalizations of lexical verbs into markers of possibility. According to Bybee et al (1994:191f), a verb expressing some kind of physical superiority can be generalized into a marker of ability, i.e. of participant-internal modality (and beyond). It is possible to extract such a reading from lexical *-hotol-* as well. That is, there is a reading which persists in the different denotations of the verb. In the same manner as the extended meaning of 'overcome', the more narrow reconstructed original meaning 'pierce'

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appear in my data or in the neighboring languages (with the exception of the Matengo vocabulary by Zimmer (n.d), where it appears with an attached question mark). I do not know if this is a spelling mistake, a metathesis variant of *-hotol-* or a totally different verb.

[214] As proposed by Guthrie (1967-71.vol3:114), the original meaning of the stem could actually have been a "special type of piercing, such as with a boring movement".

[215] See also the discussion of the cognate *-shóbol-* in Rundi (JD.62) in Bostoen et al (2012:14-15).

also encompasses the first participant succeeding in forcing his/her way through a physical barrier, e.g. the stem of a bamboo tree, as in (17).[216] The recruitment of this verb to denote ability and capacity can thus be seen as a generalization and abstraction from this physical ability to overcome and dominate a concrete referential entity to the mastery of a more abstract activity or event.[217] This is manifested in *-hotol-* taking a deverbal noun, i.e. the infinitive verb, as a complement. Deverbal nouns are "Janus-faced" in the sense that they behave like noun-like complements, on the one hand, but on the other hand express more abstract concepts of a situation, as pointed out in e.g. Croft (2003:187). As argued by e.g. Heine (1993:53), they are as a consequence easily reanalyzed as expressing the main event of a proposition. As will be shown in the following section, this is what eventually happened to the infinitive complement of *-hotol-*, as well; as argued, this appears to have co-occurred with a more extended subjectified modal meaning of the verb.

10.3.2 Subjectification-cum-grammaticalization

In the preceding section, the lexical source of *-hotol-* was traced to an original meaning of 'pierce', and I argued for the path along which such a verb could initially have been recruited as a marker of modal possibility.

In this section, I will go on to account for the second stage of development of the *-hotol-* verb, from a pre-core to core modal verb, i.e. with denotations of deontic and epistemic possibility. It is argued that once this original lexical verb was recruited into the domain of modality it continued to develop and eventually formed a new form-meaning pair, facilitated by the additional processes of subjectification and grammaticalization. Although the former term was touched upon in section 10.2.2, it is in need of further elaboration. The concept of subjectification is here to be understood following Traugott (2010b) as the extension in semantic scope, from coding more objective concepts of (innate) abilities of the first participant of a proposition, to expressing the speaker's subjective view on a situation. Thus, as pointed out by de Smet & Verstraete (2006:365), a subjectified element is interpreted with reference to the speaker uttering it. As suggested from the discussion in section 10.2.2, this phenomenon also represents the cut-off point between the pre-core and core modal uses of *-hotol-* in Manda.

Following Narrog & Heine (2011), I consider subjectification as one possible but not obligatory pragmatic-semantic initiator of change within the realm of grammaticalization. Hence, subjectification may trigger the reconceptualization of an element. This may in turn lead to a formal reanalysis and subsequent morpho-syntactic changes typical of grammaticalization (i.e. decategorialization and erosion). Both of these phenomena are seen as leading to unidirectional processes of change (see e.g. Traugott 1989, 2010).

[216] In the same way, the deviating meanings in Ngoni and Pangwa of criticizing or telling the truth (even though it hurts) can be linked to the application of a mental sense to the source verb meaning, i.e. to metaphorically penetrate someone with words.
[217] Of course, it is possible that *-hotol-* was further generalized in meaning already as a lexical verb allowing a broader collocational range which further triggered its reanalysis to a possibility marker. However, there are no indications of such an intermediate stage in the data.

Section 10.3.2.1 sets out the semantic diagnostics for the reconceptualization from the pre-core (/dynamic) to the core modal meaning of *-hotol-*. Section 10.3.2.2 presents a syntactic diagnostic that formally corroborates its shift to a more formulaic use and to the grammatical status of an auxiliary. In section 10.3.2.3, the "micro-comparative" approach from section 10.3.1 is taken up again, as the more subjectified-cum-grammaticalized use of *-hotol-* in Manda is compared with the extent of modal use of the cognate verb in the neighboring languages.

10.3.2.1 Conceptual change

This section aims at mapping out the semantic pathway of the change of *-hotol-* from a dynamic pre-core modal marker to a marker of core modality. I propose that this semasiological development was triggered by the occurrence of dynamic/non-core *-hotol-* in potentially ambiguous contexts, i.e. bridging contexts inviting an inference explicitly including the speaker's point of view, similar to the proposal in de Smet & Verstraete (2006). As will be argued further below, this inference of *-hotol-* with a subjective reading of the dynamic coding got conventionalized and semanticized at a certain point in time, thus creating a polysemic split between a non-core and a core modal use of *-hotol-*.

There is an abundance of examples, in the Manda data, of propositions that can be seen as bridging contexts, in the sense that both a non-subjective and a subjective reading is plausible. The two examples from field work data in (20) and (21) are illustrative in this respect. Both of these propositions are potentially ambiguous between encompassing a non-core and a core modal reading, depending on whether they are interpreted as representing a more objective statement or the speaker's (subjective) perspective. The first example is an utterance from an informant/speaker the first time she was recorded.

(20) *nihótó kujóva náha?*
ni-hoto ku-jov-a naha
SM1SG-POT INF-speak-FV like.this
'can I speak like this?'

In this case, the question could either be interpreted as referring to the more objective, participant-external possibility of managing to get a sound recording of her, e.g. if the microphone was running, if she was standing at a good distance from the microphone, if she needed to speak up more and so forth. However, it could equally be interpreted as a question of permission to start talking at all, i.e. as possibility with a core deontic modal flavor.

The second example of an ambiguous usage of *-hotol-* is given in (21). It comes from a context where an informant is recorded talking on the phone with her brother, discussing a third person (the author).

(21) *nívi náku ápa ihótó' kukuwonésa*

ni-vy-ili	naku	apa	a-i-hoto	ku-ku-wones-a
SM1SG-be(come)-PRF	DEP1	PROX.DEM16	SM2SG-PRS-POT	INF-OM2SG-greet-FV

'I am with him here, he is able to/might greet you'

Once again, this utterance can either be interpreted as an objective statement about the capacity of the first participant to greet in the Manda language, i.e. participant-internal possibility, or whether the subject has the knowledge or "mental ability" (Traugott & Dasher 2002:119) to express the words commonly used as a greeting. Plausibly, it can also be interpreted as denoting participant-external possibility, i.e. given the circumstances that the first participant is in close proximity to the phone, there is a physical condition that enables him to greet.[218] More importantly, though, the proposition can also be interpreted as expressing the speaker's own beliefs about the proposition, i.e. that it is probable that the first participant is going to greet her brother in the phone. Thus, the shift in interpretation reflects a shift in viewpoint. Either it is predicated as the potentiality of the first participant or, alternatively, it is taken to refer to the potentiality of the truth value of the whole proposition, i.e. an epistemic reading.

What these examples serve to portray is how a core modal inference, either deontic or epistemic, is often invited when a proposition is interpreted as more speaker-oriented. Bybee et al (1988:261; also Traugott (1989)) show that expressing that someone is capable of performing an action also implies that there is consent to this action taking place, or alternatively that there is a likelihood that the action will be performed, if the state of affairs is interpreted as reflecting the judgement of the speaker.

It is important with regard to the suggested pathway of semasiological development of *-hotol-* that the diachronic data appears to be consistent with the scenario sketched above, where the more objective senses of participant-internal and external possibility preceded deontic and epistemic possibility. In the New Testament from 1937, there is a lack of unambiguous core modal uses of *-hotol-*. Fundamentally, the notion of epistemic possibility is not expressed with *-hotol-* in the older sources of Manda. Instead it is marked with the future construction (or an adverb; see section 10.5.1.1) preceding the verbal complex and contributing the flavor of uncertainty, as in example (22). (See more about this future construction in 7.4.5).

(22) *yagalinganile lepa kwa mwenga na kwa tenga*

ya-ga-linganil-e	lepa	kwa	mwenga	na	kwa	tenga
F1-SM6-be.sufficient-F1	NEG	CP17	PERS2PL	and	CP17	PERS1PL

'[…] there may not be enough for both us and you' […]' [NT (1937); Matthew 25:9]

There are several examples, however, that are vague between a dynamic and a deontic core reading. Indeed, it is often hard to delimit external possibility from deontic modality (which is why van der Auwera & Plungian (1998) lump these two categories together). This is probably

[218] A deontic reading is, given the circumstances, less likely here.

especially the case in a religious text like this one. In the text, the content is framed as expressing more objective statements. At the same time, however, it obviously contains a religious message promoting a certain set of values and norms to be followed. The following two examples, containing excerpts from two adjacent verses of Matthew 6:24-25 (New Testament 1937), are telling in this respect.

(23) *pawaka mundu uyu ahotola kuwatumakila wabambo wawili*
pawaka mu-ndu uyu a-hotol-a ku-wa-tumakil-a wa-bambo wa-wili
NEG.EXT NCP1-person PROX.DEM1 SM3SG-POT-FV INF-OM3PL-serve-FV NCP2-master ACP2-two
'no one can serve two masters…' [NT (1937); Matthew 6:24]
{"…Either you will hate the one and love the other, or you will be devoted to the one and despise the other…}

(24) *muhotola lepa kuntumakila Mulungu nu Mamona*
mu-hotol-a lepa ku-mu-tumakil-a Mulungu na Mamona
SM2PL-POT-FV NEG INF-OM3SG-serve-FV NCP1.God COM Mamon
'You cannot serve both God and money' [NT (1937); Matthew 6:25]

Both of these examples basically carry the same meaning, but the latter proposition can be seen as logically deduced from the first. The sentence in brackets after (23) conveys the ostensibly objective circumstances relating to why the first participant is – in this case – *not* capable of performing the action (of serving) as encompassed in the example sentences. At the same time, example (24) conveys an especially strong moral overtone that what is expressed is an undesirable way of acting. Consequently, it is also reminiscent of (negative) permission, i.e. deontic possibility.

Simultaneously, it is possible to rule out for synchronic Manda that the more subjective senses of *-hotol-* are just implications, and to confirm that they indeed have been conventionalized into a new form-meaning pair. That is, together with the semantic shift of subjectification, the deontic and epistemic *-hotol-* is also affected by other processes of grammaticalization similar to those affecting other auxiliaries in Manda. In section 10.3.2.2, I present a formal piece of evidence for this polysemic evolution, i.e. of the split between a non-core and a core modal *-hotol-* and the development of a new form-meaning pair. However, there are also semantic diagnostics that allow us to disentangle the increasingly more schematic subjective reading of *-hotol-* in relation to a more dynamic, non-core modal reading. Firstly, there are examples in which *-hotol-* is able to surface with a core modal reading in propositions where an alternative dynamic modal reading is cancelled by the context. Example (25) is a sentence adapted and translated (to Swahili) from a questionnaire developed by Vander Klok (n.d.). The context (within brackets) attached to the sentence explicitly states that Pamela lacks the skill – i.e. the inherent possibility – of swimming. The proposition thus unambiguously expresses deontic possibility in the sense of permission given by an authority, here a teacher, to the implementation of the state of affairs. However, Manda speakers have no problem with translating this sentence using *-hotol-*.

(25) {Pamela's teacher told her class that it was okay to go swimming, but Pamela doesn't want to because she cannot swim!}
Paméla ahótó' kusógha
Pamela a-hoto ku-sɔgh-a
Pamela SM3SG-POT INF-swim-FV
'Pamela can swim' ('Pamela is permitted to swim'; **'Pamela is able to swim')

Another semantic diagnostic of a split between the non-core and core modal use of the possibility reading of *-hotol-* is the generalization of meaning reflected in the fact that the types of verbs and verb constructions with which it may co-occur has expanded. Thus, it can occur with collocates less compatible with a reading of first participant capability, such as stative and more passive-like constructions. The most obvious example of such a semantic mismatch for the reconceptualization and polysemic split of a linguistic item is the possibility for *-hotol-* to co-occur with "itself" (cf. 6.3.2.1). Example (26) illustrates that *-hotol-* with a core modal meaning can stand in collocation with and operate on a dynamic *-hotol-* in Manda.

(26) *ihótó' kuhótóla kupínda ligánga líla*
a-i-hotol-a ku-hotol-a ku-pɪnd-a li-ganga lɪla
SM3SG-PRS-POT-FV INF-be.able-FV INF-lift.up-FV NCP5-stone PROX.DEM5
'he might be able to lift that stone'

According to Traugott & Dasher (2002:108, 139-140; see also Traugott 2010b; Coussé 2015; Bybee & Pagliuca 1985), this possibility of forming "double modals" is also telling evidence for the increased scope and more generalized meaning of the core modal *-hotol-*. Whereas the dynamic, rightward *-hotol-* only operates on the first participant by ascribing him/her with certain abilities, the outer leftward epistemic *-hotol-* has scope over the whole proposition. Note also that the opposite around, i.e. epistemic *-hotol-* being embedded under dynamic *-hotol-* is not possible. Consequently, this is in line with the characterization of Nuyts & Byloo (2015), discussed in section 10.2.2, that the widening in the perspective of the state of affairs also has an outcome in the linguistic expression. Furthermore, it can be argued - following Coussé (2015) - that double modal constructions also represents a case of host-class expansion as epistemic *-hotol-* combines with a more schematic element (i.e. the dynamic modal verb) rather than a lexical verb.

Thus, there are several semantic factors suggesting that the core modal uses of *-hotol-*, especially with an epistemic meaning, are chronologically later developments in Manda and more differentiated from the lexical source of the verb than the participant-internal and external variants. In the next section, we will turn our attention to syntactic evidence for this split of *-hotol-* from a pre-core to a core modal.

10.3.2.2 Syntactic change

The reanalysis of *-hotol-* as a core modal auxiliary can also be shown by its syntactic behavior. That the change to a subjectified meaning has triggered a formal division is once again supported by cases of elision, i.e. the deletion of elements previously mentioned in discourse. As described for the aspectual auxiliaries in chapter 8, this appears to be a structural threshold which a verb grammaticalized to an auxiliary has passed. However, in the case of *-hotol-*, this phenomenon appears to be marked not in the transition from a lexeme to a

pre-core dynamic modal marker, but rather as an indication of the further development to a core modal, as discussed in section 10.2.2. Thus, in this case, the complement-like second verb of the construction may still be deleted both when *-hotol-* expresses a lexical meaning or a dynamic modal reading. However, when *-hotol-* denotes a more subjectified core modal meaning of permission or a belief, such a deletion of the second verb is considered ungrammatical.

This shift can be framed in a minimal pair like (27) below, which consists of two answers and thus partly reiterated versions of an initial question. In this example, the first answer (A1) is not ungrammatical, but it automatically produces a more objective pre-core modal reading of *-hotol-*, i.e. that grandmother is physically fit for the walk to a neighboring village. For the answer to encompass a more subjective sense, in this case a deontic reading of permission, *-hotol-* must be used together with the second verb, as in the second answer (A2).

(27) *ng'ówólo ahótóla kugénda kuÍléla kwa valóngo múndu?*

mu-gowolo	a-hotol-a	ku-gend-a	ku-Ilela	kwa	va-longo	mundu
NCP1-old	SM1SG-POT-FV	INF-walk-FV	LOC17-Ilela	CP17	NCP2-relative	POSS3SG

'Can grandmother (lit. the old person) go to visit her relatives in Ilela?'

A1: *éna, ahótóla* 'yes, she is able (to walk there)' **'yes, she is allowed to walk (there)'

A2: *éna, ahótóla kugénda* 'yes, she is allowed to walk (there)'

That *-hotol-* with a core modal denotation must appear with the second verb entails a syntactic reanalysis of the whole construction. As argued in 8.2.3.2, such a restriction can be seen as indicative of decategorialization. That is, that the syntactic freedom of the subjectified-cum-grammaticalized *-hotol-* is reduced in comparison to its lexical counterpart, as it cannot stand by itself but must stand together with and operate on a second verb. What this implies is firstly (and more generally) that the semantically shifted status of *-hotol-* as more formulaic in meaning is also reflected in a more grammatical/grammaticalized status syntactically. Secondly, it shows that there is a specific coding parallel to the more subjective/subjectified meaning of *-hotol-*. Consequently, following Traugott (2010b; see also Cuyckens et al 2010), it can be assumed that a new form-meaning pair has been established, with subjectification as the driving force.

10.3.2.3 Comparison with neighboring languages

To strengthen the subjectification-cum-grammaticalization pathway of change proposed above, it is fruitful to compare the Manda data with the usage of *-hotol-* in neighboring and closely related languages. As described in Table 10.3 in section 10.3.1, all of these languages have a lexical cognate to *-hotol-* and some of them also use this cognate to express modal possibility.

However, as seen in Table 8.2 below, where a more fine-grained account of the use of *-hotol-* by the different languages in the different modal subdomains are represented, the languages differ in relation to Manda and to each other in the number of subdomains that *-hotol-* covers. Taking these micro-variations as reflecting different stages of change

corroborates the pathway sketched in sections 10.3.2.1 and 10.3.2.2, where *-hotol-* shifted from a lexical verb to a pre-core modal and thence to a core modal marker.

Starting with Pangwa and moving upwards in the table, we can follow this pathway. Although *-hotol-* exists as a lexical verb in Pangwa (cf. section 10.3.1), it has not been recruited as a modal verb. Actually, Kisi appears to be the only G.60 language where *-hotol-* has modal functions. Moreover, there is variation among those languages that do use *-hotol-* as a modal verb with regard to the amount of modal flavors it may express, i.e. which subdomains of modality it may operate in. While *-hotol-* can apparently be used throughout the modal domain in Mpoto, just as in Manda, it is only used as a non-core modal in Ngoni. Matengo and Kisi are somewhere in between. Most importantly, the table shows that if a language uses *-hotol-* to express core modality, it also uses it to express pre-core modality. Thus, the data presented in the table further substantiate the hypothesis that the process of subjectification-cum-grammaticalization is a later process chronologically and that the change takes place via a stage of pre-core modal use.

LANGUAGE	**CODE**	**Pre-core modal**		**Core modal**		**Sources**
		Part-ext.	**Part.-int.**	**Deontic**	**Epistemic**	
Mpoto	N.14	yes		yes	yes	Makwaya (pers. comm.), Botne (pers. comm.)
Kisi	G.67	yes		yes	no (?)	Ngonyani (2011:153), Gray (pers. comm.)
Matengo	N.13	yes		yes(?)	no	Yoneda (pers. comm.)
Ngoni	N.12	yes		no	no	Mapunda (pers. comm.)
Pangwa	G.64	no		no	no	(Stirnimann 1983, Mwasanga pers. comm.)

Table 10.4. The degree of modal use of *-hotol-* in neighboring languages[219]

However, a word of caution is warranted here, as the reality is far from being as neat as this depiction suggests. Firstly, there is a general scarcity of data for all these languages and the records are especially rudimentary for data concerning modality. As mentioned in the introduction, modality has seldom been studied in traditional Bantuistics. Thus, the risk that a category has been overlooked or that the absence of modal data is due to an idiosyncratic tendency of a few speakers unfortunately cannot be ruled out. Secondly, the table is also a little too discrete in that it does not capture the possible ambiguous, reconceptualization-triggering examples similar to those discussed for Manda in section 10.3.2.1 (examples (20) and (21)).

[219] The question marks represent cases where sources on a language conflict with each other or with my own field notes.

Another complicating factor in terms of comparison with the neighboring languages is the more general contact-induced language change of "Swahilization" affecting the whole of this linguistic area, as shown in work such as Yoneda (2010) and Rosendal & Mapunda (2015) and also discussed in chapter 3.3 in this thesis. Consequently, all of the neighboring languages have borrowed the verb *-wez-* (roughly 'be able') from Swahili and have integrated it into the semantic domain of modality.[220] Typically, a phonologically adapted version of *-wez-* is used contrastively in the neighboring languages to express the sub-domains or flavors of possibility/potentiality not covered by *-hotol-* in the table. In addition to this, however, *-wez-* can often be used in parallel or in free variation with *-hotol-* in the other subdomains as well. Thus, it appears that *-wez-* is slowly but categorically replacing *-hotol-* in several of these languages. A good example of this phenomenon is Matengo. Yoneda (2010; pers.comm. 25-09-15) claims that *-hotol-* may denote possibility (to the extent depicted in the table).[221] However, this usage is only found (and known) in an older generation of speakers. Although the lexical meaning of *-hotol-* 'pierce, stab' (see section 10.3.1) is still very commonly used throughout all the generations, younger speakers have stopped using *-hotol-* as a modal verb. Instead, they exclusively use *-hwes-* (< Swahili *-wez-*). Thus, it is difficult to disentangle how the borrowing of *-wez-* has affected the general modal paradigm of the neighboring languages, i.e. whether it has stopped an increasingly non-referential use of *-hotol-* or whether it has already replaced it and thus obscured the pathway of change sketched above.[222]

Interestingly, this tendency to borrowing in the neighboring languages stands in striking contrast to the situation in Manda. There is no single instance in the Manda data where *-wez-* is used for expressing the modal concept of possibility. This can be connected to another tendency discussed in section 3, and briefly in the paragraph above, namely that *-hotol-* is more strongly associated with its lexical senses in the neighboring languages than it is in Manda. The fact that Manda speakers associate *-hotol-* more strongly with a modal than a lexical meaning might have made the speakers more resistant to accepting the intrusion of Swahili into this specific domain.

10.4 The necessity verbs *-lond-*, *-londek-* and *-yenelek-*

The other verbs used in Manda to express modal notions, *-lond-*, *-londek-* and *-yenelek-*, operate within the modal force of necessity, the second of the two fundamental modal concepts discussed in section 10.2.1. Just as with possibility, necessity can be understood as a

[220] Basically, all speakers of these languages (including Manda) are bilingual in Swahili, one of the two official languages and the *de facto* lingua franca of Tanzania. See chapter 3.3.1 for a further discussion on this issue.
[221] The question mark reflects my own conflicting field notes.
[222] The variety of Ngoni spoken in Mozambique could have served as a clue here. The speakers are claimed by (Kröger 2013) to have migrated from Southern Tanzania some 80 years ago. Consequently, there is conceivably less Swahili intrusion in the language. For example, *-wez-* is not used. Unfortunately, *-hotol-*, which does exist in the language with the lexical reflexes 'drill' and 'puncture and abscess' (generalized to 'heal'), has not been recruited as a modal verb at all (Kröger pers. comm. 17-09-2015).

modal force intersecting within the four flavors of modality to produce expressions with different meanings. Thus, the modal force of necessity covers the flavors of participant-internal necessity, participant-external necessity, deontic necessity and epistemic necessity. Interestingly, the conceptual domain of necessity is very unlike its possibility counterpart in Manda. It is more of a "rag-bag" collection consisting of different verbs. Moreover, as will be accounted for in sections 10.4.1 and 10.4.2, all of these verbs show a low degree of grammaticalization. That is, even though they have been recruited to express modal functions and thus have arguably been the subject of some kind of semantic generalization, they only operate within a few or even a single subcategory of modal flavor. Furthermore, they show no signs, conceptually or morpho-syntactically, of being having been grammaticalized and conventionalized to core modals. Thus, the conditions under which these necessity verbs operate are in many ways different to those discussed for the possibility verb *-hotol-* above, as there are no strong indications of additional developments of grammaticalization and subjectification in this domain.

The first verb under scrutiny is *-lond-*. This verb was discussed as a marker of proximative aspect in 8.3.[223] However, it may also be used in a double verb construction to express participant-inherent necessity in Manda. Thus, *-lond-* marks that the situation expressed in a second verb in the infinitive form – like 'eat' in example (28) and 'dig for medicine' (a euphemism for 'urinate') in example (29) – is a need fully inherent in the first participant of the proposition.

(28) *kíla payúmúka alónda kúla*
kila pa-a-yumuk-a a-lond-a ku-l-a
every LOC16-SM3SG-wake.up-FV SM3SG-NEC-FV INF-eat-FV
'always when she wakes up she needs to eat'

(29) *nilónda kugíma nténde*
ni-lond-a ku-gim-a mu-tende
SM1SG-NEC-FV INF-dig-FV NCP3-medicine
'I need to urinate (lit. to dig for medicine)'

Note that the source verb *-lond-* is polysemous. Thus, it also means 'want'[224] (cf. example (34) below). With this meaning it has also grammaticalized into a proximative marker in Manda as accounted for in chapter 8.3.2. Moreover, *-lond-* also has several other lexical denotations, including 'look for' (as in (35)).

Next, there are two verbs, *-londek-* and *-yenelek-*,[225] that may be used in Manda in order to express both participant-external and deontic necessity. Thus, when occurring in collocations

[223] See this section for a more extensive treatment of the semasiological background, synchronic semantic range and involvement in grammaticalization of this specific verb.
[224] Thus, *-lond-* arguably also expresses so-called "volitional" or "bouletic" modality (as it also expresses desires). This concept, however, is not included in the conceptualization of modality used in this analysis.
[225] There is actually an additional verb here *-lɪnganɪl-* that also expresses participant-external/deontic modality. It has its origin in *-lɪngan-* 'be equal' (also reconstructed as **-dɪng-* for both zones N and G

with a second verb, these verbs indicate that the state of affairs conveyed in the second verb is indispensable for the first participant, due to external conditions. Thus, *-londek-* in (30) expresses the first participant's need to take the bus, given the fact that there simply are no other (physically or pecuniary) convenient means of travel. Similar constraints are reflected in the use of *-yenelek-* in (31), whereas in (32) it is instead temporal constraints, i.e. that the meeting is on the same day and about to start at the time of utterance, that motivate the use of *-yenelek-*.

(30) *wilóndéka kukwéla libási*
u-i-londek-a ku-kwel-a li-basi [Sw.]
SM2SG-PRS-NEC-FV INF-climb-FV NCP5-bus
'you have to take the bus' {to get to Nsungu}

(31) *ngáti ulónda kulʊ́ta kuMbóngo, uyenéléka kulʊ́ta na wátu*
ngati u-lond-a ku-lʊt-a ku-Mbongo u-yenelek-a ku-lʊt-a na u-atu
if SM1SG-want-FV INF-go-FVLOC17-Mbongo SM2SG-NEC-FV INF-go-FV COM NCP14-canoe
'if you want to go to Mbongo, you have to go with a canoe'
{because it is rain season so the water level in the river Mchuchuma that delineates Mbongo from Nsungu is so high that you cannot cross it}

(32) *niyenéléka kulʊ́ta kuwungáno wa chadéma*
ni-yenelek-a ku-lʊt-a ku-wungano wa chadema [Sw.]
SM1SG-NEC-FV INF-go-FV LOC17-NCP14.gathering CP14 CHADEMA[226]
'I have to go to the CHADEMA gathering' {it's on today and it starts soon}

Both *-londek-* and *-yenelek-*, in a similar construction with a second verb in the infinitive form, can also be used for the expression of deontic necessity, i.e. where the external circumstances, in contrast to the more physical constraints in the previous examples, are socially motivated in some way and the circumstances are imposed by some kind of authority. Thus, participant necessity is typically conveyed as an obligation for the participant to engage in the event encoded in the clause.

in Bastin et al (2002). It occurs sporadically in the historical sources but never in the synchronic spontaneous data, which makes it a difficult element to analyze further.

[226] CHADEMA (=*Chama cha Demokrasia na Maendeleo*) is a political party in Tanzania (it is the main opposition party on the mainland).

(33) *ulóndéka lépa kubíta*
u-londek-a lepa ku-bɪt-a
SM2SG-NEC-FV NEG INF-go-FV
'You are not supposed to go'

(34) *wóna ulónda kutáma wíchu na vándu*
wona u-lond-a ku-tam-a wichu na va-ndu
if SM2SG-want-FV INF-sit-FV well COM NCP2-people
'if you want to live well with people

uyenéléka kuvagána vándu
u-yenelek-a ku-va-gan-a va-ndu
SM2SG-NEC-FV INF-OM3PL-love-FV NCP2-people
you have to love people'

As pointed out in 10.2.1, it is typically the speaker who imposes these obligations. Interestingly, it tends to be the case in deontic expression with both *-londek-* and *-yenelek-* that the obligator, i.e. the source behind the force (de Haan 2006:29), in these cases are not in fact the speaker. Thus, they are typically more "descriptive", i.e. reporting on the "attitude regarding some state of affairs held by someone else" (Nuyts 2006:15). Alternatively, they are vague in this sense. Thus, in example (35) with *-londek-*, the speaker could be understood as either expressing a self-imposed directive to go and get something to accompany the dinner, or rather that it is his wife, who is preparing the dinner, who is expecting him to do that. (Note that this example also contains a reflex of *-lond-* surfacing as the content verb. As mentioned above, this verb is polysemous and in this case it expresses a divergent lexical meaning 'look for'. Thus, it is not a straightforward case of evidence of a grammaticalized status of *-lond-*).

(35) *nilóndéka kulónda mbóga*
ni-londek-a ku-lond-a mboga
SM1SG-NEC-FV INF-look.for-FV NCP9.foodstuff[227]
'I am supposed to (go and) look for something to accompany the ugali'

Moreover, both of these two verbs are used to mark relatively weak obligation, i.e. the consequences for the first participant of not fulfilling the need are not severe (see Bybee et al 1994:187).

In addition to the construction discussed above, participant-external/deontic necessity can also be expressed with *-londek-* inflected with a 'dummy morph' – the subject marker of class 9 – in which case it has scope over a whole matrix clause rather than over the single action/event of a second verb. In these constructions, *-londek-* behaves syntactically more like a lexicalized adverbial and occurs with the main verb inflected in the subjunctive (see more about the subjunctive as a modal marker in section 10.5.1.2).

[227]Recall that although **boga* is reconstructed as 'vegetable' by Bastin et al (2002), *mboga* in Manda refers to any foods that may accompany the starch (typically cassava *ugali*) of a meal, e.g. fish, beans or a dish made from cassava leaves or other vegetables.

(36) *ilóndéka alɔtáyi kuhénga lihéngu*

i-londek-a	a-lɔt-ayi	ku-heng-a	li-hengu
SM9-NEC-FV	SM3SG-go-SBJ	INF-work-FV	NCP5-work

'it is necessary (that) he goes to work'

Finally, it should be noted that although *-londek-* and *-yenelek-* are both used to express participant-external and deontic necessity, they also differ to some extent. To begin with, *-londek-* is more widely preferred among my consultants. Moreover, there is a clear preference for using *-londek-* when there is a specifically human agent that the situation – implicitly or explicitly – refers back to. In other words, *-londek-* is favored when there is a person behind the stated obligation, whether that person is the speaker or someone else. In contrast, *-yenelek-* is preferred when there are physical circumstances constricting the first participant. Thus, even though both of the forms can be used to express participant-external and deontic modality, *-londek-* is more linked with the latter feature and *-yenelek-* with the former.[228]

10.4.1 Origin of the necessity verbs and their recruitment as modal verbs

As seen from the description above, the three verbs *-lond-*, *-londek-* and *-yenelek-* are used to express necessity in Manda. This section discusses the origin of these verbs and how they may have been recruited as modal markers. Unlike the rather peculiar origin of the possibility verb *-hotol-*, the etymology and recruitment into the modal domain of the necessity verbs is more in accord with cross-linguistic tendencies.

We begin with *-lond-*, the modal verb used only to mark participant-internal necessity, a dynamic category outside of core modality, which only expresses necessities fully inherent in the first participant. As touched upon in the previous section, the origin of this verb is transparently the polysemous lexical verb *-lond-*, from Proto-Bantu **-dond-* 'follow, search for' (Guthrie 1967-71.vol3:178). In Manda, the verb has the same meanings as have been reconstructed for Proto-Bantu. However, it has also extended its lexical-semantic range into additional meanings such as 'want', 'desire', and specifically 'need', based on the inference that what one is looking for is subsequently something one wants (to have) or desires. (Chapter 8.3.2 contains a more fully-fledged account of this etymon, including comparative notes on the reflexes of this verb in the neighboring languages.) Thus, one of the lexical denotations of *-lond-* in Manda is 'need'. This lexical meaning is seen in example (37), where *-lond-* with this sense appears with a noun phrase complement.

(37) *nilónda nténde wángu nikótó kúfwa*

ni-lond-a	mu-tende	u-angu	ni-koto	ku-fw-a
SM1SG-need-FV	NCP3.medicine	ACP3-POSS1SG	SM1SG.-NEG	INF-die-FV

'I need my medicine so that I don't die'

[228] According to one speaker *-yenelek-* expressing deontic modality supposedly marks a relatively stronger sense of obligation than *-londek-*. However, extensive data in support of such a conclusion are unfortunately lacking.

Perhaps unsurprisingly, according to van der Auwera & Plungian (1998), the typical source verb for a marker of participant-internal necessity is indeed ‘need’. It is also hypothesized for Manda that it was this specific sense of *-lond-* that was recruited into the modal domain. Just as for *-hotol-*, this arguably occurred in collocations with an ambiguous second verb, that is, a second verb in the infinitive form with an indeterminate status between a verbal complement and the main verb of the clause. As noted by Givón (2001:304), a verb meaning ‘need’ has an “inherently irrealis” status already at a lexical stage when occurring in double verb constructions, as its lexical-semantic range by default leads to it expressing the non-factuality of the act encoded in the collocated infinitive. This entails that there is no real shift in the semantics of *-lond-* when it occurs with a noun (phrase) complement. Compare for example the minor nuances of change in meaning between (38) and (38), where *-lond-* either occurs with an infinitive collocate or a noun phrase complement.

(38) a) *ni-lónd-a kú-nyw-a kaháwa* ‘I need to drink coffee’
vs.
b) *ni-lónd-a kaháwa* ‘I need coffee’

Thus, the difference from a modal verb *-lond-* and the ideational source verb is small, even from a semantic point of view. In this sense, it is difficult to differentiate the modal verb *-lond-* from constructions consisting of the lexical verb *-lond-* with a de-verbal noun complement. Thus, modal *-lond-* represents a very early stage of grammaticalization and shows no signs of subjectification. This is also to be expected given its less advanced status as a dynamic participant-internal modal.[229]

With regard to the second necessity verb, *-londek-*, the pre-modal source transparently contains the same *-lond-* verb and thus can be reconstructed as originating from the same etymon. In addition, it is suffixed with the medio-passive extension *-ɪk-*, reconstructed from Proto-Bantu with the analogous form **-ɪk-* (the vowel of the extension is lowered to due to vowel harmony with the stem). This extension is a productive derivational suffix in Manda, and also in the surrounding languages (for this reason, the lexical denotation of this verb will not be compared to the cognate reflexes in the neighboring languages in this case). As discussed in 5.4.3.3, it has a syntactic valence-decreasing function and a semantic agent-demoting or deleting and object-promoting function in Manda. As pointed out by Schadeberg (2003:75), it is in addition typically used to “indicate that the subject […] is potentially or factually affected by the action expressed by the verb”. In Manda it is used productively to express both middle voice and passive-like constructions. This reflects a common pattern in this area as shown in work such as van der Wal (2015) and Chavula (2016). This is also reflected in the lexical use of *-londek-*, as exemplified in (39) below, where it even surfaces with an explicit agent adjunct. Note also that in example (40), *-londek-* has the extended meaning ‘be required’.

[229]However, see 8.3.3 for an account of the more advanced grammaticalization of this etymon into a proximative auxiliary.

(39) *nilóndéka kunyúmba ni máwu*

ni-lond-ık-a	ku-nyumba	ni	mawu
SM1SG-need-NEUT-FV	LOC17-NCP9.home	COM	mother

'I'm needed at home by mother'

(40) *yaulondeke pa kihogosi iki*

ya-u-lond-ık-e	pa	ki-hogosi	iki
F1-SM3-need-NEUT-F1	LOC16	NCP7-generation	PROX.DEM7

'it shall be required of this generation' [NT (1937); Luke 11:51]

The verb *-londek-* is clearly lexically derived from *-lond-*, as discussed in the previous paragraph. However, I propose that it was recruited independently into the modal domain, straight into denoting participant-external notions. Cross-linguistically, pre-modal sources with similar syntactic-semantic coding tend to go directly into denoting participant-external/deontic necessity. An example is English 'be supposed (to)', as described in van der Auwera & Plungian (1998) and Visconti (2004). As shown in Visconti (2004; see also Bybee et al 1994:185), this is connected to the fact that such marking by itself implicates that the first participant is affected by external forces. In other words, the semantics conveyed by this stative-like morpheme *-ık-* invert the desiderative denotations of 'want', 'need' and 'desire' encoded in the original verb stem *-lond-* from being inherent in the first participant to being external and imposed, i.e. 'required', as from the outside. Consequently, it is easily reinterpreted as a participant-external or deontic modal. As for the other modal verbs, the semanticization and extension of this interpretation into marking participant-external/deontic necessity arguably stems from contexts where *-londek-* occurred with a second verb in the infinitive, as set out in (41) below.

(41) *alóndéka kubíta kushúli*

a-londek-a	ku-bıt-a	ku-shuli
SM3SG-be.needed~NEC-FV	INF-go-FV	LOC17-NCP9.school

'she is needed/wanted/required to go to school' (by some external implicit factor)
⊃ 'she has to go to school'

Thus, interestingly, there is a one-to-one connection between the derivation from *-lond-* to *-londek-* and the shift of modal flavor from participant-internal to participant-external modality.

The third necessity verb, *-yenelek-*, is analogous to *-londek-*, as it transparently also consists of a verb derived with the medio-passive extension *-ık-*, with similar formal and functional characteristics to those described above. However, the source verb stem itself is less easily traceable in this case. The underived stem is not reconstructed for Proto-Bantu. Moreover, it is not found in most of the sources on the neighboring languages, either with or without a modal meaning. Two exceptions are *-ghenel-* 'be spread out' in Kisi (Nurse & Philippson 1975)

and *-yenel-* ‘spread, extend, content, suffice’ in Matengo (Zimmer 1947).[230] A lexical verb *-yenel-* also surfaces in Manda. It has a similar meaning ‘be spread out’ and the related meanings ‘be lasting (in space/time)’ and – in extension – ‘suit’ and ‘be fitting’.

(42) *kikongondéla kiyénéla lépe kupínda sémbe ówʊ*
ki-kongondela ki-yenel-a lepe ku-pɪnd-a sembe ʊwʊ
NCP7-basket(big) SM7-suffice-FV NEG INF-carry-FV NCP14.flour PROX.DEM14
‘this basket does not fit (is not big enough) to carry this flour in’

(43) *sháti iniyénéla*
shati [Sw.] i-ni-yenel-a
NCP9.shirt SM9-OM1SG-suit-FV
‘the shirt suits me’

Consequently, the verb with this meaning, derived with the medio-passive extension, i.e. the source verb for this modal marker, denotes to ‘be spread out’ or ‘be fitted’ into some item.

(44) *máchi ága gayenéléka mukifúlu*
ma-chi aga ga-yenel-ɪk-a mu-ki-fulu
NCP6-water PROX.DEM6 SM6-suffice-NEUT-FV LOC18-NCP7-pot(for water)
‘the water is being fitted in the pot (i.e. it is placed in the pot)’

The verb *-yenelek-* does not surface as a necessity marker or even a lexical verb in the historical Manda data or in the neighboring languages (as far as I can tell).[231] However, a verb denoting ‘be fitting’ is still a common cross-linguistic source for expressing participant-external/deontic necessity, according to Bybee et al (1994:182-183), who even make explicit reference to the (Southern Tanzanian) Bantu language Mwera (P.22) as an instance of this phenomenon. Note, however, how context plays a crucial role in the instances where ‘be fitting’ is grammaticalized into a marker of necessity. Bybee et al (1994:183) paraphrase the constructions in which this grammaticalization takes place in terms of ‘it is fitting’, i.e. where the subject of the predicate is not co-referential with the first participant affected by the situation encoded in the verb.[232] Indeed, as seen in the Mwera example (45), the first participant of the participant-external/deontic construction is coded as an object (i.e. as an object marker inflected on the modal verb *-ŵandicil-*) and there is an expletive morpheme (the subject marker of class 9) in subject position.[233]

[230] See also *-kwener-* ‘be fitting’ in Tumbuka (N.21; Vail 1972:90 Turner 1996:206), *-ene-* ‘be spread out […], be sufficient’ in Swahili (G.42; TUKI 2001) and *-enel-* ‘to fit, to (have) spread’ in Kagulu (G.12; M. Petzell: pers. comm.).
[231] In these sources, the typical marker of necessity is the subjunctive (discussed in section 10.4.2).
[232] This is similar to Heine’s (1993:39) “evaluative” conceptual schema “X to/that Y”, where X stands for the modal verb which expresses an “evaluative concept” over Y, the complement~content-verb.
[233] Note that the subject marker of noun class 9 is also used to form the more adverbial-like *ilondeka* (example (36) above) in Manda.

(45) *ituŵandicile kuwala ukoto*
i-tu-ŵandicil-e ku-wal-a ukoto
SM9-OM1PL-be.fitting-SBJ INF-dress-FV properly
'we ought to dress properly'
[Mwera (P.22); Harries (1950:109; my glossing)]

It is in the light of this fact that it makes sense for Manda to have added the neutro-passive *-ık-*, since one of the functions of the neutro-passive, as noted above, is to promote an object to subject position. Consequently, the derived modal verb *-yenelek-* signals that what is 'fitting', hence what is 'suitable' or 'appropriate', affects the subject of the clause, i.e. the first participant of the proposition. Thus, *-yenelek-* in collocation with a second infinitive verb signals that it is considered appropriate for the first participant to take part in the act encoded in the infinitive verb. Thus, it is easily reinterpreted as expressing participant-external or deontic modality.

(46) *uyenéléka kulóta kupolísi*
u-yenelek-a ku-lɒt-a ku-polisi [Sw.]
SM2SG-be.fitted~NEC-FV INF-go-FV LOC17-NCP9.police
'you are being fitted to go to the police' ~ 'it is fitting that you go to the police'
⊃ 'you have to go to the police'

Finally, as mentioned above, there is a slight pragmatic-semantic difference in the distribution of *-londek-* and *-yenelek-*, where the former is preferred with a human being as the causer of the obligation. This can be understood as originating from the different lexical heritages of the two forms. This proposal stems from the fact that the volitional or desiderative content inherent in the source verb stem *-lond-*, i.e. the desire for the situation encoded in the second verb to be accomplished, is typically associated with an animate agent. (Note, however, that this still does not have to be the speaker.) The stronger preference for *-londek-* to be used specifically where an animate referent is the source of the obligation can thus be seen as a case of persistence (Hopper 1991), a contiguity of its lexical meaning.

10.4.2 (The lack of indications of) subjectification-cum-grammaticalization

Once recruited into the modal domain, the verbs expressing modal necessity do not appear to have developed further in any particular sense. Although they have clearly been recruited into the modal domain and thus have arguably lost some of their lexical semantics (but see the discussion on *-lond-* in the previous section) and perform a grammatical function (cf. the criteria of auxiliation of Anderson 2006:5), the necessity verbs do not adhere to any semantic or formal diagnostics indicative of a further reconceptualization into a core modal. That is, there are no clear indications of a split into a new conventionalized form-meaning pair as a core modal, as was described for *-hotol-* in section 10.3.2. This issue will be further explored in this section.

That *lond-*, *-londek-* and *-yenelek-* show few signs of additional development is not surprising given the fact that these verbs have arguably not gone through the second stage of development from a pre-core to a core modal as was described for *-hotol-*. Consequently, they have not passed the threshold of subjectification-cum-grammaticalization. This section will

account for these facts more explicitly. On a general note, none of these verbs may be used to express epistemic necessity, i.e. the most semantically advanced modal force. More specifically, it should be recalled that, to begin with, *-lond-* as a modal verb is only used to express dynamic participant-inherent modality and shows a low degree of semantic evolution in comparison to its lexical counterpart. It was furthermore argued that both *-londek-* and *-yenelek-* did not evolve within the various flavors of the modal domain but that they were recruited directly from lexical verbs into the modal meaning they convey. Thus, they also show a low level of development within the modal domain. Moreover, although both *-londek-* and *-yenelek-*, aside from participant-external necessity, can also be used more specifically to express deontic necessity, i.e. a typically more subjectified flavor of modality, it was seen that the deontic that they both convey is weak. It is weak both in the sense that they do not express a strong force of obligation and that, in connection to this, they typically do not refer to the speaker's own attitude but rather to more general social norms or the demands of someone else as the underlying force. Thus, even though both are deontic modals, they tend to be framed as more objective reports on the attitudes of others rather than as explicitly conveying the subjective beliefs of the speaker. In the words of Nuyts (2006:15), they are more "descriptive" than "performative". Thus, both *-londek-* and *-yenelek-* are less likely to be interpreted as having the speaker as the source of obligation (see also Traugott & Dasher 2002:114-117).

Importantly, it appears that in those cases where there is a possible reading of *-londek-* and *-yenelek* as reflecting the speaker's own attitude, i.e. in possible bridging cases contexts where a more performative, subjective reading is possible, this invited inference can still be cancelled, as exemplified with *-londek-* in (47).

(47) *valóndéka kutangátíla kuhónda máyáwu, kóma vakíta lépe*

va-londek-a	ku-tangat-il-a	ku-geh-a	ma-yawu	koma	va-kɪt-a	lepe
SM3PL-NEC-FV	INF-help-APPL-FV	INF-peal-FV	NCP6-cassava	but	SM3PL-do-FV	NEG

a.'they are supposed to help to peel the cassava, but they do not do (it)'
b. ??'they must help to peel the cassava, but they do not do (it)'

An interpretation of *-londek-* and *-yenelek-* as expressing the innate and individual attitude of the speaker is thus still merely an inference that can be violated. This suggests, following Visconti (2004) and Traugott & Dasher (2002:141), that a more subjectified, core modal reading of these verbs has not been conventionalized and grammaticalized.

That *-lond-*, *-londek-* and *-yenelek-* have not developed further into new form-meaning pairs is reflected in the fact that they do not adhere to any of the semantic and morpho-syntactic diagnostics described for *-hotol-* in section 10.3.2, as well as for other auxiliaries in Manda such as the completive and the proximative (section 8.2 and 8.3) and the secondary negative (section 11.3). To start with, these verbs still have selectional restrictions on which types of verbs they may co-occur with. That is, these verbs cannot be collocated with a second verb

that contradicts their original lexical semantics.[234] This also means that it is not possible to form a double modal construction with these verbs, in contrast with *-hotol-* (as exemplified in (26), section 10.3.2.1). Importantly, there are no morpho-syntactic indications of the new modal status of these verbs either. Thus, unlike what was described for *-hotol-* in section 10.3.2.2, the second verb may always be omitted in ellipsis constructions with these necessity verbs.

What about the comparative data, then? For *-hotol-*, we also saw that several of the surrounding languages had at least partially recruited this verb into a possibility marker. Strikingly, this appears not to be the case for any of the necessity verbs. That is, there are no records or field notes that indicate that any cognate of these verbs can be used as a modal marker. That a pattern to recruit these verbs into the modal domain is not shared by any of the neighboring languages also suggests that they are relatively recent innovations and consequently have had less of a chance to extend in meaning. Recall, however, the caveat that the comparative data in general suffer from the lack of satisfactory description on modality.

To conclude, then, it is apparent that there is a much lower degree of development to account for, within the domain of necessity, with regard to the concepts of grammaticalization and subjectification. The modal verbs within the modal domain are both weakly subjectified and, conceivably as a consequence, also weakly grammaticalized, both with regard to functional-semantic indications as well as formal ones. This, in turn, stands in stark contrast to the domain of possibility, where the verb *-hotol-*, as described in section 10.3, covers all flavors of possibility and shows indications of both conceptual and syntactic reanalysis.

10.5 A note on additional non-verbal markers of modality

This chapter will end with a note on some additional grammatical modal markers that are not (auxiliary) verbs but that nonetheless play an important role in the domain of modality.

10.5.1.1 Epistemic possibility adverbs

As described in section 10.3, *-hotol-* is the only auxiliary verb used to express possibility in Manda. However, there are also two prominent adverbs expressing epistemic possibility found in my corpus. The first one is *manyayi* 'perhaps'.

(48) *manyáyi ihótó kuhída kundóla*

manyayi	a-i-hotol-a	ku-hid-a	ku-mu-lol-a
perhaps	SM3SG-PRS-POSS-FV	INF-come-FV	INF-OM3SG-see-FV

'perhaps he can come to see

[234] Recall that *-lond-* is a polysemous lexical verb. Thus, in example (35) above, where *-londek-* collocates with *-lond-*, the latter expresses a deviant meaning from 'need'.

ní mwéne ntámu ǒkwa
ni mu-ene mu-tamu ʊkwa
FOC NCP1-pron NCP1-sick.person MID.DEM17
her, the sick person, there'

(49) *gólo achíti lépe, mányáyi ligóno língi*
golo a-a-hich-iti lepe manyayi li-gono lɪ-ngi
yesterday SM3SG-P2-come-P2 NEG perhaps NCP5-day ACP5-other
'she did not come yesterday, perhaps some other day'

The epistemic adverbial *manyayi* 'perhaps' conceivably originates from the verb stem **-many-* 'know' (Bastin et al 2002), inflected in the subjunctive form. Cross-linguistically, 'know' is a very common lexical source for a possibility marker, as shown by Bybee et al (1994:190), who also make reference, once again, to Mwera (P.22) as having recruited the cognate *-many-* to expressing this force. Interestingly, *-many-* also surfaces as a concessive marker in Manda. Bybee et al (1994:240; see also van der Auwera & Plungian 1998) demonstrate that this is a common "post-modal" function of an epistemic possibility marker. In other words, it is common for an epistemic possibility marker to extend in meaning beyond expressing modal notions into a subordinate conjunction marking 'even though' as illustrated in (50). However, if these two functions are diachronically related or stems from different grammaticalization processes is uncertain given the fact that *-many-* with a concessive reading often surfaces in the infinitive form, as in (51).[235] In those cases it structurally more remnant of complementizers in Manda - like *kukɪta* and *kuya* (see 9.2.3).[236]

(50) *mbúya ílɪma kung'ǒnda,*
mbuya a-i-lɪm-a ku-mu-gʊnda
NCP1a.grandmother SM3SG-PRS-cultivate-FV LOC17-NCP3-field
'the old lady (lit. grandmother) is working at the field

manyáyi ílwala
manyayi a-i-lwal-a
CONC SM3SG-PRS-be.ill-FV
even though she is ill'

(51) *fidóngi fyéne kumánya vayandikísi"bure"*
fi-dongi fi-ene kumanya va-yandikis-ili bure [waka]
NCP8-pill acp8-(it)self CONC SM3PL-write-PRF free
'(we have to pay for) the pills themselves, event though they have written that is free'

The second prominent epistemic possibility adverb is *kwali* 'maybe'.

[235] The concessive can also be realized as *kumányáyi*, which I analyzes as the infinitive inflected with the imperfective and with a raised final vowel *-a* (similar to e.g. the past imperfective 7.4.7.3), i.e. °*ku-many-ag-a*.
[236] A concessive clause may also be marked by the conjunction *haka*.

(52) *kwáli yaitónyi kílo íkɪ*
kwali ya-i-tony-i ki-lo ɪkɪ
maybe F1-SM9-rain-F1 ?NCP7-night PROX.DEM7
'Maybe it is going to rain this night'

(53) *ngati kwali yakolele kindu pa uwu*
ngati kwali ya-a-kolel-e ki-ndu pa uwu
if maybe F1-SM3SG-find-F1 NCP7-thing LOC16 PROX.DEM3
'if haply he might find any thing thereon' [NT (1937); Mark 11:13]

I have not been able to trace the origin of *kwali*. However, it appears in several neighboring languages, e.g. Ngoni ("Neu-kingoni") has *kwali* 'I do not know' (Spiss 1904:404), and Matengo has *kwâle* 'perhaps' (Yoneda 2006:136). Tumbuka (N.21), spoken across the Lake Nyasa, also makes use of a marker similar in form and meaning to *kwali*, namely *kware* 'perhaps' (Turner 1996:237).

10.5.1.2 The subjunctive and/or lásima as markers of necessity

It was shown in section 10.4 above that verbs are not used to express core necessity in Manda. Instead, alternative ways of expressing both deontic and epistemic necessity are used, to which we will turn our attention in this section.

To start with, there is an additional tactic of expressing deontic necessity, namely by inflecting the main verb with the subjunctive conjugation (cf. 7.5.1). According to Nurse & Devos (forthcom.), this is a common function of the subjunctive across Bantu languages. The use of the subjunctive, unlike *-londek-* and *-yenelek-*, may be used more directly to express deontic necessity with a subjective realization of the proposition. Thus, in example (54), the speaker presents his[237] own point of view on how he wishes the addressee to organize a specific task.

(54) *mónga alʊ́táyi, yʊ́ngi ayingílʌ́yi*
mu-monga a-lʊt-ayi yʊ-ngi a-yingil-ayi
NCP1-one SM3SG-go-SBJ ACP1-other SM3SG-enter-SBJ
'one should go and the other one should come in'

However, the subjunctive is also considered as expressing a relatively weak force of obligation. To be able to express a proposition with a stronger sense of obligation, as in (55), speakers tend to add the Swahili element *lásima* in clause-initial position.

(55) *lásima fwáláy' hélméti*
lasima [Sw.] fwal-ayi helmeti [Sw.]
NEC wear-SBJ NCP9.helmet
'you must wear a helmet'

Interestingly, *lásima* is also the only element found in Manda for expressing the final flavor within the paradigm of necessity, namely epistemic necessity, which conveys that the

[237] In this specific case the speaker is a male, hence the explicit choice of pronoun.

proposition holds a high level of certainty. Note that the conjugation of the predicate is indicative in these constructions and not subjunctive as with the deontic constructions.

(56) *lásima abítí' kukanísa*
lasima [Sw.] a-bɪt-ili ku-kanisa [Sw.]
NEC SM3SG-go-PRF LOC17-NCP9.church
'she must have gone to church'

(57) *lásima limbóyáli líyí' lépe panyúmba*
lasima [Sw.] li-mboyali li-y-ili lepe pa-nyumba
NEC NCP5-cat SM5-be-PRF NEG LOC16-NCP9.home
'the cat must not be in the house' {I have been looking everywhere}

Thus, a construction of epistemic necessity in Manda basically consists of a regular and indicative proposition where *lásima* is added to signal the speaker's strong assessment that the state of affairs expressed in the proposition holds.

What is the origin of these alternative markers and how did they get recruited into the modal domain? With regard to the subjunctive form, it is inherited in Manda (7.5.1). The specific function of expressing deontic modality is most probably also indigenous to Manda, given the strong cross-Bantu tendency to use this form for this function as shown in Nurse & Devos (forthcom.). It is also, more specifically, a common function of the subjunctive in this area as demonstrated in Ngonyani (2013a), who discusses the function of the subjunctive with regard to Kisi, Ngoni and Ndendeule (N.101). Secondly, the marker *lásima* is a borrowing from Swahili *lazima* with a similar functional range. That *lásima* is a Swahili loan is clear from the fact that this word was originally also borrowed into Swahili from Arabic *lāzim(an)* 'necessary' (see Schadeberg 2009). There are no traces of an original form being used in Manda. In fact, an original form for expressing this category seems to be lacking altogether in the area. Instead, several of the neighboring languages to Manda appear to use the construction with reflexes of *lazima* as well.

10.6 Summary and conclusions

This chapter has been devoted to the subject of how verbs have been recruited to express modality in Manda. Modality has here been conceptualized as a semantic space consisting of the paradigmatic variation of possibility and necessity intersecting within four subdomains of modal flavors. Table 10.5 summarizes the range of the various modal verbs within this semantic space.

		Part.-internal	Part.-external	Deontic	Epistemic
Possibility					
	-hotol-	yes	yes	yes	yes
Necessity					
	-lond-	yes	no	no	no
	-londek-	no	yes	yes (?)	no
	-yenelek-	no	yes	yes (?)	no

Table 10.5. Semantic range of modal verbs in Manda

As described in this chapter, and summarized in this table, there is a stark contrast between the domain of possibility and the domain of necessity with regard to the semasiological development and change associated with a particular sign. With regard to the domain of possibility, the extensive polysemic behavior and semasiological development of the verb *-hotol-* were shown. It was argued that it first developed from a lexical verb 'pierce' and 'overcome, overpower' to become a modal verb through semantic generalization. Secondly, it has been shown that it evolved even further within the domain of modality, from expressing dynamic and pre-core modality to expressing the more attitudinal categories of deontic and epistemic core modality. It has been shown through both semantic and syntactic investigations that this latter evolution occurred through a joint process of subjectification and grammaticalization. Consequently, a more speaker-oriented reading eventually resulted in *-hotol-* acquiring a new status as a more developed auxiliary verb, and thus created a new, divergent form-meaning pair. Interestingly, the formal shift appears to have taken place in tandem with the advancement of *-hotol-* to a core modal rather than at the pre-core modal stage.

Such advanced developments cannot be found in the domain of necessity. Instead, several different verbs, namely *-lond-*, *-londek-* and *-yenelek-* (as well as various other tactics), are employed in order to express the different modal flavors. Moreover, the verbs that have been recruited for functions within this domain show fewer indications, if any, of additional conventionalized semantic and syntactic change. Although both *-yenelek-* and *-londek-* may be used to express a deontic force and thus verge on the status of core modal markers, this is not represented in any change in the status of these verbs in relation to their etymons. Thus, *-yenelek-* and *-londek-* are arguably exposed to subjectification but this sense is not salient enough to have affected the structural status of these verbs, i.e. it appears that they have yet to be reanalyzed. This ambiguous status is represented with a question mark in the table.

There is in general a lack of formal traces of any of the modal verbs being reconceptualized in comparison with other auxiliaries. This concerns not only the necessity verbs but also *-hotol-*, which despite its advanced semantic development through all modal flavors, and its increase

in subjectification and selectional relaxation, shows few morpho-syntactic indications of reanalysis (in comparison to English modals, for instance). Moreover, there are no structural diagnostics singling out *-hotol-* as a pre-core (dynamic) modal marker from its lexeme. This is an issue raised in the discussion of modal verbs in other Bantu languages as well, i.e. in Bostoen et al (2012) and Kawalya et al (2014) and stands out in comparison to other areas of Bantu verbal structure, which are renowned for a rapid pace of formal grammaticalization (see the discussion in chapter 6.3.5). According to Krug (2011), this has to do with the fact that modal verbs are semantically "more weighty" than auxiliaries expressing other notions such as tense and aspect. That is, they are less abstract and formulaic and thus stand closer to lexical verbs. This explanation is also consistent with the more general note by van der Auwera & Plungian (1998:115) that semantic change within the modal domain is primarily connected with gradual semantic shifts rather than formal alteration.

This relatively high degree of "lexicality" might in turn be connected to the exposure of Manda to contact-induced change; we have seen instances of this both in the discussion of the Manda data and also with regard to neighboring languages. As discussed in section 10.3.2.3, several of Manda's neighboring languages use *-wez-*, borrowed from Swahili, as a marker of possibility. This appears to have either replaced or hindered a further evolution of *-hotol-* into a more generalized core modal meaning. Manda is not affected by this phenomenon (or at least this is not yet the case). Manda is, however, just as exposed to Swahilization as any of its neighbors. As seen in section 10.4.1, it has also borrowed a modal expression from Swahili into the necessity domain, namely *lásima*.[238]

Borrowing in the domain of modality has also been reported for other Bantu languages, including by Devos (2008b, forthcom.), Gluckman et al (2017) and Deogratias Kawalya (pers. comm. 11-01-17).[239] According to Matras (2007; see also Friedman 2012), modals are cross-linguistically the most likely category within the verbal structure of a language to be borrowed. Within the domain of modality, in turn, markers of obligation, followed by "necessity" (i.e. epistemic necessity in our terminology) are most commonly exposed to contact influence. This means that the use of the borrowed *lásima* in Manda is consistent with a more general cross-linguistic pattern as well.[240]

[238] Interestingly, it is not only in Swahili – and as a consequence other East African languages – where *lāzim(an*) has been borrowed. As shown by Matras (2007), other languages in contact with Arabic, e.g. Domari, have also borrowed this particular element.

[239] The phenomenon of extensive borrowing in this domain might partly be an explanation as to why the topic of modal verbs in many cases appears to have been a neglected subject in the description of Bantu languages.

[240] Another possible explanation for the more extensive set of modal markers, as well as the borrowing in the necessity domain in Manda, could arguably be the fact that this modal force expresses relatively stronger propositions. Thus, in relation to the original subjunctive, there might have been a motivation to: a) recruit *-londek-* and *-yenelek-* in order to express a relatively more mitigated, less face-threatening obligation; and b) to borrow *lazima* for the opposite reason, namely to strengthen the force of the proposition.

11 Negation

11.1 Introduction

Manda stands out typologically from a cross-Bantu perspective because it lacks inflectional negation strategies. As shown in Nurse (2008:44, 179-187), Güldemann (1999) and Kamba Muzenga (1981) negation is canonically, marked with verb-internal morphemes in Bantu, i.e. with formatives prefixed to the verbal stem. These negative morphemes are generally considered as old and some of them have even been reconstructed for Proto-Bantu, e.g. by Kamba Muzenga (1981). Nurse (2008:188) discusses two re-occurring sets of such negative formatives that are found in complementary distribution. The first is a *primary* negative marker that serves as a standard negator, the other a *secondary* negative marker that is devoted to other non-standard contexts of negation. Although Manda lacks negative prefixes, it will be shown that it has two categories of negators that match with these categorizations in terms of distribution. Moreover, negative constructions in Bantu are also known to be prone to change, as shown in work such as Güldemann (1996: 261-284, 1999), Nurse (2008:194-196, 291-292) and Givón (1973, 2001:382-383). And Manda is a good example of this. As will be seen in this chapter, the language has an innovative set of markers of different shapes, syntactic positions and etymologies in use for the negative paradigm. Several different negators are used in Manda. In addition to this, there is variation in these expressions both between different competing constructions in a single domain and within the constructions themselves.

The purpose of this chapter is to disentangle all these different forms and functions and to account for both their origin and their development within the negative paradigm, and to explore how they, in turn, have affected the general linguistic character of synchronic Manda. The chapter starts with a discussion of standard negation, which is similar in function to Nurse's (2008:188) primary negation but does not appear verb-internally. It continues with an account of an auxiliary construction that, in turn, is reminiscent of Nurse's category of secondary negation. A less discussed negator, the existential negative, is also described. Finally, two additional special negators are discussed.

11.2 Standard negation *lépa/hé*

As mentioned in the introduction, standard negation is typically expressed in Bantu with a formative prefixed to the main verb of a clause. This, however, is not the case in Manda, where the standard sentential negator consists of a free-standing element occurring after the main verb. This element may be one of two distinct forms, i.e. either *lépa* – occasionally pronounced as *lépe* or even *lépi* – or *he*. Although a prefix is prototypically more common in Bantu, Devos & van der Auwera (2013) and Nurse (2008:182-183, 289) have shown that post-verbal negative marking is also a prominent tactic of negation. 35% of Nurse's sample of Bantu languages have what he refers to as a "verb-final negative", of which 25% are independent particles as in Manda (see Nurse 2008:289 for a description). In the most extensive cross-Bantu study of these post-verbal markers – i.e. Devos & van der Auwera (2013) – it is concluded that this negation tactic is especially prevalent in Western Bantu (see also Nurse 2008:57). However, as described in Nurse (2008:57, 180), there is also a cluster of

languages from different Guthrie zones – N10-20, P10, G50 – spoken particularly in southern Tanzania, where the main negation strategy is expressed with a post-verbal element as well. Although these languages are sorted into different subfamilies also genetically by Nurse (1988), they are geographically adjacent to each other. Included in this linguistic area is Manda, together with several of its neighbors. Although these languages share the characteristic of having a main negator as a post-verbal element, there is still a plethora of different shapes among these markers, even within a single language. Thus, it is unlikely that there is a shared source. Even so, the syntagmatic similarity that they do share strongly suggests that they all originate from the same process of change. This process, commonly referred to as "Jespersen's cycle" (a term coined by Dahl 1979), involves an element that was initially used for reinforcing negative expressions turning into the negative marker itself, as described by van der Auwera (2009). This means that there are reasons to believe that these markers were initially recruited to reinforce a previously existing negator (presumably a verb-internal prefix) but at a later stage were reanalyzed as the negator itself. The purpose here is to account for how both *lépa* and *hé* function as negators and how they got recruited into this function in Manda.

In section 11.2.1, I will give a description of the form and function of both *lépa* and *hé* in synchronic Manda. As will be seen, they are almost always used for the same functions. The last part of this section will address the differences – albeit subtle – that exist between these two markers. The following two sections will focus on the origin and development of these post-verbal negators. The main hypothesis underlying the proposed reconstruction is that both forms have been recruited into functioning as standard negators through the Jespersen's cycle scenario of grammaticalization.

11.2.1 Form and function

The realization of the post-verbal standard negator varies in Manda between two different elements, namely *lépa* and *he*.

(1) *ning'ána lépa afísa wa usaláma*
ni-mu-gan-a lepa afisa wa usalama [Sw.]
SM1SG-OM1SG-like-FV NEG NCP1a.security officer
'I don't like the security officer'

(2) *nénga namanyí' hé ngáti yanilémbáyi kitábu*
nenga ni-a-many-ili he ngati ya-ni-lemb-ayi ki-tabu [Sw.]
PERS1SG SM1SG-P2-know-P2 NEG that F1-SM1SG-write-F1 NCP7-book
'me, I didn't know that I would write a book'

There are some minor differences between the two markers, which will be further discussed in section 11.2.1.1. However, in general they appear in free variation. With regard to form, both of them are uninflected. Whereas the final vowel of *lépa* is often raised to a higher front realization, rendered either as *lépe* or *lépi*, *hé* is left unaltered. Moreover, due to haplology the form *lépa* is often shortened to *lé*' before constituents consisting of a /p/ as the onset of the initial syllable. Similarly, the final syllable of theperfect suffix is omitted in constructions where it precedes *lépa*.

(3) *agóna lé' pa-kitánda*

a-gon-a	lepa	pa-ki-tanda	[ndángáti
SM1SG-lie.down-FV	NEG	LOC16-NCP7-bed	NCP9.bed]

'she is not lying down on the bed'

(4) *atumbwí' lépa kulóva dominíka ya gólo*

a-a-tumbul-ili	lepa	ku-lov-a	dominika	ya	golo
SM3SG-P2-begin-P2	NEG	INF-fish-FV	NCP9.week	CP9	yesterday

'he didn't start fishing last week'

With regard to position, the post-verbal marker is strongly linked to the "Immediately After the Verb" (IAV) position (Hyman & Watters 1984), where it has scope over either the verb alone or the whole proposition, as illustrated in (5) and (6). This link is so strong that it even breaks up auxiliary constructions and other periphrastic double verb constructions, as exemplified in (7) and (8). Thus, even though the second verb of these constructions is arguably the main verb semantically, expressing the main event of the proposition to be negated, *lépa/hé* still targets the first verb syntactically.

(5) *Kóvi augána ndíma, léma ndíma ung'ána*

Kovi a-u-gan-a		mu-lıma	lema	mu-lıma	u-mu-gan-a
Kovi SM3SG-OM3-love-FV		NCP3-land	but	NCP3-land	SM3-OM3sg-love-FV

'Kovi likes the land, but the land

lépi	*Kóvi*
lepi	Kovi
NEG	Kovi

doesn't like Kovi'

(6) *nimányí lépe ngáti yabíti kupolísi*

ni-many-ili	lepe	ngati	ya-a-bıt-i	ku-polisi [Sw.]
SM1SG-know-PRF	NEG	if	F1-SM3SG-go-F1	INF-police

'I don't know if he will go to the police'

(7) *nabıtí' hé kukína, lího lanisumbuláyi*

ni-a-bıt-ili	he	ku-kina-a	li-iho	li-a-ni-sumbul[humbus]-ayi
SM1SG-P2-go-P2	NEG	LOC18-play-FV	NCP5-eye	SM5-P.I2-OM1SG-disturb-P.I2

'I didn't go to play, my eye was disturbing me'

(8) *ahótóla hé kutéléka gwáli wa máyáwu*

a-hotol-a	he	ku-telek-a	gwali	wa	ma-yawu
3SG-can-FV	NEG	INF-cook-FV	NCP14.*ugali*	CP14	NCP6-cassava

'she can't cook cassava *ugali*'

The post-verbal marker surfaces in a wide variety of contexts and with a wide range of negative functions. Typically, and primarily, it is used to express standard sentential negation as defined by Miestamo (2005) and Dahl (2010). That is, *lépa*/*hé* is used to negate main declarative verbal clauses prototypically connected to finiteness and with scope over the

whole proposition. Consequently, *lépa/hé* surfaces with all constructions within the whole indicative TA paradigm. (See section 11.3 for prohibitive, subjunctive and other non-indicative contexts where *lépa/hé* is not used.)

(9) *uniwéne lépa nikımbíléye?*
u-ni-won-ili lepa ni-kımbıl-eye
SM2SG-OM1SG-see-PRF NEG SM1SG-run-P.I1
'didn't you see me running?'

(10) *akayingí' lépe mugáti*
a-ka-yingil-ili lepe mu-gati
SM3SG-P1-enter-P1 NEG LOC18-inside
'she didn't go inside'

(11) *tilímí' lakíni tapatí hé máyáwo*
ti-lım-ili lakini [koma] ti-a-pat-ili he ma-yawo
SM1PL-cultivate-PRF but SM1PL-P2-get-P2 NEG NCP6-cassava
'we have cultivated, but we didn't get any cassava'

(12) *wóna ubéla kugíníka vándu háka masómo gáko*
wona u-bel-a ku-ginik-a va-ndu haka ma-somo ga-ako
if SM2SG-refuse-FV INF-respect-FV NCP2-people even NCP6-study ACP6-POSS2SG
'If you refuse to respect people, even your studies,

gausóma ága gáya lépa na malúmbu
ga-u-som-a aga ga-y-a lepa na ma-lumbu
REL6-SM2SG-study-FV PROX.DEM6 SM6-be(come)-FV NEG COM NCP6-meaning
those things that you are studying are not going to have meaning

na yaufíki lépe pátáli
na ya-u-fik-i lepe pa-tali
COM F1-SM2SG-arrive-F1 NEG LOC16-long
and you will not reach far'

However, *lépa/hé* surfaces as a negator in several non-main or non-standard contexts as well, sometimes in competition with other negative markers (as will be apparent in other parts of the chapter). Here, *lépa/hé* also occasionally departs from its rigorous syntagmatic IAV position.

To begin with, *lépa/hé* is also employed for negation in non-verbal negation predicates. In an attributive clause, *lépa/hé* may occur in constructions both with a copula as in (14), (15), and without, as in (13), which corresponds to the general pattern in Manda: that a copula verb is optional in these clause types. Interestingly, the position of *lépa/hé* also shifts from the pattern described above. Here, *lépa/hé* occurs immediately after the nominal phrase constituting the negated predicative, rather than after the (copula) verb. This deviation from the canonical IAV pattern will be addressed further below.

(13) *dádi wáko lépe*
dadi u-ako lepe
NCP1a.father ACP1-POSS2SG NEG
‘(I’m) not your father’

(14) *kwa ndáva ya njála ténga ta vakówósi lépa*
kwa ndava yi-a njala tenga ta va-kowosi lepa
CP17 NCP9.reason CP9 NCP9.hunger PERS1PL 1PL.a NCP2-sly NEG
‘because of the hunger we are not sly’

(15) *makɪtíku gáyí’ wíchu lépe pála*
ma-kɪtɪku ga-y-ili wichu lepe pala
NCP6-arrangement SM6-be-PRF good NEG DIST.DEM16
‘the arrangement is not good there’

The markers *lépa/hé* may also be used for negating possession. Here, the position of the negator depends on whether the construction is formed with a copula (inflected for TA) or consists of only the comitative marker *na*. In the latter case, *lépa/hé* ends up after the possessed entity, in a similar fashion to the attributive clauses above. However, in constructions with the copula, *lépa/hé* stands in IAV position, as in example (17).

(16) *tína lihéngu lépe té’ tá vagógólo*
ti-na li-hengu lepe tete ta va-gogolo
1PL-COM NCP5-work NEG PERS1PL SM1PL.a NCP2-old
‘we don’t have any work, we old folks’

(17) *nála wa kavílı ayí’ lépe na mwána*
mu-dala wa ka-vılı a-a-y-ili lepe na mu-ana
NCP1-wife CP1 ACP12-two 3SG-P2-be-P2 NEG COM NCP1-child
‘the second wife had no child’

Other less standard clauses where *lépa/hé* occurs include locative clauses (18), existential clauses (19) (cf. section 11.4), relative clauses (20), and in the apodosis of conditional constructions (21) (cf. section 11.3).

(18) *mbóga íyí’ lépe kunyúmba*
mboga i-y-ili lepe ku-nyumba
NCP9-foodstuff SM9-be-PRF NEG LOC17-NCP9.home
‘there’s nothing to accompany the ugali at home’

(19) *ah, matánga mwándi gayí’ lépa, básı, vavıkí’ mábíhı!*
ah ma-tanga mwandi ga-a-y-ili lepa basi [Sw.] va-a-vık-ili ma-bıhı
ah NCP6-door far.past SM6-P2-be-P2 NEG thus SM2PL-P2-put-P2 NCP6-tree
‘ah, there were no doors in the old days, so (instead) they put trees!’

(20) *múndu ywaibíta lépa njógo wángu*
mu-ndu ywa-a-i-bɪt-a lepa mu-jogo u-angu
NCP1-person REL1-SM3SG-PRS-go-FV NEG NCP1-friend ACP1-POSS1SG
'the person who isn't going is my friend'

(21) *kuvyáyi ukotó' kulíla, ngatikupíliki lépa*
kuvyayi u-koto ku-lɪl-a nga-ti-ku-pɪlɪk-ili lepa
COND SM2SG-NEG2 INF-cry-FV COND-SM1PL-OM2SG-hear-COND NEG
'if you hadn't cried, we hadn't heard you'

Finally, *lépa/hé* is also the negator used in interrogative clauses in synchronic Manda.

(22) *mbóna vatuwóna lépa*?
mbona va-tu-won-a lepa
why SM3PL-OM1PL-see-FV NEG
'why don't they see us?'

As described above, *lépa/hé* typically occurs in a position directly following the main verb but this position is not totally fixed and may be switched. Crucially, this shift is connected to whether the purpose is to negate the whole proposition or specifically mark out a single constituent. This means that there is a difference in the reading between *lépa/hé* standing in IAV position or after another constituent with regard to whether it has scope over the whole proposition or over a specific constituent. As pointed out by Ngonyani (2003:86-7) for the cognate negator in Ngoni, this is most obvious when *lépa/hé* is employed for contrastive focus. In such cases, it is placed just after the element being contrasted, e.g. a complement verb and a possessive pronoun, as in the following examples.

(23) *nénga nihícha kugóna lépe, nihícha kuhénga lihéngu*
nenga ni-hich-a ku-gon-a lepe ni-hich-a ku-heng-a li-hengu
me SM1SG-come-FV INF-sleep-FV NEG SM1SG-come-FVINF-work-FV NCP5-work
'I have come not to SLEEP, I have come to work'

(24) *hínu, nyáma íyɪ, ikayíli yítu lépa, ya vándu*
hɪnu nyama ɪyɪ i-ka-y-ili yi-itu lepa ya va-ndu
now NCP9.meat PROX.DEM9 SM9-P1-be-P1 ACP9-POSS1PL NEG CP9 NCP2-people
'now, this meat is not OURS, (but) of others'

Similarly, when it is the specific inherent semantics of a constituent that is negated, rather than the whole proposition – a phenomenon paraphrasable to lexical-derivational negation in other languages – *lépa/hé* also shifts to a position after that constituent. This is most apparent in nominal-predicative clauses like (15) above. However, it also occurs with verbal predications in Manda. For instance, in example (25) below, the predicate verb and the proposition itself both hold true as the subject does engage in the act of sensing something. Instead, it is the sensation itself that is polarized. Consequently, *lépa* is not positioned in IAV position but after the element encompassing the sensation, *-nofu* 'well'.

(25) *ayiyúfwana nófu lépa*
a-yi-yufwan-a mu-nofu lepa
SM1SG-REFL-listen-FV NCP1-well NEG
'she doesn't feel well' ~ 'She feels not well/unwell'

In the same way, both (26a) and (26b) are acceptable sentences and express the same information. However, tentatively they seem to be varying slightly in reading with regard to which constituent is negated, the complement noun or the predicate verb.

(26) *domaníka yíla nilɔ́ta kusáli kuSántómasi*
domanika yıla ni-lɔt-a ku-sali [Sw.] ku-Sántomasi
Sunday DIST.DEM9 SM1SG-go-FV INF-pray LOC17-Saint Thomas
'at Sunday, I went to pray at Saint Thomas…

a. *kwayí' kíndu lépe*
ku-a-y-ili ki-ndu lepe
LOC17-P2-be-P2 NCP7-thing NEG
…there was *nothing* (special)' (just praying)' {negating 'thing'}
/
b. *kwayí' lépe kíndu*
ku-a-y-ili lepe ki-ndu
LOC17-P2-be-P2 NEG NCP7-thing
…there *was not* a thing (except for praying)' {negating 'was'}

Besides functioning as negators, both *lépa* and *hé* are also used for other (negative) expressions. Firstly, they are both used as a negative exclamation marker or answering particle 'no'.

(27) *koma ajowa: 'Lepa'*
koma a-jow-a lepa
but SM3SG-say-FV no
'but he answered: "No"' [NT (1937); Matthew 13:29]

Moreover, both *lépa* and *hé* are employed in tag questions (example (28) being adapted from Riedel & Patin 2011) and other kind of "pro-sentences", i.e. "sentences with the same propositional content as the utterance of the preceding context" (Bernini & Ramat 1996:89, cited in Veselinova 2013:118).

(28) *iyéléwa mána yaki kíki,*
a-i-yelew[many]-a maana [Sw.] yi-aki kiki
SM3SG-PRS-understand-FV meaning SM9-POSS3SG what
'He understands what it means,

<u>iyéléwa</u> hé?
a-i-yelew[many]-a he
SM3SG-PRS-understand-FV NEG
doesn't he?'

(29) *niyenaléka kúlya, ngáti lépe yanífwi na njála*
ni-yenelek-a ku-ly-a ngati lepe ya-ni-fw-i na njala
SM1SG-be.fitting-FV INF-eat-FV if NEG F1-SM1SG-die-F1 COM NCP9.hunger
'I must eat, if not I will die with hunger'

The connection between *lépa/hé* and these disparate functions will be further explored in the sections 11.2.2 and 11.2.3. Before that, however, a short discussion of the difference – or rather the lack of difference – between *lépa* and *hé* is warranted.

11.2.1.1 A note on the (lack of) difference between lépa and hé

As stated initially, and subsequently shown through the examples, both *lépa* and *hé* are employed as standard post-verbal negators in Manda. In addition, both *lépa* and *hé* can be used as negative interjections and as pro-sentences. As will be further discussed in the sections below, this in turn also suggests that they have been recruited as negators through a similar pathway of grammaticalization.

These negators behave remarkably similarly. Moreover, given that all my informants use both *lépa* and *he*, I consider it unlikely that the variants reflect a dialectal difference in Manda, as suggested for the cognate forms in Ngoni by Ngonyani (2003:86). Nor does a prosodic explanation – somehow connected to *lépa* being bisyllabic and *hé* monosyllabic – hold. On the contrary, there are several examples in which *lépa* and *hé* occur interchangeably and negate almost identical constructions.

(30) *pícha yáki ikawóka hé,*
picha [Sw.] yi-aki i-ka-wók-a he
NCP9.picture SM9-POSS3SG SM9-CONS-depart-FV NEG
'her picture didn't go away

itáma múmútu, ikawóka lépa
i-tam-a mu-mu-tu i-ka-wók-a lepa
SM9-sit-FV LOC18-NCP3-head SM9-CONS-depart-FV NEG
it is stuck in my head, it didn't go away'

(31) *gála malupíya gála góha agakumbatíli yómbi*
gala ma-lupiya [Sw.] gala ga-oha a-a-ga-kumbat-ili yombi
DIST.DEM6 NCP6-money DIST.DEM6 ACP6-all SM3SG-P2-OM6-embrace-P2 PERS3SG
'all that money that he took

apéléka lépi kuserikáli,
a-pelek-a lepi ku-serikali [Sw.]
SM3SG-bring-FV NEG LOC17-NCP9.government
he didn't bring it to the government,

apéléka hé kuhalmasháuri
a-pelek-a he ku-halmashauri [Sw.]
SM3SG-bring-FV NEG LOC17-NCP9.district.office
he didn't bring it to the district office'

What examples like these suggest is rather the benefit of having two near synonyms, as this allows for alternation between one form and the other, which, in turn, helps to avoid reiterated content. Thus, there might be a stylistic and rhetorical reason in Manda for maintaining a system with two separate standard negators. Moreover, this pattern is not exclusive to Manda. According to Devos & van der Auwera (2013), it is not unheard of cross-Bantu for a language with post-verbal negation marking to alternate more or less freely between two different particles. Languages spoken in vicinity to Manda with such an alternation include Tumbuka (N.21; Kiso 2012:190) and Ndamba (G.52; Novotná 2005:136).[241]

Nonetheless, despite all these similarities, there are at least three differences between *lépa* and *he*, as summarized in Table 11.1 below. Firstly, *lépa* is more generally used. (This is reflected in the relatively greater number of examples with *lépa* in this chapter). Secondly, *hé* does not occur in the historical sources. This could either mean that it was not used, or was less used at a particular point in time, or that it was excluded for some other reason (e.g. register).

[241] Another example of such a language is Bira (D.32) in Devos & van der Auwera (2013).

	High(er) frequency[242]	Occurs in chronolects	Means 'never'
lépa	yes	yes	yes
hé	no	no	no

Table 11.1. Differences in the distribution of *lépa* and *he*

Thirdly, and finally, there appears to be a subtle pragmatic-semantic difference in the sense that *lépa*, unlike *he*, may carry a stronger sense of denial that also holds through time, i.e. something similar and translatable to 'never' in English.

(32) *niwáhí' lépa kulwála maleríya*
ni-wah-ili [Sw.] lepa ku-lwal-a ma-leriya [Sw.]
SM1SG-experience-PRF NEG INF-be.sick-FV NCP6-malaria
'I have NEVER suffered from Malaria'

(33) *Sospéter apíga lépa*
Sospeter a-pig-a [Sw.] lepa
Sospeter SM3SG-PRS-call-FV NEG
'Sospeter NEVER calls'

Arguably, this adds an extra layer of emphasis to the proposition. It should be stressed, however that this is a subtle difference, and on most occasions, *lépa* and *hé* are treated inter-changeably.

11.2.2 Origin

As mentioned in the introduction, there are reasons to assume that the use of *lépa* and *hé* as post-verbal negative markers originated in processes that were part of a Jespersen's cycle scenario. This issue will be further addressed in the next section. However, it suffices to mention here that Veselinova (2014; see also Croft 1991), has shown that negative interjections and other kinds of proposition-external negative particles are common sources for standard negators cross-linguistically. Furthermore, one of the two most typical sources of a post-verbal negator cross-Bantu has been traced by Devos & van der Auwera (2013) to be a particle expressing 'no'. And, as already described in the previous section, both *lépa* and *hé* can be used for such expressions as well in Manda.

Moreover, as seen in Table 11.2 below, this is a pattern not exclusively restricted to Manda. Several of the neighboring languages also use (reflexes of) either *lépa* or *hé* as - at least - a negative interjection/tag-particle.[243] As will also be further discussed in the next section, for many of these languages, *lépa* and *hé* also function as post-verbal negators. (Note, however, that the equivalent of *hé* in Pangwa and Mpoto appears not to be used as a negative interjection).

[242] A search in my corpus gave 1200 matches for *lepV* and 110 for *he*.
[243] *he* is sometimes represented as a two-vowel *hee*, in Ngoni (Ngonyani 2003:86) and Mpoto (Botne pers. comm.).

Language	Code	*hé*		*lépa*		Sources
		as negative interjection	as post-verbal negator	as negative interjection	post-verbal negator	
Pangwa	G.64	no	yes(?)[244]	no	no	(Stirnimann 1983), Mwasanga (pers. comm.)
Kisi	G.67	yes	yes	no	no	Ngonyani (2011:135-140)
Nyakyusa	M.31	no	no	no	no	(Persohn 2016, pers. comm.)
Ngoni	N.12	yes	yes	yes	yes	Ngonyani (2003:86)
Matengo	N.13	no	no	no	no	(Yoneda 2000; pers. comm.)
Mpoto	N.14	no	yes	yes	yes(?)[245]	Botne (pers. comm.) Makwaya (pers. comm.)

Table 11.2. Usage of *lépa* and *hé* reflexes in neighboring languages to Manda

This strong polysemic relationship - together with the fact that negative particles tend to get grammaticalized into negators and especially post-verbal negators in Bantu - thus points towards that both *lépa* and *hé* functioned as some kind of negative particles at the moment when they were recruited as standard negators. How this may have happened is the subject of the next section. With this mentioned, it is possible, even probable, that *lépa,* especially, has a

[244] In Pangwa, the cognate (?) *chee* may optionally be used to reinforce the standard inflected negation (Mwasanga pers. comm. 22-08-16). It might thus be a remnant of the first stage of a Jespersen's cycle. See further discussion in section 11.2.3.1.

[245] In Mpoto there is actually some indications for that *lepa* may be used to reinforce *hee* as in this example provided to me by Robert Botne (pers. comm. 09-08-16): *va-wanj-iti ku-tila mewa va-hwet-iti hee n-gou hy-ao, lepa*! 'they started running likewise not wearing any of their clothes, not at all!'.

semasiological background stretching further back than being a negative particle. For example, Veselinova (2014) has shown that it is common for pro-sentences and negative interjections to be derived from negative existentials, in turn originating from either locative constructions or inherently negative lexemes (see also section 3). With this in mind, it is worth noting that *lépa* partly has a phonemic shape remnant of a locative marker of class 16. More intriguingly, there is a verb *-lepalel-* in Manda which means 'fail', i.e. an inherently negative verb. In Mozambique Ngoni, the cognate verb stripped of the continuative extension and thus surfacing as *-lep-* is actually used as a negative auxiliary (in preverbal position), according to Kröger (2011). This is apparently also the case in Mpoto (pers. comm. with Robert Botne 09-08-16). There are, however, no traces in the Manda data of such meanings or of further semantic or structural developments.

11.2.3 Reconstructed path of development

In the previous section, both *lépa* and *hé* were reconstructed as originally being negative particles. The following section aims at mapping out the pathway of change that turned these forms into standard negators. The section is divided into two subsections. In section 11.2.3.1, I will address how these markers can be understood as being derived through a Jespersen's cycle process. In section 11.2.3.2, I will account for the indications of a syntactic change where *lépa* has become more closely associated with the main verb.

11.2.3.1 The Jespersen's cycle scenario

The Jespersen's cycle refers to a grammaticalization process of negative marking. It is generally understood as consisting of a set of interrelated and subsequent stages as decribed in Dahl (1979; 2010), van der Auwera (2009) and Devos & van der Auwera (2013). In a first stage (**stage I**), an element originally expressing something other than (proper) negation is recruited to co-occur with the original negation marker. This is done in order to add extra emphasis or to strengthen the negation of a proposition. In a later stage (**stage II**), this element loses its emphatic reading and it is reanalyzed as an obligatory and neutral part of the negation strategy, together with the original negator. In the final stage (**stage III**), the original negation marker disappears, which leaves the former emphatic element as the new sole negator. Hence, the cycle is closed and the language is back to once again marking negation with a single element. Importantly, however, the negator now has a different form and is usually in a different position. This reflects its previous meaning(s) and functions both before and within the cycle. The underlying hypothesis here is that the grammaticalization process of a Jespersen's cycle has affected Manda historically. Such a hypothesis accounts for why Manda has this rather non-canonical (from a Bantu perspective) non-inflected standard negation system. At the same time, we saw in the examples in section 11.2.1 that the negation strategy only consists of a single post-verbal particle and thus Manda must be in a state where such a cycle is closed. However, there are traces from both the historical records and from the comparative data that offer clues of earlier stages of a Jespersen's cycle in Manda. This is more the case with regard to *lépa* and less so with regard to *he*.

With regard to *lépa*, there are examples from the chronolects where it occurs in a discontinuous negation construction with a negative prefix of the form *na-*.[246]

(34) *ngosi nakulinganila lepa kwifwika pa mutu*
mu-gosi na-ku-linganil-a lepa ku-yi-fwik-a pa-mu-tu
NCP1-man NEG-INF-favor-FV NEG INF-REFL-cover-FV LOC16-NCP3-head
'a man ought not to cover his head' [NT (1937); 1 Kor. 11:17]

(35) *kwa ndawa kiki mwenga mwavvene nakupawula lepa kya malinga*?
kwa ndawa kiki mwenga mwawene na-ku-pawul-a lepa kya ma-linga
because what PERS-PRON2PL 2PL-self NEG-INF-judge-FV NEG CP7 NCP6-right
'[…] why don't you judge for yourself what is right?' [NT (1937); Luke 12:57]

Examples like these are indicative of a stage II of the cycle having existed in Manda, reflecting an earlier stage where negation in Manda was marked in a doubled fashion with a negative *na-* prefix together with *lépa*. This in turn points toward *na-* historically being the original sole marker that later got lost. Indeed, as will be argued in section 11.5, *na-* has not even fully disappeared, as it still surfaces transparently as part of a lexicalized negative copula construction.

There are, however, some problems with such a conclusion. Firstly, although the proposed original negator is a prefix it still does not match fully with a canonical Bantu negation formative. As can be inferred from the examples, *na-* is attached to an infinitive verb rather than an inflected verb. This renders the construction "quirky" from a syntagmatic point of view, as there is no marking of TA or clause participants. Instead, such concepts must be expressed periphrastically. Furthermore, there is nothing in the examples that suggests that *lépa* adds any special reading of emphasis or similar to the proposition. This could, however, be explained in terms of *lépa* at this stage already being fully neutralized and just forming a discontinuous part of a double negation pattern. Indeed, in the majority of cases, *lépa* occurs as the sole negator even in the older sources. It is only in more marked contexts that this double construction occurs, or more precisely in mood-like or modal propositions (34) and interrogative (35) constructions. As further presented in 6.4.1.1, according to Dimmendaal (2011:148), it is common cross-linguistically for an archaism which has disappeared from main clauses to continue to surface in more marked, less frequently used contexts. It is thus conceivable that these examples convey the last retentions of the previous, original negative marker before it was totally levelled out in synchronic Manda.

This analysis is further strengthened in the light of the comparative data, and specifically in comparison with Ngoni, the language with which Manda is most closely affiliated. Although

[246] The origin of *na-* is not clear. Such a formative is not present in Manda's closest Southern Highland/G.60 neighbors Pangwa and Kisi. However, it surfaces in two other languages of this subgroup, namely Kinga (G.65; Kamba Muzenga 1981:110; Wolff 1905) and Vwanji (G.66; Eaton pers. comm. 20-04-17). It is possible that this negative prefix is a reflex of the canonical negative marker **nka* (as suggested to me by Maud Devos). Similarly, the negative *ngaa* in Matengo (N.13) could also be a reflex of **nka* (note however that *ngaa* is a free-standing particle and not a prefix).

both negative *lépa* and *hé* also exist in this language, the prefix *na-* is shown by Ebner (1939) and also Ngonyani (2003) to be more widely used as a negative marker, including in main clauses. Moreover, Ebner (1939:30), who actually refers to *na-* as the "most common" negator in Ngoni, explicitly demonstrates that a post-verbal item may be added to a construction negated with *na-* for the specific reason of "accentuating" the negation.[247] That is, it is used for constructions similar to the emphasis-adding stage of stage I, as described above. Putting the Manda and Ngoni data together thus means that there are attested examples involving *na-* in all the stages of a Jespersen's cycle. That is, *na-* occurring with a post-verbal item for extra emphasis (stage I) but also in a doubled construction with a bleached post verbal element (stage II). Finally, in stage III, *na-* does not surface at all. This is the most common stage and the default structure in synchronic Manda (and Ngoni). What this suggests, moreover, is that Jespersen's cycle in Bantu does not necessarily have to start with a traditional, inflected negative prefix, as assumed by Devos & van der Auwera (2013). The proposed stages of the development of *lépa* along the Jespersen's cycle are summarized in the table below.

***Stage I**	*na-…* (*lepa*)	↓
Stage II	*na-… lepa*	
Stage III	*…lepa*	

Table 11.3 Reconstructed stages of Jespersen's cycle in Manda

With regard to *he,* then, the picture is slightly more complicated, as this form does not appear in any of the historical data. Based on its position and its polysemy as a more general negative particle, it is conceivable that it has developed along the same route as *lépa*. This hypothesis is further strengthened with reference to Pangwa. Pangwa has a canonical inflectional standard negation. However, according to the native speaker Cyprian Mwasanga (pers. comm. 22-08-16) there is a marker *chee,* thus formally similar to *he,* which may combine with the standard negator in a post-verbal position in order to reinforce the negation, e.g. *sindilonda* 'I don't want to', *sindilonda chee* 'I (really) don't want to'. This, in turn, points toward an earlier stage (stage I) of Jespersen's cycle, which presumably came to develop further in Manda.[248]

11.2.3.2 A possible permutation?

What follows in this section is a short discussion regarding the possibility that *lépa*, as a sentential negator, might have undergone permutation – due to verbal attraction – to a rigid position next to the main verb (cf. Heine & Reh 1984:120-122; Watters 1979).

[247] Peculiarly, however, the example of such a post-verbal emphatic item is not *lepa* or *he* but *ng'a*/*ng'o*, which is actually more reminiscent of the main negator in Matengo (Yoneda 2000) and also the possessive negator in Manda (discussed in section 11.5). That *lepa* and *he* function as negators in Ngoni as well suggests that Ngoni has also passed through the whole cycle with regard to these markers and that the construction with *ng'a*/*ng'o* as emphasizers represents a new turn, i.e. a new stage I, of a reintroduced cycle.

[248] This can also be compared to the portverbal negative markers *cha(ra)* and *cha* in Tumbuka (N.21) and Tonga (N.15) respectively (Turner 1996:16).

It is typically the case that an independent post-verbal negator in Bantu occurs in one of two positions. Often it stands in IAV position, as described for *lépa/hé* in Manda. However, as described in Devos & Auwera (2013:213; see also Gibson & Wilhelmsen 2015), it may also stand clause-finally in other Bantu languages. At the same time, there are functional and structural conditions conspiring for a clause-final negator to be attracted to the main verb and consequently shift to the IAV position. Firstly, as argued by Dahl (2010), a negator tends to be placed next to the item being negated, especially when it comes to the verb. Secondly, negation is an inherently focused category, while the IAV position is typically reserved for focused items in Bantu languages, as described in e.g. Downing (2012), Downing & Hyman (2015); see also Hyman & Watters (1984) for the Grassfield Bantu language Aghem. Also, Nurse (2008:289) notes that there is a cline of post-verbal negators cross-Bantu from independent particles to clitics to inflected suffixes, which would suggest that a fixed position is an initial step in the further coalescence of these negators.

In the light of these facts, it should be mentioned that Guthrie (1948:60) offers an example of Manda negation (that has also been cited in Devos & van der Auwera 2013:230 as characteristic of Manda. In this example the post-verbal negator occurs clause-finally, after the direct object and not IAV, as would be expected given the description in section 11.2.1. Thus, compare the position of *lépa* in Guthrie's example, cited in (36), to the identical (with regard to content) synchronic example (37).

(36) *tiletiti kiβɪga lɪpa* 'we did not bring the pot' [Guthrie (1948:60)[249]]

(37) *tilétíti lépa kívígha* 'we did not bring the pot'

It should be noted, however, that Guthrie only provides this single example. Moreover, it is actually slightly anomalous for other reasons than the position of the negator. Firstly, some phonemic representations do not seem consistent with the typology of (synchronic) Manda, most crucially with regard to *lépa* itself, which is not pronounced at its usual height. It is of course also possible that the example is taken out of context and actually refers to a contrastive construction, i.e. something like 'we did not bring the POT (but the knife)'. In that case the syntax is perfectly analogous with the synchronic data in section 11.2.1. Nonetheless, it cannot be excluded that *lépa* in Manda has become more strongly bound to the main predicate and has consequently shifted from a clause-final or more free position to a stricter IAV position when marking sentence (verbal) negation.

11.3 Secondary negative *-kotok-*[250]

As mentioned in the introduction, it is common for Bantu languages to have a negator devoted to non-standard, non-indicative clauses. According to Güldemann (1999:576-577; see also Nurse 2008:194) such a negative appears canonically in directive speech acts and non-finite contexts, expressing more semantic than propositional negation, i.e. with scope over the

[249] The phonemic representation is an adapted version of the one Guthrie uses and is based on Guthrie's (1948:7) own discussion of orthography. /β/ = a bilabial fricative.
[250] Parts of this section are published in Bernander (forthcom.).

lexical stem rather than the whole proposition. In Manda, this functional slot is filled by an auxiliary verb *-kotok-* operating on a full verb in the infinitive. Following Nurse (2008:188) this will be referred to as the secondary negative marker. It is a bit unexpected that the second most prominent negator in a Bantu language consists of a verb operating in a periphrastic construction, as it is more typically marked by a verb-internal prefix in the post-initial position.[251] However, auxiliary verbs that function as negators form a salient category cross-linguistically (see Dahl 2010), especially in prohibitive constructions. This is also the case in Bantu (cf. Devos & Van Olmen 2013) and, as will be argued, *-kotok* also started its career as a prohibitive in Manda. Moreover, Güldemann (1999) convincingly argues that prefixes with this function and in the post-initial position have their origin in such periphrastic constructions.

That *-kotok-* has its origin in a verb means that in many ways it behaves similarly to the other auxiliaries in Manda that express more canonical functions like TA and modality. This means that it is possible to reconstruct its path of development through a similar set of diagnostics. As will be apparent, however, on a structural level and with regard to form, *-kotok-* has developed further than its auxiliary counterparts. Indeed, it is the most eroded and thus the most formally grammaticalized auxiliary. As argued in Bernander (forthcom.), it actually appears that *-kotok-* is moving towards a fused, affixal position in the verb-internal post-initial slot typically devoted to secondary negative prefixes cross-Bantu. Before considering this claim, however, we will more closely examine its formal characteristics and distribution.

11.3.1 Form and function

When *-kotok-* is used as a marker of negation it may either occur as a fully inflected verbal word or in a reduced form. In its full form it may be inflected in one of the two subjunctive forms, i.e. either with a final *-e* (less common) or with the suffix *-ayi*, the latter also raising the final vowel of the stem to /u/ (see 7.5.1.1). The functional range of *-kotok-* fits very well with Güldemann's (1999) typology of secondary negatives, where five specific clause types are mentioned. These are *prohibitives*, *subjunctives*, *verbal nouns (~infinitives)*, *hypotactic adverbial clauses* and *relative clauses*. With the exception of relative clauses, *-kotok-* appears in all of these clause types in Manda.

Firstly, and most prominently, *-kotok-* is used as a prohibitive. When exclusively expressing a negative directive it may also appear with the itive conjugation, as in (39).

(38) *ni ukotoke kuyananga mafuta nu mvinyo*
ni u-kotok-e ku-yanang-a ma-futa na mu-inyo [Sw.]
COM SM2SG-NEG-FV INF-damage-FV NCP6-oil COM NCP3-wine
'…and do not damage the oil and the wine!' [NT 1937; Revelation 6:6]

[251] The post-initial position refers to the slot in the verbal word immediately after the subject marker, which Manda exclusively uses to mark TAM (see Table 7.1).

(39) *mukotó kugóna*[252]
mu-koto ku-gon-a
SM2PL-NEG INF-sleep-FV
'don't sleep!'

(40) *ukakóto kuholáléla!*
u-ka-koto ku-holalel-a
SM2SG-ITV-NEG INF-think(.over)-FV
'(go away and) don't think about it!'

Unlike many other Bantu languages, which only use a negative auxiliary for negative commands (see Devos & Van Olmen 2013), *-kotok-* may also appear in non-directive as well as milder commands and obligations. For instance, it may be used in mitigated speech acts, as in (41), or in a hortative clause like (42). It can also be used to negate the *future obligative* (43).

(41) *nisʊ́ka ukótó kunipéla máwu*
ni-sʊk-a u-koto ku-ni-pel-a mawu
SM1SG-beg-FV SM2SG-NEG INF-OM1SG-give-FV NCP1.mother
'please, don't give me mother'
{to talk to in the phone, because she is sick and needs to rest}

(42) *ukotó kugénda ná múndu ʊ́yʊ, ndáva mwífi*
u-koto ku-gend-a na mu-ndu ʊyʊ ndava mu-ifi
SM2SG-NEG INF-walk-FV COM NCP1-person PROX.DEM1 because NCP1-thief
'you shouldn't hang out with him, because he is a thief'

(43) *mwakóto kutúmíla sénde jóha múgímbɪ*
mu-a-koto ku-tumil-a sende ji-oha mu-gɪmbɪ
SM2PL-F.OBL-NEG INF-use-FV NCP10.money ACP10-all LOC18-NCP14.alcohol
'You should not spend all the money on alcohol!'
{if you get a seat on the bus to Ludewa tomorrow}

The *-kotok-* complex also appears in subordinate clauses in Manda, i.e. similar to the hypotactic adverbial clauses that Güldemann (1999) refers to. Examples of such clauses are purposive clauses (44) and the protasis clause of conditionals (45).

(44) *akanfutíli kunyúma, ikotó kung'kánga*
a-ka-mu-fut-ili ku-nyuma i-koto ku-mu-kang-a
SM3SG-P1-OM3SG-pull-P1 LOC17-NCP9.back SM9-NEG INF-OM3SG-gore-FV
'he pulls him back, so that it (the bull) doesn't gore him'

[252] Note, that although the tone pattern here indicates that this a truncated version of the subjunctive 2 conjugation (SM-B-ayi with a high tone on the antepenult and the penult) the final vowel is not raised as would be expected (cf. 7.5.1.1).

(45) *kuyáy ngáti ikotúká' kudíndɔ́la mapéma…*
ku-y-ayi ngati i-kotok-ayi ku-dɪndɔl-a mapema [manyáta]
INF-be-INF COND SM9-NEG-SBJ INF-open-FV early
'if it hadn't opened early…'

Finally, *-kotok-* appears in constructions where an infinitive is negated.

(46) *kukótóka kúya wákápi*
ku-kotoka ku-y-a wakapi
INF-NEG-FV INF-be-FV ACP1.oneself
'to not be by oneself'

(47) *kukótóka kubíta*
ku-kotok-a ku-bɪt-a
INF-NEG-FV INF-go-FV
'to not go'

Summing up, it is clear that *-kotok-* is actually used in a wide range of contexts. Hence, it is a negator with a relatively broad use, beyond functioning as merely a prohibitive. The following sections will deal with the semasiological background of its evolution.

11.3.2 Origin

The verb *-kotok-* has a rather peculiar etymology. It has been reconstructed for Proto-Bantu as **-kot-ʊk-*, with the meaning 'go home from work' (Guthrie 1967-71; Bastin et al 2002). According to Schadeberg (n.d:8-9; 2002), the final VC of this verbal base is the separative or reversive extension *-ʊk-* (5.4.3.7). Thus, **-kot-ʊk-* is originally a separative or reversive derivation of the verb **-kot-* meaning 'stoop, be bent'. Its complex meaning can be understood as being derived from situations involving cultivation with a hoe, where straightening oneself (i.e. the opposite of being bent) means that it is time to stop working (and go home from the field). This meaning is still in use in some of Manda's neighboring languages, as seen in Table 8.5 and in the example from Nyakyusa below.

(48) *paapo fiki ʊgwe ʊkotwike mbɪbɪmbɪbɪ pambombo?*
paapo fiki ʊgwe ʊ-kotok-ile mbibimbibi pa-mbombo
why you SM2SG-quit-PFV fast LOC16-NCP9.work
'why did you stop working so early (lit. why did you quit and go home from work early?)'
[Nyakyusa (M.31); Mwakalinga (pers. comm. 22-01-15), Bastian Persohn (pers. comm. 25-10-2016]

Language	Code	Reflex	Translation	Sources
Pangwa	G.64	-	-	(Stirnimann 1983, Nurse and Philippson 1975)
Kisi	G.67	-*kotok*-	'stop, leave off'	Gray (forthc.:119)
Nyakyusa	M.31	-*kotok*-	'quit and go home from work'	(Felberg 1996:63)
Ngoni	N.12	-*kotok*-	'leave off, stop, cease', 'stop doing something'	Ebner (1939: 26), Nurse and Philippson (1975), Ngonyani (2003:104, 2013b)
Matengo	N.13	-*kotok*-	'leave (to do something), (off), leave (to do something)'	Nurse and Philippson (1975); Yoneda (2006:78)
Mpoto	N.14	-*kotok*-	'leave (off)'	Nurse and Philippson (1975)

Table 11.4 Lexical denotation of Proto-Bantu reflex *-*kot-ʊk*- in neighboring languages to Manda

However, for the majority of the languages in the table it appears that this rather complex meaning has shifted once again and today encompasses a more general cessative or terminative concept. This is also the case for Manda.[253] Here, the referential meaning of -*kotok*- is also more general. The meaning is 'stop, leave (off)', both in the historical records as well as in my own field data. This is exemplified below.

(49) *na gakakotwiki, na lukagwili lumbwela*
na ga-ka-kotok-ili na lu-ka-gw-ili lu-mbwela
COM SM6-P1-stop-P1 COM SM11-P1-fall-P1 NCP11-calm
'[…] and they ceased, and there was a calm." [NT (1937); Luke 8:24]

[253] It appears that the verb -*wɔy*- instead fills this meaning in Manda. It is listed as meaning 'go home from work' in TLS (1975). However, my consultants tend to use it in a broader sense of 'go home' (i.e. not necessarily from work). Interestingly, the verb -*wɔy*- stands in a relationship of complimentary distribution with the verb -*kɪlawʊk*- 'return', contrasting in usage depending on whether the goal of the motion encoded in the proposition is the home of the speaker or someplace else.

(50) *nikótwíki kukína mpíla*
ni-kotok-ili ku-kin-a mu-pila [Sw.]
SM1SG-stop-PRF INF-play-FV NCP3-football
'I have quit playing football' ~ 'I have given up (playing) football'

As exemplified in (50), there is also a preference for lexical *-kotok-* to collocate syntactically with an infinitival complement.

11.3.3 The pathway of grammaticalization

This section accounts for how *-kotok-* was grammaticalized into a negator. What the analysis will show is that the process in many instances follows a similar pathway to the one discussed for the other auxiliaries in Manda, i.e. the aspectual auxiliaries of chapter 5 and the modal verbs discussed in chapter 7. Thus, analogous diagnostics can be used to account for the grammaticalization of *-kotok-* as well. Consequently, the analysis will start with the functional-semantic diagnostics encountered – including the facts retrievable from the historical data – and go on to portray the formal ones. Finally, the analysis is related to data from neighboring languages. Interestingly, the analysis shows that *-kotok-* has undergone more formal change than these other auxiliaries.

I propose that *-kotok-* was first recruited as a prohibitive and then extended into other contexts. According to Nurse (2008:191), "negative imperatives appear to be a major conduit through which innovation occurs [in Bantu]". According to (Devos & Van Olmen 2013; see also Hopper & Traugott 2003:42), this is most probably due to the requirement of reinforcing the expressivity of both directive and negative utterances, as their pragmatic strength tends to get lost over time. Cross-Bantu studies such as Devos & Van Olmen (2013) but also more general typological examinations such as Aikhenvald (2010) and Heine & Kuteva (2007:77-78) show that a cessative verb like *-kotok-* is then typically recruited for such a prohibitive function. Thus, there are both cross-Bantu and cross-linguistically induced generalizations of conceptually (semantically and functionally) as well as formally (structurally) motivated patterns of change. Moreover, as will be seen in section 11.3.3.3, the comparative data also points towards such a path of evolution.

11.3.3.1 Diagnostics of functional-semantic change

As mentioned above, one premise governing the analysis is that the grammaticalization of *-kotok-* into a negator started out with its being used as prohibitive. It is also hypothesized that this enabled the further evolution of *-kotok-* into a wider set of negative functions. What triggered the reanalysis of lexical *-kotok-* into a prohibitive can, in turn, be found in its inherent semantics. That is, verbs like 'stop, quit' are inherently "negative implicative" (Givón (1973), in the sense that they imply that an event coded in their complement does not occur (or does not hold "truth") in reference to the time directly following that event. For instance, example (50) above (here re-introduced as (51)) not only expresses that the activity has stopped but also that is not continuing at the reference time.

(51) *nikótwíki kukína mpíla*
ni-kotok-ili ku-kin-a mu-pila [Sw.]
SM1SG-stop-PRF INF-play-FV NCP3-football
'I have quit playing football'
⊃ I do NOT play football (here and now)

Similarly, a command to 'stop' or 'quit' an activity simultaneously implies that the hearer should *not* pursue that activity any longer, i.e. what van der Auwera (2010) refers to as an "indirect prohibitive speech act".

There are several vague examples like this in the Manda data, where *-kotok-* can either be interpreted as expressing termination or "plain" negation. Indeed, it is most often the case in the chronolects, where *-kotok-* only surfaces as prohibitive, that the interpretation is ambiguous between the lexical cessative or negative imperative reading.

(52) *ukótóke kuhangáyíka na ndómi ɪsɪ*
u-kotok-i ku-hangayik-a na ndɔmi ɪsɪ
SM2SG-stop~NEG-SBJ INF-be.distressed-FV COM NCP10.news PROX.DEM10
'don't be distressed by these news' ~ 'stop being distressed by these news'

(53) *wana wadala wa Yerusalem,*
va-na va-dala va Yerusalem
NCP2-children NCP2-woman CP2 Jerusalem
'daughters of Jerusalem,

mukotoke kunililila nenga
mu-kotok-e ku-ni-lɪl-ɪl-a nenga
SM2PL-stop~NEG-FV INF-OM1SG-cry.for-APPL-FV PERS1SG
stop weeping for me ~ weep not for me […]' [NT (1937); Luke 23:28]

Consequently, these kinds of ambiguous propositions must have served as the bridging context for the invited inference of negation to be conventionalized. This generalization in meaning facilitated, in turn, the further spread into additional contexts.

Furthermore, there are examples of "switch contexts" (Heine 2002) in the synchronic data, i.e. constructions where *-kotok-* would be infelicitous if interpreted with a terminative reading. Crucially, *-kotok-* has been the subject of relaxation of selectional restrictions. This means that it may collocate with an expanded set of verbs. Firstly, it may stand with verbs of opposite semantics, i.e. inceptive verbs like *-tumbul-* 'to begin' as exemplified below.[254]

[254] Note that the subject marker for 2nd person singular is (optionally) not indexed on the verb in Manda in directive constructions. This is common in other Bantu languages as well (see Devos & van Olmen 2013) and corresponds to a general cross-linguistic pattern where the imperative form tends to be minimal in inflectional weight (see Aikhenvald 2010). See also 7.5.1.2.

(54) *kotúkáy' kutúmbúla kulóva sómba!*

kotok-ayi	ku-tumbul-a	ku-lov-a	somba
NEG-SBJ	INF-begin-FV	INF-fish-FV	NCP10.fish

'don't begin to fish'

??'stop begin to fish'

What such an utterance implies is that *-kotok-* can be used not only to denote the prevention of the continuation of an action already embarked on, but also as an exhortation to refrain from an activity altogether. Secondly, *-kotok-* can co-occur with its own etymon as an auxiliate (i.e. the second verb expressing the main event of the proposition).

(55) *ukotó kukótóka kulémba méséji*

u-koto	ku-kotok-a	ku-lemb-a	meseji [Sw.]
SM2SG-NEG	INF-stop-FV	INF-write-FV	SMS

'Don't stop writing the SMS'

Thus, *-kotok-* must have been desemanticalized, as such constructions would not have been accepted with its lexical reading. This, in turn, also means that it has expanded into a broader, more formulaic meaning of marking negation.

This semantic shift of the *-kotok-* construction is also reflected in translations. That is, it may be translated into corresponding negative constructions in Swahili (G.42; see e.g. Nurse 2008:192; Ashton 1947:70-71)[255] and English. This is also seen in verses from the New Testament (1937), where the use of *-kotok-* corresponds to the use of a negative marker in both the English and Swahili versions. The excerpt from Mark 6:50 below is an example of this.

(56) **Manda**: *mu-**kotok**-e* *ku-yogop-a*
SM2PL-NEG-SBJ INF-be.afraid-FV

Swahili: *m-**si**-ogop-e*
SM2PL-NEG-be.afraid-SBJ

English: *do **not** be afraid*

Taken together, these factors show that a semantic reanalysis has occurred and that there exists a *-kotok-* form in Manda with only a generalized negative meaning, stripped of its lexical cessative semantics.

11.3.3.2 Formal change

As argued for in the analysis above, the *-kotok-* complex has been reconceptualized, with *-kotok-* semantically changed into a negator and the second verb into the full verb of the proposition. Several formal changes have also accompanied this resemanticalization. To

[255] The corresponding negator is a prefix *si-* in the post-initial slot in Swahili.

begin with, the negative construction with *-kotok-* has been the subject of the same syntactic changes as described for the other auxiliaries in Manda, resulting in a stronger cohesion with the second verb. Thus, when the second verb is the full verb of a clause, it is, for example, banned from elision as an antecedent in anaphoric discourse. See 8.3.3.2 for a more elaborate account of this feature.

The reanalysis of the *-kotok-* construction is also marked by other kinds of features of decategorialization of what Croft (2003:258) refers to as "rigidification". For example, an adverbial may not occur between the two verbs. A sentence like (57a) is not ungrammatical but necessarily conveys a lexical cessative reading of *-kotok-*. Thus, the minimal pair of sentences in (57) are seen as mutually exclusive by the speaker, discriminating between a referential and a non-referential reading. While (57a) necessarily operates on an already started event, this is not a prerequisite for the case in (57b).

(57) a. *nilónda akotúkáy' hínu kulíma*
ni-lond-a a-kotok-ayi hınu ku-lım-a
SM1SG-wish-FV SM3SG-stop-SBJ now INF-cultivate-FV
'I wish he would stop cultivating now' {event aleady started}

b. *nilónda akotó kulíma hínu*
ni-lond-a a-koto ku-lıma hınu
SM1SG-wish-FV SM3SG-NEG INF-cultivate now
'I wish he would not cultivate now' {event yet to be started}

As already touched on in earlier sections, when *-kotok-* occurs with a negative function it must always be inflected in an irrealis form, unlike the lexical *-kotok-*, which is not restricted to a certain set of TAM inflections. This in turn entails a loss of what Lehmann (2015:146-147) refers to as "(intra)paradigmatic variability". Another reduction of the auxiliary *-kotok-* in comparison to its lexical counterpart is of course that it cannot be negated.

More interestingly, unlike the other auxiliaries, the phonological substance of negative *-kotok-* has also been exposed to change, i.e. it has undergone erosion. As already seen in several of the examples, the final syllable of the verb stem of *-kotok-*, including the suffix(es), tends to be deleted. As a result, the verb is reduced to *-koto*.

(58) *ukótó kulóngéla na nénga jínsi ɪyɪ!*
u-koto ku-longel-a na nenga jinsi ɪyɪ [mu-túndu ówʊ
SM2SG-NEG INF-talk-FV COM PERS1SG NCP9.manner PROX.DEM9 NCP3-manner PROX.DEM3]
'don't talk to me like that!'

(59) *tukotó kúnywa gímbɪ nyamuhópi*
tu-koto ku-nyw-a gɪmbɪ nyamuhopi
SM1PL-NEG INF-drink-FV NCP14.alcohol much
'we shouldn't drink too much (alcohol)'

It can be argued that this deletion of phonemic substance can be used as a diagnostic for the reanalyzed status of this negator. This is because *-koto* does not have the same independent word status as *-kotok-*. Instead, it is invariable or "defective" (Heine 1993:60-61) in the sense that losing the final syllable entails losing the possibility of being conjugated with other extensions or TAM suffixes. Moreover, this reduction of phonemic substance also marks a formal split from the lexical source, given that the default interpretation of *-koto* is as a function word of negation and not 'stop, leave (off)'.

However, it is problematic to rely heavily on erosion as a diagnostic of grammaticalization *per se*, as phonetic reduction is typical of any frequent and thus routinized expression in a language as pointed out by e.g. Lehmann (2015:135) and Brems (2010).[256] It is, furthermore, impossible to link this reduction in phonemic shape to further indications of coalescence such as prosody. For example, there are no tone deletions or tone shifts indicative of univerbation.[257]

Another problematic issue with regard to this diagnostic is the general tendency in the Manda language (5.2.3.1) to delete the final syllable of a verbal word when it occurs in a non-final position in a clause. The deletion of the final vowel of *-kotok-* can thus be compared with *-hotol-* (10.3), the other auxiliary consisting of a bisyllabic verb stem in Manda which also displays optional deletion of its final syllable. However, such syllable loss is restricted to verbs with a coronal consonant as coda, which *-kotok-*, unlike *-hotol-*, does not have. This suggests that something else must have motivated this reduction.[258] What is more intriguing is that *-koto* may also be reduced. In progressive registers, with younger speakers, an additional syllable may optionally be dropped from *-kotok-*, leaving only the initial CV-shaped *-ko* of the original verbal base.

[256] Brems discusses these issues in connection to spelling. It is assumed here that reduction in spelling also reflects reduction in actual speech.
[257] Curiously, however, in the few examples where my informants have written the construction themselves, they tend to represent it as one unit in their spelling. Note also that according to Novotná (2005:137-138), a cognate construction in Ndamba (G.52) has undergone univerbation, e.g. *akotokuyenda pala* 's/he shouldn't go there'.
[258] Another possible "natural" explanation to this reduction, i.e. outside the realms of grammaticalization, could be haplology.

(60) *akanijovíli nikó kuwɔ́ka*
a-ka-ni-jov-ili ni-ko ku-wɔk-a
SM3SG-P1-OM1SG-say-P1 1SG-NEG INF-leave-FV
'he told me that I shouldn't go'

(61) *kuyáy' tukó kumemésa ndóo…*
ku-y-ayi tu-ko ku-memes-a ndoo [kí-vígha
INF-be-INF SM1PL-NEG INF-fill-FV NCP9.bucket NCP7-pot]
'If we hadn't filled the bucket…'

Examples like these can be interpreted in two ways. Either the defective and thus – as argued by (Heine 1993:56) - decategorialized *-koto* has been reanalyzed as a verb stem on its own, which in turn undergoes final syllable deletion, or the further erosion is the result of a convergence between the more generalized meaning and a plausible higher frequency in usage. In any case, examples like these clearly show that this is a phenomenon beyond mere final syllable deletion.

As pointed out in Bernander (forthcom.), this means that not only does *-kotok-* share the functions typical of a secondary negator. It also seems to change *structurally* in correspondence with the canonical path of verb-to-affix grammaticalization in Bantu languages as described in works such as Heine & Reh (1984), Muzale (1998), Nurse (2008: 60) and also in 6.3.5. Thus, the Manda data offer rare language-internal evidence of the intermediate steps of a grammaticalization path suggested by Güldemann (1999), where secondary negative prefixes in the post-initial position (i.e. the canonical way of marking negation) are derived from periphrastic constructions consisting of a negative auxiliary and an infinitive verb.

11.3.3.3 Micro-comparative indications of change

As seen above, there are both semantic and formal diagnostics that can be used to show that *-kotok-* has grammaticalized into a negator dedicated to non-standard clause types.

Comparison with the surrounding languages further strengthens this proposed path of development, as apparent in Table 11.5. A "yes" in the table here means that the *-kotok-* construction can be used in the specific clause type as a negator; this does not mean that other strategies of negation cannot be used there as well. The table is arranged in descending order from languages using *-kotok-* as a negator to those that do not, and for those that do, in which clause types. As can be seen, this creates an implicational hierarchy of change. What it implies, firstly, is that the basic notion of unidirectionality holds. That is, as *-kotok-* surfaces as a negator it also surfaces as a lexical verb and not vice-versa. Moreover, when comparing this table with Table 11.5 in section 11.3.2, it is clear that it is only in the languages where *-kotok-* has a more generalized meaning that this verb has undergone grammaticalization in the first place. In Nyakyusa, where *-kotok-* still reflects the original semantics, it remains a lexeme with solely referential use. It is worth noting that this is consistent with claims in the literature, e.g. Heine (1993:27-31), that items of more general character and with a more basic reference are those that tend to be recruited for grammaticalization

There is also an implicational hierarchy with regard to the extension of use of *-kotok-* as a negator. The five clause types in the table are the same as the ones discussed in section 11.3.1 as typical for this kind of negator to operate in.[259] The fact that all the languages in the chart minimally cover the prohibitive conforms to the general Bantu pattern described in (Nurse 2008:193) that a negative auxiliary does not tend to exist in a language without covering directives. This thus supports the hypothesis that the grammaticalization process in Manda started out in such contexts.

Language	**Code**	**Lexical use**	**Clause types**					**Sources**
			PROH	**SUBJ**	**NEG INF**	**HYPO**	**REL**	
Pangwa	G.64	no	no					(Stirnimann 1983, Nurse and Philippson 1975)
Nyakyusa	M.31	yes	no					Felberg (1996:63)
Matengo	N.13	yes	yes (?)	no	no	no	no	Yoneda (2006:78), Kayuni (pers.comm.)
Kisi	G.67	yes	yes (?)	yes (?)	no	no	no	Gray (forthcom.:118-119)
Mpoto	N.14	yes	yes	yes	yes	no	yes	Makwaya (pers. comm.)
Ngoni	N.12	yes	yes	yes	no	yes	no	Ngonyani (2003:87), Ebner (1939:31)
Manda	N.11	yes	yes	yes	yes	yes	no	

Table 11.5. Comparison of clause type coverage of *-kotok-* as a negative in Manda and its neighbors.[260]

The function of *-kotok-* in Kisi (G.67) is especially intriguing in regard to the question of the introduction of *-kotok-* into the prohibitive domain. According to Gray

[259] As far as I can tell from the sources, the use of *-kotok-* as a negative outside of these domains does not exist in any of the languages.
[260] The abbreviations in the table stand for: Prohibitive; Subjunctive; Negative Infinitive; Hypotactic clause; Relative clause.

(forthcom.), *-kotok-* may be used as a negative command. However, it stands in complementary distribution with another prohibitive auxiliary, *-syom-*, and is explicitly used to express that the subject "is already doing the action and should stop" (Gray forthcom.: 118). Hence, *-kotok-* as a prohibitive in Kisi shows more lexical persistence. Consequently, it allows for a lesser degree of host class expansion compared to Manda. This suggests that it still is at an earlier stage of development. At the same time, it offers a clue as to what might have been the underlying motivation and starting point for the grammaticalization of *-kotok-* in Manda. According to Devos & van Olmen (2013:45; see also Aikhenvald 2010:359), one of the reasons behind the genesis of a new prohibitive construction originates in the need to express specific subtypes of (negative) directives. This appears to be the case in Kisi, where *-kotok-* is solely used as what van der Auwera (2010)[261] calls a "retrospective" prohibitive, i.e. with specific focus on the termination of an activity. Once recruited, however, such a construction may continue to change and acquire a more generalized meaning and distribution, as mirrored in the more extended use of *-kotok-* in Manda.

Mpoto appears to differ from Kisi. Just like in Manda, *-kotok-* is used for negating most marked clause types. It is, however, interesting to note that there is a crucial difference between Mpoto and Manda with regard to which domains *-kotok-* may appear in. Unlike Manda, *-kotok-* is not used as a negator of hypotactical adverbial clauses in Mpoto. On the other hand, it is used in constructions that negate relative clauses, i.e. the only clause type not covered by *-kotok-* in Manda.

(62) *nimpala mbumba yula ywayukoto kuhwata inguo yikele*

ni-m-pala	mbumba yula	ywa-yu-koto	ku-hwata	inguo	yikele
SM1SG-OM3SG-love	lady	DEM1 REL1-SM1SG-NEG	INF-wear	clothes	red

'I love that lady, (she) who does not wear red clothes'

[Mpoto (N.14); Makwaya (pers. comm. 10-01-16)]

Finally, there is also a prominent formal issue that can be inferred from the comparative data (not represented in the table). Many of the neighboring languages may reduce *-kotok-* into *-koto* just as Manda does (see e.g. Ngonyani 2013b). Manda, however, is the sole language that appears to allow the further reduction of *-koto* into *-ko*, as discussed in section 11.3.3.2 and illustrated in example (60) and (61). This would indicate that Manda is in a more developed stage of formal grammaticalization, in comparison with its neighbors. As this phonemic decrease is restricted to younger speakers of Manda, however, it cannot be excluded that this difference rather reflects socio-linguistic and language-internal differences – that is, that the various results originate in variance in age of the informants of the various languages. This issue, together with the question of why *-kotok-* has expanded into different clause types in Mpoto and Manda, calls for further research.

[261] Indeed, it could be argued that the verb *-bel-* 'refuse' in Manda fills a function such as, in this case, a prospective prohibitive, that is, as a directive with the focus on prohibiting the inception of an activity. As this verb only functions as an indirect prohibitive and is not further grammaticalized, it is not treated in this thesis.

11.4 Negative existential *kwawáka*

Except for standard negation and the secondary negative marker, Manda also has a special negator *kwawáka* (also *pawáka* and *kawáka*) used for negating existential clauses.[262]

As pointed out by Veselinova (2013, 2014, 2016; see also Dahl 2010), the negation of existentials is often ignored in cross-linguistic studies of negation. Such studies prefer to place their focus on standard forms of negation and avoid discussion of negative existentials just because they are often "special", representing a diverging pattern. It is apparently "extremely common" for a language to have a specialized marker for negative existentials (Veselinova 2013). Yet the negative existential is seldom discussed for Bantu languages, whether in descriptions of a single language or in more typological or comparative works (the latter is probably mainly a result of the former). The discussion in Bantu has instead traditionally been framed around verb-internal negators and the two broader sets of primary and secondary negators discussed above. However, as will be apparent in the following discussion, the Manda data fits well within the cross-linguistically deduced pattern(s) described for the negative existential in Veselinova's work. There are similarities with regard to both semantic and morpho-syntactic behavior as well as to diachronic origin. Hence, there are reasons to assume that the traits detected in Manda also represent broader Bantu tendencies.

11.4.1 Form and function

In Manda, the word surfacing alternatively as *kwawáka, pawáka* or *kawáka* is employed as a negative existential. That is, it is used in constructions that denote the non-existence or absence of a particular entity.

(63) *hínu ligéléda kwawáka*
hınu li-geleda kwawaka
now NCP5-car NEG.EX
'now, there is no car (to transport us)'

(64) MM: *apu tilyáy' kíki?*

apu [apa]	ti-ly-ayi	kiki
here	SM1PL-eat-SBJ	what

'what shall we eat here?'

[262] Interestingly, there is no special marking of affirmative existential clauses in Manda. This contrasts with e.g. Swahili – as seen in Marten (2013) - a closely related Bantu language and the contact language during elicitation. It is, however, not rare in other parts of the world (nor presumably in other Bantu languages as well) to have a negative existential marker but to lack a corresponding affirmative one. Thus, an existential clause in Manda is merely expressed with the copula verb *-(v)y-*, regularly inflected for person and TAM. (However, the word order is often switched in such constructions with the verb in initial position and the subject in a position immediately following it.) The affirmative existential is further described in 9.2.1., examples (26) to (28).

CE: *sénde pawáka?*
sende pawaka
NCP10.money NEG.EX
'there's no money (left)?'
MM: *kila kínu: "nunua; nunuanunua"*
kila [Sw.] ki-ınu nunua nunuanunua [hemela]
every NCP7-thing buy
'everything (is): "Buy-buy-buy-buy''

(65) *kawáka ndáya ya kubákíla apa*
kawaka ndaya ya ku-bakıl-[sigal]-a apa
NEG.EX NCP9.reason CP9 INF-stay.APPL-FV PROX.DEM16
'there is no reason to stay here'

As seen in the examples above, the negative existential may vary slightly in shape with regard to the initial onset of the first syllable. The most common form in actual speech and thus the form used for referring to the general notion of this negator in this study is *kwawáka*. However, both of the other forms are widespread in use as well. In the chronolect of the New Testament (1937), this negator is exclusively represented with *pawáka*. As reflected in the example, the negative existential is here typically paired up with and operates on the noun *mundu* 'person' to denote a concept analogous to a negative indefinite covert pronoun.

(66) *leka ligono lila nu saa yake*
leka li-gono lila na saa [Sw.] yi-ake
but NCP5-day DIST.DEM5 and time ACP9-POSS3SG
'but about that day or hour

pawaka mundu wa kumanya
pawaka mu-ndu wa ku-many-a
NEG.EX NCP1-person CP1 INF-know-FV
'no one knows […]' {not even the angels in heaven, nor the Son, but only the Father'}
[NT (1937); Matthew 24:36]

The final formal variant of the negative existential is *kawáka,* which is especially used in the Southern Manda variety. The use of *kawáka* is – in comparison to the other reflexes of the negative existential – restricted in its distribution, as it may only collocate with and refer to an (absent) inanimate. Thus, an example like (68) is considered highly infelicitous.

(67) *kalámu kawáka*
kalamu [Sw.] kawaka
NCP9.pencil NEG.EX
'there is no pencil (here)'

(68) ***matumbíli kawáka* 'there are no monkeys (here)'

Moreover, none of the variants of *kwawáka* are allowed in constructions expressing contrastive focus. According to (Veselinova 2013:124), this restriction, which is typical of a negative existential, reflects its nature of denying the existence of an entity in an "absolute, categorical way" rather than in relation to something else. Such an expression is instead marked with the standard or main negator(s) (see section 11.2.1).

(69) *Rahéla lépa ywávíli ápa, ávíli Jóhn*
Rahela lepa ywa-a-vy-ili apa a-vy-ili John
Rahela NEG REL1-SM3SG-be(come)-PRF PROX.DEM16 SM3SG-be(come)-PRF John
'it is not Rahela who is here, but John'

It should be pointed out that the standard negators are always an optional and felicitous alternative to *kwawáka* for expressing negative existence and similar concepts in Manda. The negative existential may vary quite freely with regard to its position in the clause. For instance, the sentence 'there is no phone' may be expressed as either (70) or (71).

(70) *símu kawáka*
simu [Sw.] kawaka
NCP9.phone NEG.EX
'there is no phone (here)'

(71) *kawáka símu*
kawaka simu [Sw.]
NEG.EX NCP9.phone
'there is no phone (here)'

Although *kwawáka* is predominantly used in the present tense, it is accepted in other TAM contexts as well, e.g. in the (remote) past, as in (72).

(72) *akolí' mapéla kawáka*
a-a-kol-iti ma-pela kawaka
SM3SG-P2-meet-P2 NCP6-guava NEG.EX
'he found (that) there were no guavas'

As seen in this example, however, the negative existential carries no additional marking in such contexts.

11.4.2 Origin

The origin of the negative existential can be traced to a construction consisting of a particle *-a* inflecting for (verbal) subject markers together with the originally nominal form *wáka*. The original construction may be schematized as °ACP-*a* = *wáka*, where the *-a* particle most likely stems from the connective particle (5.3.2.6). The three different onsets of the initial syllable of the negative existential can be attributed to subject markers of three different locative noun classes and their regular patterns of coalescence with a vowel /*a*/, that is, *pawáka* from class prefix 16 *pa-*, *kwawáka* from class prefix 17 *ku-* and *kawáka* from class prefix 7 *ki-*. The background to the choices of these particular class prefixes and their implications for the

expression of the negative existential is more thoroughly discussed in section 11.4.3.

With regard to the element *wáka*, it depicts various meanings in Manda and may function as either an adjective or an adverb. As an adjective, the stem is invariable and cannot be inflected directly for nominal agreement. Instead, agreement has to be expressed with the help of the particle *-a*, introduced in the previous paragraph.[263] As an adjective, it encompasses meanings such as 'empty', 'naked' but also 'free of charge'. Other meanings, with specific reference to human beings, include 'foolish' and 'impure'.

(73) *panyúmba pawáka*
pa-nyumba pa-a=waka
LOC16-NCP9.house ACP16-a=empty
'at home it's empty' {I have left no one there and I have closed it so none can enter.}

(74) *péni yawáka*
peni [Sw.] yi-a=waka
pen ACP9-a=free
'the pen is free of charge'

(75) *wenga mundu wawaka*
wenga mu-ndu u-a=waka
PERS2SG NCP1-person ACP1-a=foolish
'you foolish person […]' [NT (1937); James 2:20]

The word *wáka* may also be used adverbially, in which case it is uninflected and denotes 'only, just'.

(76) *nitáma wáka*
ni-tam-a waka
SM1SG-sit-FV only
'I'm just sitting (loitering)'

It may also be used to express 'without (any) reason' and similar meanings.[264]

(77) *nihéngí' lihéngu wáka*
ni-heng-iti li-hengu waka
SM1SG-work-PRF NCP5-work only
'I have worked for no reason'
{after being out fishing all night without getting any fish in the net}

[263] This inability to be inflected suggests that *wáka* may originally have been a noun, arguably belonging to noun class 14, given the initial glide.
[264] The famous slogan of the present-day president of Tanzania, John Pombe Magufuli, is translated as *ápa lihéngu wáka* in Manda. The original phrase in Swahili reads *Hapa kazi tu*. Literally it means 'here (is) just/only work', but a more idiomatically correct translation would be something like 'it is time for nothing else but (hard) work'.

(78) *nipátí' sómba ísɪ wáka*

ni-pat-iti	somba	ɪsɪ	waka
SM1SG-get-PRF	NCP10.fish	PROX.DEM10	only

'I just got this fish (i.e. without doing anything, either fishing or paying for it)'

I have not been able to connect the lexeme *wáka* with a Proto-Bantu root, but the micro-comparative notes in Table 11.6 shows that there are reflexes of the same cognate word with similar meanings in several of the surrounding languages. Furthermore, looking through the table from the top down, the reflexes in Matengo and Kisi where the Proto-Bantu consonant **b* has not been fully weakened serve as indications that the form in an earlier proto-stage was probably °*bwaka*.[265] It can also be inferred from the table that the spread of this word was exclusive to Rufiji-Ruvuma languages and/or languages spoken along the lake shores. It is also a prevalent word on the other side of Lake Nyasa. Interestingly, for Tumbuka (N.21), *waka* has been extensively described as not only an adverbial meaning 'just' but also as an intensifier or emphasis marker of ideophones (Vail 1973:117-121; see also Botne 1993).[266]

Language	**Code**	**Reflex**	**Translation**	**Sources**
Matengo	N.13	*bwâka*	'for free'	Yoneda (2006:67)
Kisi	G.67	*bhwaka*[267]	'only, nothing, empty'	Ngonyani (2011: 46, 203)
Ngoni	N.12	*waka*	'empty, naked, only, vain, just'	Spiss (1904:325, 361, 369, 401)
Mpoto	N.14	*ku-waka*	'be absent'	Botne (pers. comm.)
Pangwa	G.64	-	-	
Kinga	G.65	-	-	
Nyakyusa	M.31	-	-	

Table 11.6 Lexical denotation of °*bwaka* in neighboring languages to Manda

The sense of the etymon *wáka* is not surprising from a typological perspective. It is common cross-linguistically for a negative existential to originate from lexemes with some kind of negative content (e.g. 'destroy' or 'disappear'). Almost 40% of the cross-linguistic sample of negative existentials presemted in Veselinova (2013:137) are derived from such lexemes.

Now, the meaning(s) of *wáka* as reflected in Manda and its neighbors is not negative *per se*. However, there is an implication permeating all of them, namely the total absence of any additional characteristics to the entity they modify, whether an object or an activity. As will be further argued for below, it is this 'absence' reading within a specific syntagmatic environment that has triggered the recruitment of *wáka* into forming a negative existential.

[265] This is also in line with the hypothesis that *wáka* may originally have been a noun of noun class 14.
[266] In Tumbuka, *waka* may also encompass 'nothing; no change' (Turner 1996:155).
[267] The grapheme <bh> stands for a voiced bilabial fricative /β/.

Interestingly, what this reconstruction further implies is that there is not or has not been a specific negative marker involved in the development of the negative existential in Manda. According to Veselinova (2013:127), this reflects the conceptual nature of the negative existential – distinguishing it from other negators – of marking the absence of something rather than negating its existence. However, Givón (2001:383-4) has pointed out that other negators, not only negative existentials, may develop out of lexemes with inherent negative readings (see also section 11.3.2). Indeed, the recruitment of *wáka* as a negative existential adheres to a more general process of linguistic innovation that reaches far beyond the domain of negation, where more referential material is schematized and used for expressing a more grammatical concept. It is this process to which we will turn our attention in the following section.

11.4.3 Reconstructed path of development and indications of change

As suggested in the previous section, the negative existential *kwawáka* (and its equivalents) originates in the resemanticalization of the lexical and nominal form *wáka* 'empty, naked'. This is clear in a minimal pair like (79) and (80) below: a construction like (79) can never have a negative existential reading, while (80) can never have a lexical reading.

(79) *fikómbi fyawáka*
fi-kombi fi-a=waka
NCP8-cup ACP8-a=empty
'the cups are empty'
**'there are no cups'

(80) *fikómbi kwawáka*
fi-kombi kwawaka
NCP8-cup NEG.EX
'there are no cups'
**'the cups are empty'

Importantly, this reanalysis occurred within a certain predicative inflectional pattern. That is, when functioning as a negative existential, *waka* has to occur in a construction with the verbal particle *-a*. This particle must, in turn, be inflected with either a locative subject marker[268] or the subject marker of class 7. What unifies these three disparate class prefixes – and what I believe is the reason behind their recruitment into forming a part of the negative existential – is that they all already possess more relational functions.

Firstly, the class prefixes 16 and 17 represent – with one single exception – two noun classes without any inherent lexemes. Instead, the noun class prefix marking they agree with is additive and is used for coding spatial relations. Thus, instead of referring to a specific entity as an antecedent, these subject markers refer instead to its location. Moreover, and similar to what has been pointed out for Swahili by Marten (2013), when there is no specific locative antecedent, they may instead appear as expletives. Similarly, the agreement prefixes of class 7

[268] There are no examples in the data of a variant of the negative existential derived from the third locative noun class of class 18.

may be used to refer to '(some-)thing', i.e. to a concrete item in a generic rather than a specific sense. This function of class 7 is visible in its appearance with the question particle *kiki* 'what', transparently consisting of *-ki* 'which' inflected with this class prefix (and paraphrasable as 'which thing') and *kyángá* 'without' (see section 11.5). Hence, just like the locative classes, class 7 indexation may also exhibit a more expletive-like function. Consequently, as these subject markers are already associated with a more relational use, they are also more easily recruited as members of a more schematized function such as a negative existential.

That *kwawáka* really has been reanalyzed into a negative existential is apparent from the fact that the construction has lost its semantic-syntactic relationship to the original agreement marking. Unlike the etymon adjective, which automatically agrees with the noun it is modifying, *kwawáka* (and its equivalents) has no such restrictions for person, number or noun class affiliation. Thus, *kwawáka* and *pawáka* may occur in propositions without any specific reference to a location. Furthermore, the variant *kawáka*, which originally contained an agreement marker of the singular noun class 7, can occur with and operate on nouns not only of deviating noun classes but also of deviating number. One example of this is (81), where *kawáka* collocates with *fipambiku* 'fruits' of plural noun class 8 (See also example (72) where *kawáka* collocates with *mapela*, belonging to the plural noun class 6).

(81) *kawáka fipámbíku mulibíki*
kawaka fi-pámbíku mu-li-bɪki
NEG.EX NCP8-fruit LOC18-NCP5-tree
'there are no fruits in the tree'

However, as already described in section 11.4.1, the negative existential *kawáka* may not operate on animates. This restriction entails that there is still some kind of persistence in this specific variant of the negative existential, reflecting the inherent association with 'things' discussed above.

11.5 A note on two other special negators

This chapter will end with a note on two additional negators in Manda. Both are used rarely and only in a specialized set of contexts.

The first of these negators is *nakuya*, or *nukuya*, which function as a negative copula.

(82) *núkúya malínga mavána vachóko kukíta víla*
nukuya ma-linga ma-va-na va-choko ku-kɪt-a vɪla
NEG.COP NCP6-rightousness NCP6-NCP2-children ACP2-small INF-do-FV DIST.DEM7
'it is not appropriate for small children to behave like that'

(83) {'my relatives are your relatives'}
núkúya ngáti valóngo va nénga vahícha
nukuya ngati va-longo va nenga va-hich-a
NEG.COP like NCP2-relative CP2 PERS1SG SM3PL-come-FV
'it is not like my relatives are coming

panyúmba apa uvadádíla
pa-nyumba apa u-va-dad-ɪl-a
LOC16-NCP9.home PROX.DEM16 SM2SG-OM2SG-be.angry-APPL-FV
home here (and) you are getting angry with them'

This negative copula can be traced back to an archaic negative prefix *na-* and the copula verb *-y-* in the infinitive, viz. *kuya*.[269] As described in section 11.2.3.1 above, this *na-* also surfaces in discontinuous negative constructions with the standard negator *lépa* to mark negation in irrealis contexts. In those cases, *na-* operates on a verb which is also in the infinitive.

The other special negator is *-(a)ngá*. It is used to negate possessive clauses, as in this example, which is a riddle.

(84) *nyúmba yangu yángá ndyángu*
nyumba yi-angu yi-(a)ngá mu-lyangu
NCP9.house ACP9-POSS1SG ACP9-NEG.POSS NCP3-door
'my house has no door' {Answer: An egg}

A construction consisting of the class 7 prefix *ki-* together with *ngá* is used in a lexicalized sense to denote 'without'.

(85) *tihálúla kyángá kukópóla*
ti-halul-a ki-(a)nga ku-kɒpɒl-a
SM1SG-grind-FV SM7-NEG.POSS INF-pulp-FV
'we grind without pulping (it)'

Both *nakuya* and *ngá* seem to be archaisms, as they are found exclusively among older consultants' varieties and in the chronolects. Moreover, they are most often encountered in parts of data typically maintaining archaisms, such as proverbs, riddles and idiomatic expressions (see 6.4.1.1). As shown in section 11.2.1, the standard negators *lépa/hé* in constructions with the copula verb and/or the comitative marker can alternatively be used for the same functions as both *nakuya* and *ngá.* Interestingly, these forms are formally similar to negators that are in wider usage in neighboring languages, particularly *na-* in Ngoni and *ngaa*

[269] There are no examples in the data of a construction with the Matumba *-vy-*shaped copula verb.

in Matengo. Thus, it cannot be ruled out that they are (partial) borrowings.

11.6 Summary & Conclusions

This chapter has dealt with the expression of negation in Manda. As shown, the language makes use of several different tactics to express negation. As a standard negator, Manda uses a post-verbal element occurring in IAV position, unless it is used for explicitly marking another constituent in the clause. Interestingly, there are two different particles used for this function in Manda, *hé* and *lépa*. As has been argued, both can be explained as stemming from a Jespersen's cycle path of grammaticalization. Likewise, the most prominent non-standard negator, i.e. *-kotok-*, can be traced to a cross-linguistically common grammaticalization path of auxiliation. It is intriguing how the behavior and formal development of *-kotok-* match up so well with what has been described in Güldemann (1999) for the more canonical (cross-Bantu) post-initial negative prefix. Just as for *-kotok-*, the source of the negative existential *kwawáka* can also be traced to a lexeme with inherent negative semantics.

This chapter started out by claiming that Manda is a comparatively atypical Bantu language with regard to its negative paradigm. As is often the case, however, the diachronic traces can explain these anomalies. Once the synchronic state is seen as the sum of previous processes having taken place, and the variation as representing various layers of change, the Manda data are more easily interpretable. If anything, Manda conforms well to the fundamental cross-Bantu pattern described by Nurse (2008:189) that stipulates that the marking of negation has changed "constantly" and "dramatically".

12 Summary & conclusions

12.1 Introduction

This final chapter summarizes and concludes this thesis. It offers an account of how the objectives of this study have been addressed and dealt with throughout this thesis and their results, pointing out both the more general patterns found and the particulars of the Manda grammar.

The chapter will start in section 12.2 with a summary and discussion of the results obtained from the analysis of the Manda data. Dealing with both of these aims in a satisfying way required the combination and intersection of more traditional or "prototypical" field work methods with methods of grammatical reconstruction. The evaluation of these methods and their combination is discussed further 12.3. Some prospective areas for further research on Manda, are pointed out in section 12.4, considering both grammar and grammaticalization but also to other topics. Finally, section 12.5 contains some concluding remarks.

12.2 Summary of main results

The aim of this study has been two-fold, consisting of two different yet interdependent objectives. The first aim was to offer a description of the grammar of the Manda language, with a special focus on the domain of tense, aspect, mood, modality and negation - i.e. the wider TAM domain. The second aim was to account for the historical processes, specifically grammaticalization, which has resulted in the grammar - and in particular the wider TAM domain - of the Manda language looking and behaving as it does. This section will offer a brief summary of the results of this study, together with an account of the more general patterns detected and how they feed into Bantuistics in general as well as into general typology.

Crucially, this study of Manda has contributed with a description of the hitherto basically un-described language. That is, this thesis is, at the present moment, the most detailed linguistic description of Manda. It presents the fundamental parts of the language, viz. the phonology, morphology and morpho-syntax.

As may be deduced from chapter 5, Manda can in many ways be seen as a fairly typical (Eastern) Bantu language. Despite the presumably advanced contact situation Manda has been subject to, it actually appears to be a highly conservative language in many ways. Consequently, the language has a rather conservative phoneme inventory with the retention of a 7-vowel system and many consonants which can be linked to the inventory suggested for Proto-Bantu in a rather straight forward fashion (cf. Hyman 2003). In contrast to Nurse (1988), it was shown that Manda does have tone, although its usage is restricted in comparison with other Bantu languages, as characterized, for example, by the lack of lexical tone distinctions. A restricted tone system is, however, consistent with other neighboring languages (see e.g. Downing 2012, Odden 1988). With regard to morphological structure, Manda is - just as all Bantu languages - agglutinative. Hence, it has a nominal system consisting of a rich set of noun classes - reconstructable for Proto-Bantu - with class prefixes

indexed on several other parts of speech. However, Manda has completely lost pre-prefixes. The verbal morphotaxis is also relatively multi-faceted. Reflexes of all the typical Bantu derivational extensions morphemes are represented in the language (cf. Schadeberg 2003).

The agglutinative structure can also be seen in chapter 7, the first chapter of part II. This part did not only consist of a description of the formal and functional characteristics of the various expressions encountered, but it also set out to reconstruct the semasiological background of the various markers. Chapter 7 covers the synthetic TAM constructions in Manda, consisting of a variety of combinations of prefixes and suffixes. To a limited extent, Manda can also be said to have a scaled tense system, with at least two past and two future tenses (only speakers of the Matumba dialect make use of two future tenses, however), a typical trait of a Bantu language (Dahl 1985:121, Nurse 2008:88-90). With the exception of the future formative *ya-*, basically all TAM morphemes can be linked to Proto-Bantu reconstructions and most conjugations (i.e. compositional combinations of these TAM morphemes) also re-appear in the neighboring languages. Less typically, Manda appears to have lost what Nurse & Devos (forthcom.) refer to as the "morphologically specialized Imperative conjugation". Directives are instead obligatory expressed with the suffix *-ayi*, originating (partly) from the imperfective **-ag-* (cf. Nurse & Philippson 2006). Furthermore, Manda lacks negative prefixes. Instead, standard negation is marked with a post-verbal particle and secondary negation with a complex construction with a negative auxiliary. It was argued, however, that this latter construction is formally moving towards the same position as a typical secondary negative prefix. (The negative markers will be further discussed below.) Also, dialectal isoglosses with regard to the TAM conjugations were found, including the shape of the present tense, the allomorphs of the suffix *-ili* and the inclusion or not of the second future SM-*(a)la*-B-*a*, all dividing the northeastern Matumba dialect from the southern variety of Manda.

The remaining of chapters of the second part of this thesis dealt with complex constructions within the wider TAM domain. This part of the thesis is divided into chapters representing various subdomains of the wider TAM domain found in Manda. Thus, chapter 8 and 9 accounted for the complex aspectual marking in Manda. Whereas chapter 8 focused on the three aspectual auxiliaries found in Manda, chapter 9 discussed complex copula constructions. Chapter 10 accounted for the modal domain and its markers and chapter 11 the domain of negation. By analyzing these complex constructions, this study has departed from more "traditional" studies of Bantu, which more typically focus on word level inflectional morphology. As an indirect consequence of this approach, more focus has also been placed on linguistic domains less studied within Bantuistics, such as modality and non-inflectional negation.

Comparing the result of these different chapters allows us to extract more general patterns. To begin with, it can be seen that the vast bulk of the complex conjugations in Manda consist of auxiliary constructions. Manda makes use of auxiliaries for the marking of aspect as seen in chapter 8 and 9, modality as seen in chapter 10 and even negation as seen in chapter 11. This adheres to a general tendency of Bantu languages, where lexical verbs often are recruited to express grammatical concepts (Givón 1979, Nurse 2008:59; 291-293). Yet, both the

categories of modal verbs and negative verbs are seldom extensively dealt with in descriptions of Bantu languages.

In general, the auxiliaries of Manda have in many ways developed in a similar direction, along similar pathways and due to similar mechanics of change, although they are arguably on different stages of transformation along the verb-to-affix cline (Heine 1993). The various reconstructions of their development mainly support the cross-linguistic generalizations on auxiliation and verb-to-affix grammaticalization, both with regard to functional as well as structural issues (see e.g. Heine & Kuteva 2002). Yet, there are some specific characteristics and peculiarities which stands out from the analysis of the Manda data, which deserve to be highlighted.

The first comment regards the etymology of these source verbs. Although these verbs at "first sight" appear to represent typical lexical sources of grammaticalization - e.g. a motion verb grammaticalizing into a prospective, a cessative verb grammaticalizing into a prohibitive (and beyond) - the study has shown that they often have a more complex lexico-semantic background in need of scrutiny. Secondly, auxiliation in Manda appears to have a strong preference for taking place in contexts of double verb constructions where the second verb – i.e. the initially de-verbal noun which is to be reanalyzed as the main verb – occurs in the infinitive form. Hopefully, this study has contributed to a broader understanding of how also this infinitive verb is a crucial part of the grammaticalization scenario and just as affected by the mechanisms of change as the auxiliary verb, not least with regard to its reanalysis from complement to main verb. This has been a comparatively lesser discussed topic in the Bantu literature, which has focused more exclusively on the development of the auxiliary verb.

A third characteristic of the Manda auxiliaries and auxiliary constructions is the fact that they appear to have been subject to a relatively minor set of formal changes, seldom displaying any signs of erosion, i.e. phonetic reduction. This is a fact which was specifically highlighted with regard to the modal verbs, where even the most advanced developed verb, the possibility marker *-hotol-*, appears not to have been subject to much formal change. With regard to modal verbs, this can be explained by the general characteristic of such verbs having more semantic weight, and as a result, typically being less formulaic and more lexical-like (as argued by Krug 2011). However, also, the aspectual auxiliaries in Manda appear to have undergone relatively limited formal shifts. The exception to this pattern is the secondary negative auxiliary *-kotok-* which arguably has been the subject of the loss of phonetic segments. However, even this auxiliary lacks for example any strong indications of univerbation, i.e. of fusing with the second verb. This stands in opposition to the general characterization of TAM markers in Bantu undergoing grammaticalization as being prone to fusing and thus rapidly transforming from auxiliaries to affixes (Nurse 2008:25). The lack of such explicit formal indications of grammaticalization with regard to the auxiliaries (and other grammatical markers) in Manda have forced considering other kinds of less obvious evidence. This has contributed to a more fine-grained analysis of more initial stages of grammaticalization in general and in particular the pragmatic-semantic characteristics of a marker undergoing grammaticalization in a Bantu language.

Except for the development of auxiliaries, the various chapters of the second part of this thesis have also accounted for markers within the wider TAM domain which appear to have evolved from other processes of grammatical change. Of these markers, the "aspectual copula" *-(a)kona* described in chapter 6 has the most spectacular semasiological background. It was argued that this marker, functioning as an aspectual copula and a persistive in Manda, could ultimately be traced to a locative pronoun borrowed from South African Nguni. Two other examples of non-verbal grammaticalization in Manda were revealed within the domain of negation as described in section 8. Firstly, the standard negation strategy in Manda with a post verbal particle was suggested to stem from a Jespersen's Cycle scenario. Secondly, it was argued that the negative existential *kwawáka* was initially recruited from an inherently negative adjective~adverb expressing meanings such as 'empty' and 'just'. This fits well within the cross-linguistically deduced pattern(s) regarding the origin of negative existentials (cf. Veselinova 2013). Furthermore, this seems to be in line with a more general pattern of eastern and southern Tanzanian Bantu languages where a word originally referring to roughly 'empty, in vain' and/or 'just, only' also serves as the source of the negative existential (cf. Bernander et al 2017).

Finally, other negative markers, but also adverbs and complementizers and their potential lexical or less grammaticalized background have been briefly mentioned as they have appeared throughout these chapters. However, it has been beyond the scope of this study to offer a more thorough reconstruction of these expressions. This is a prospective area for further research, as discussed further in section 12.4. Before that, section 12.3 presents and assesses the methodology used.

12.3 Evaluation of the methodology

The methods used for gathering and analyzing the Manda data was described in two sections of this thesis, viz. the field methodology of elicitation and text collection in chapter 4 and the techniques used for reconstruction of grammaticalization (and other historical pathways of change) in 0. Both techniques have been employed to secure access to as many different sources as possible and to facilitate the analysis of the Manda data. Both techniques can be understood as being based on a typological and panchronic conceptual framework and have been organized to capture and analyze the particulars of the Manda language, including its historical and ongoing changes. The field data have served as the basis of the analysis, but in order to get as coherent and reliable conclusions as possible, this data has also been scrutinized in the light of both the available historical data as well as comparative data, ranging from comparison with the neighboring languages to cross-Bantu and further to cross-linguistic tendencies and explanations.

In this way, diagnostics of functional and formal change could be developed and tested on the collected data (including the historical data) and further examined in a more fine-grained

manner, specifically by elicitation of speaker judgements on (non-)grammaticality and from the implications derived from the micro-variation found in the neighboring languages.

As a result, this study has shown how it is possible to generate hypotheses of grammatical change in Manda, despite the obvious limitation of making historical inferences given the lack of an extensive diachronic corpus. Hopefully, this study has offered insights into possible ways of developing a framework of grammaticalization with regard to an under-documented language, whether it being a Bantu language or of other origin. In this way, the study has arguably also contributed to an increased understanding of cross-linguistic pathways of grammatical change, with regard to potential sources, direction pathways and formal and functional representations of such a development.

12.4 Directions for further research

Given the limited amount of time and the lack of any extensive previous documentation of Manda, which also required collecting and processing of most of the data (including data on the neighboring languages), many interesting aspects of the Manda language have unfortunately had to be left out of this study. That is, despite having covered a significant part of the Manda language, there are still many parts which are not covered at all or in need of a more substantial investigation and Manda is still undoubtedly an understudied and under-documented language. This also means that there are many prospects for further research as will be discussed in the following.

Firstly, there are parts of speech such as adverbs and conjunctions and part of the linguistic system such as syntax and information structure, which need to be properly described. Furthermore, a more fine-grained analysis of the lexical-semantics of the verb and how this interplays with the different TAM categories described in this thesis, deserve to be further scrutinized. This could be fruitfully combined with a more elaborate account of the semantic traits of the various extensions and other kinds of verbal derivation in Manda.

Despite the aim of this study to cover the grammaticalization processes in Manda, there are still also many potential grammaticalization stories waiting to be told outside the scope of this thesis. For example, many adverbials, complementizers and conjunctions are transparently derived from lexical verbs but how this recruitment may have happened is still not worked out properly. Also, how the noun ‘person’ got recruited as a possessive marker is an interesting topic for further analysis.

Finally, the genealogy of the Manda language and a deeper understanding of the pattern of contact in this area is a crucial topic in need of further enquiry. Hopefully, the data collected and presented in this thesis can serve as material to put further light on this issue. Previous studies dealing with the genealogy of Manda have focused predominantly on lexis (Nurse 1988; Ehret 1999; Gray & Roth 2016). Yet, we know that structural properties (such as TAM morphemes) are less prone to be borrowed. Thus, a more extensive comparison of these features in Manda and its neighbors could bring more light on this issue. Another connected topic in need of a comprehensive investigation is the socio-history of the Manda speaking community and its members, with regard to the effect that the various historical events have

had in forming this community and the identity of its speakers, but also its direct impact on their speech. One extremely important historical factor deemed to have had a thorough impact, is the Ngoni invasion. Crucially, the Ngoni are not only a neighboring language to Manda but also its closest affiliate. The general conclusion – put forward in e.g. Nurse (1988) - that the South African Nguni has had limited linguistic impact on the Tanzanian Ngoni language of today, and also of the neighboring languages, generally seems to hold. Still, there are influences that can be detected, such as *-(a)kona* discussed in chapter 6. This is an issue which needs to be further investigated not least in order to reach a firmer conclusion with regard to the genealogy of the languages of this area.

In general, the area where Manda is spoken is under-studied, especially with regard to the languages of the Tanzanian side of Lake Nyasa. However, there is also a lack of sources for the languages spoken in Malawi. For example, there is still no grammar of Tonga (N.15) spoken in Malawi and - as Chavula (2016) points out - there is not really a proper grammar on Tumbuka (N.21) either. Hence, it would be of importance to further investigate and describe the various languages spoken around the lake more thoroughly. In addition, a more holistic approach which treats all the languages spoken around Lake Nyasa as constituting a linguistic area and search for traces of convergence between these languages could be fruitful.

12.5 Concluding remarks

This study has offered new insights in the previously poorly documented language Manda. In addition, it has provided a wider understanding of an understudied part of the Bantu speaking area. The study has provided information for other researchers for further studies in Manda as well as for comparative and typological studies. It has also shown that it is possible to offer a more “deep” description of a previously (basically) unstudied language, by not only describing the form and the function of the various categories of the grammar of Manda but also by linking the synchronic grammar to its history and the diachronic processes and forces which have shaped it. Hopefully, this thesis does not only provide insights for linguistic research but also raise the awareness and status of this beautiful language and its speakers.

Appendix Manda texts

I. KOLIMBA'S TALE
Stanley Kolimba (18-06-15)

mwándi ayí' múndu na vádála vavílı
mwandi a-a-y-ili mu-ndu na va-dala va-vılı
past SM3SG-P2-be(come)-P2 NCP1-person COM NCP2-wife ACP2-two
'a long time ago, there was a man and his two wives

nála wa kwánza yóla áyí' na vána vavílı
mu-dala wa kwanza [Sw.] yóla a-y-ili na va-ana va-vılı
NCP1-woman CP1 first DIST.DEM1 SM3SG-be(come)-PRF COM NCP2-child ACP2two
the first wife had two children

nála wa kavílı áyí' hé na mwána
mu-dala wa ka-vılı a-y-ili he na mu-ana
NCP1-woman CP1 ACP12-two SM3SG-be(come)-PRF NEG COM NCP1-child
the second wife did not have any children

payí' lukúmbi payí' njála sána
pa-a-y-ili lu-kumbi pa-a-y-ili njala sana [nyamuhopi]
SM16-P2-be(come)-P2 NCP11-period SM16-P2-be(come)-P2 NCP9.hunger very
at one time there was a great famine

njála yíla yakomí' vándu vamahéle sána
njala yıla yi-a-kom-iti va-ndu va-mahele sana [Sw.]
NCP9.hunger DIST.DEM9 SM9-P2-kill-P2 NCP2-person ACP2-many very
this famine killed many people

lakíni ng'ósi yóla ampéle hé
lakini [Sw.] mu-gosi yʊla a-a-mu-pele he
but NCP1-man DIST.DEM1 SM3SG-P2-OM3SG-give-P2 NEG
but that husband did not give

gwáli vachókólʊ vavílı na nála yóla
gwali va-chókólʊ va-vılı na mu-dala yʊla
NCP14.ugali NCP2-grandchild ACP2-two COM NCP1-woman DIST.DEM1
food (lit. *ugali*) to his children (lit. grandchildren) and that wife

ndáva ang'ani' sána nála va kavílı
ndava a-mu-gan-iti sana [nyamuhopi] mu-dala wa ka-vılı
because SM3SG-OM3SG-love-PRF very NCP1-woman CP1 ACP12-two
because he really loved the second wife

nála wa kutumbúlíla yóla apatí' hé kíndu
mu-dala wa ku-tumbul-ıl-a yʊla a-a-pat-iti he kı-ndu
NCP1-woman CP1 INF-begin-APPL-FV DIST.DEM1 SM3SG-P2-get-P2 NEG ACP7-thing
the first wife did not get a thing

básı, nála yóla atáma na vána vála
basi [Sw.] mu-dala yʊla a-tam-a na va-ana vala
so NCP1-woman DIST.DEM1 SM3SG-live-FV COM NCP2-children DIST.DEM2
so, that wife was (lit. is) living with those children

na mahʊmbʊsíkʊ sána
na ma-hʊmbʊsɪkʊ sana [Sw.]
com NCP6-distress very
in great distress

ligóno língi vakatáma
li-gono lɪ-ngi va-ka-tam-a
NCP5-day ACP5-(an)other SM2PL-CONS-sit-FV
one day, they were around (lit. sitting~living)

dádi vávi akakíta vakóma líbwa
dadi va-avi a-ka-kɪt-a va-kom-a li-bwa
NCP1a.father ACP2-POSS3PL SM3SG-CONS-do-FV SM3PL-kill-FV NCP5-dog
their father arranged for a dog to be killed

líbwa líla vakavíka munyúmba
li-bwa lɪla va-ka-vɪk-a mu-nyumba
NCP5-dog DIST.DEM5 SM3PL-CONS-put-FV LOC18-NCP9.house
the dog was put (lit. they put it) inside the house

akanóta vána múndu na nála mbáha yʊ́la
a-ka-not-a va-ana mu-ndu na mu-dala mu-vaha yʊla
SM3SG-CONS-deprive-FV NCP2-child NCP1-person COM NCP1-woman ACP1-big PROX.DEM1
he deprived his children and that first wife (of the dog meat)

báada ya kunóta, nála yʊ́la kuwóna
baada [Sw.] ya ku-not-a mu-dala yʊla ku-won-a
after CP9 INF-deprive-FV NCP1-wife DIST.DEM1 INF-see-FV
after being deprived, that wife realizing

vána váki váfwi, akahíja nyáma yíla
va-ana va-aki va-fw-i a-ka-hɪj-a nyama yɪla
NCP2-children ACP2-POSS3SG SM3PL-die-SBJ SM3SG-CONS-steal-FV NCP9.meat DIST.DEM9
that her children would die, she stole the meat

vakakɪluká' kuhúma kwavakabíti,
va-ka-kɪlawʊk-ayi ku-hum-a kwa-va-ka-bɪt-iti
SM3PL-SIT-return-SIT INF-come.from-FV REL17-SM3PL-P1-go-P1
having returned from where they (the father and his entoruge) had gone,

vakólí' vahɪjíwi
va-kol-iti va-hɪj-iw-iti
SM3PL-encounter-PRF SM3PL-steal-PASS-PRF
they noticed that they had been robbed

akakotolésa: "pána náni atólíli?"
a-ka-kotoles-a pa-na nani a-tol-iti
SM1SG-CONS-ask-FV LOC16-COM who SM3SG-take-PRF
he (the father) asked: "Is there someone who has taken (it)?"

yʊ́la akokósa: "nimányí' hé
yʊla a-kokos-a ni-many-iti he
DIST.DEM1 SM3SG-explain-FV SM3SG-know-PRF NEG
she (the first wife) said (lit. explained): "I don't know,

“ápa tíyí’ ta vavílɪ wénga na mbáha, na nchóko
apa ti-y-ili ta va-vɪlɪ wenga na mu-vaha na mu-choko
LOC16 SM1PL-be(come)-PRF SM1PL.a ACP2-two PERS2SG FOC NCP1-big FOC NCP1-small
here there have (only) been the two of us, you the first wife, the second wife,

na vána vítu
na va-ana va-itu
COM NCP2-children ACP2-POSS1PL
and our children

hínu náha ahíjíti”
hɪnu naha a-hɪj-iti
now just SM3SG-steal-PRF
(and) just now someone has stolen (it)”

anjóva:”nimányí’ lépe”
a-mu-jov-a ni-many-iti lepe
SM3SG-OM3SG-say-FV SM1SG-know-PRF NEG
she answered him: “I don’t know”

“bási”, akajóva:”ngáti náha
basi [Sw.] a-ka-jov-a ngati naha
ok SM3SG-CONS-say-FV like this
“ok”, he said: “If it is like that

tibítá’ kulílíndi liváha sána
ti-bɪt-ayi ku-li-lɪndi li-vaha sana [Sw.]
SM1PL-go-SBJ INF-NCP5-hole ACP5-big very
we shall go to a very big hole

wóna múndu ahíjíti
wona mu-ndu a-hɪj-iti
if NCP1-person SM3SG-steal-PRF
if someone has stolen

yabí’ kutumbúkíla mulílíndi móla
ya-a-bɪt-i ku-tumbuk-ɪl-a mu-li-lɪndi mʊla
F1-SM3SG-PROSP-F1 INF-sink.down-APPL-FV LOC18-NCP5-hole DIST.DEM18
she is going to sink down into that hole”

hínu máwu yóla akajóva: “hínu ngati nibí’ móla
hɪnu mawu yʊla a-ka-jov-a hɪnu ngati ni-bɪt-a mʊla
now NCP1.mother PROX.DEM1 SM3SG-CONS-say-FV now if SM3SG-go-FV DIST.DEM18
now, that mother said: “now, if I’m going (inside) there,

ngáti nilʊ́tíli, yanífwi”
ngati ni-lʊt-ɪl-i ya-ni-fw-i
if SM1SG-pass.APPL-SBJ FUT-SM1SG-die-SBJ
if I have to pass over there, I will die”

akavakokoséla vána múndu kúya:
a-ka-va-kokosel-a va-ana mundu kuya
SM3SG-CONS-OM3PL-explain-FV NCP2-children POSS3SG COMP
she explained to her children that:

“*nénga, ngáti nibí’ pála, kuyómbóka pála*
nenga ngati ni-bɪt-a pala ku-yɔmbɔk-a pala
PERS1SG if SM1SG-go-FV DIST.DEM16 INF-cross-FV DIST.DEM16
me, if I go there, to cross (over) there

palílíndi pála
pa-li-lɪndi pala
LOC16-NCP5-hole DIST.DEM16
at the hole, there

muyá’ na mpámba mukiwóko
mu-y-ayi na mu-pamba mu-ki-woko
SM2PL-be-SBJ COM NCP3-knife LOC18-NCP7-hand
make sure to have a knife in your hand

mudumúlá’ livéle
mu-dumul-ayi li-vele
SM2SG-cut-SBJ NCP5-breast
cut a breast

na livéle líla mukapandá’ kudási
na li-vele lɪla mu-ka-vɪk-ayi mu-ka-pand-ayi kudasi
COM NCP5-breast DIST.DEM5 SM2PL-ITV-put-SBJ SM2SG-ITV-plant-SBJ LOC17.wilderness
and that breast, you shall (go and) plant it in the wilderness

básí, vakabíta pála
basi [Sw.] va-ka-bɪt-a pala
so SM3PL-ITV-go-FV DIST.DEM16
so, they went there

akaánsa ng'ósi kuyómbóka pála
a-ka-ans [*tumbul*]-a mu-gosi ku-yɔmbɔk-a pala
SM3SG-CONS-start-FV NCP1-man INF-cross-FV DIST.DEM16
the man started crossing there,

kóni vayımbá’ luyímbʊ
kʊ-ni va-a-yɪmb-ayi lu-yɪmbʊ
LOC17-there SM3PL-P.I2-sing-P.I2 NCP11-song
while there were singing a song,

akabíta nála wa kavílɪ
a-ka-bɪt-a mu-dala wa ka-vɪlɪ
SM3SG-CONS-go-FV NCP1-woman CP1 SM12-two
the second wife went,

akahícha mwéne máwu yóla
a-ka-hich-a mu-ene mawu yʊla
SM3SG-CONS-come-FV NCP1-self NCP1.mother DIST.DEM1
(then) she came herself, that mother

vána múndu vakísa munyúma
va-ana mundu va-kɪs-a mu-nyuma
NCP2-children POSS3SG SM2-follow-FV LOC18-behind
her children followed behind

vayımbí' náha
va-P2-yımb-iti naha
SM3PL-sing-P2 like.that
they sung in the same way

kufíka pagatipagáti, nála akagána kúgwa[270]
ku-fik-a pa-gati-pa-gati mu-dala a-ka-gan-a ku-gw-a
INF-arrive-FV LOC16-middle.RED NCP1-woman SM3SG-CONS-love-FV INF-fall-FV
arriving at the very middle, the woman was about to fall

bási, mwána mónga akang'keméléla palápála:
basi [Sw.] mu-ana mu-monga a-ka-mu-kemel-a palapala
so NCP1-child ACP1-one SM3SG-CONS-OM3SG-call.APPL-FV DIST.DEM16.RED
so, just then she called one of her children:

"*kıtá' ngavajóvi' nyóngólo*!"
kıt-ayi nga-a-va-jov-iti nyongolo
do-SBJ COND-SM3SG-OM2PL-say-COND NCP1.mother
"do as mother has said to you"

akadúmú' livéle líla akabí' kupánda kudási
a-ka-dumul-a li-vele lıla a-ka-bıt-a ku-pand-a kudasi
SM3SG-CONS-cut-FV NCP5-breast DIST.DEM5 SM3SG-CONS-go-FV INF-plant-FV LOC17.wilderness
(and) he cut the breast and went to plant it in the wilderness

vála vakashíla máwu yɔ́la
vala va-ka-shıl-a mawu yɔla
DIST.DEM2 SM3PL-CONS-bury-FV NCP1.mother DIST.DEM1
they buried (their) mother

kila ligóno vabíta kuyitálíla máchi
kila li-gono va-bıt-a ku-yit-alıl-a ma-chi
every NCP5-day SM3PL-go-FV INF-pour-CONT-FV NCP6-water
every day they went to pour water

kudási kɔ́la
ku-dasi kɔla
LOC17-wilderness DIST.DEM17
in the wilderness, there

báada ya dominíka sivílı hínu
baada [Sw.] ya dominika si-vılı hınu
after CP9 NCP10.week ACP2-two now
after two weeks, now,

[270] Note that *-gan-* 'love' and not *-lond-* is used here with what arguably is a proximative meaning.

pakaméla ng'kóngo
pa-ka-mel-a mu-kongo
LOC16-CONS-grow-FV NCP3-tree
a tree grew there

pavashílí' livéle la nyóngó' wávi pála
pa-va-shɪl-iti li-vele la nyongolo u-avi pala
REL16-SM3PL-bury-PRF NCP5-breast CP5 NCP1.mother ACP1-POSS3PL DIST.DEM16
where they had buried their mother's breast

ng'kóngo góla ukapís' fipámbíku fimahéle sána
mu-kongo gɔla u-kapis-iti fi-pambiku fi-mahele sana [nyamuhopi]
NCP3-tree DIST.DEM3 SM3-give.out.CAUS-PRF SM8-fruit ACP8-many very
the tree had given out an abundance of fruits

fa wíchu sána
fa wichu sana [nyamuhopi]
CP8 NCP14.good very
very good (ones)

vána vála, hínu, valamúléye,
va-ana vala hɪnu va-lam-ul-eye
NCP2-children DIST.DEM2 now NCP2-nibble-P.I1
the children were eating them (the fruits)

ndáva vanotíwi gwáli vadamíléye fíla fipámbíku
ndava va-not-iw-ili gwali va-damil-eye fɪla fi-pambiku
because SM3PL-deprive-PASS-PRF NCP14-food SM3PL-nibble-P.I1 DIST.DEM8 NCP8-fruits
because they had been deprived of food, they were eating those fruits

fíla fafihúmí' livéle la nyóngólo wávi
fɪla fa-fi-hum-iti li-vele la nyongolo u-avi
DIST.DEM8 REL8-SM8-come.from-PRF NCP5-breast CP5 NCP1.mother ACP1-POSS3PL
those (fruits), which had come from the breast of their mother

eh, gayí' bwína, gafúndéye wíchu sána[271]
eh ga-a-y-ili bwina ga-fund-eye wichu sana [nyamuhopi]
eh SM6-P2-be-P2 good SM6-be(come)-ripe-P.I1 good very
yes, they (the fruits) were good, they ripened very well

bási, ligóno língi vakatámatáma
basi [Sw.] li-gono lɪ-ngi va-ka-tamatama
so NCP5-dayACP5-(an)other SM3PL-CONS-sit.RED
so, another day they were sitting around,

[271]Note the shift in noun class reference here, probably due to Swahili influence ('fruit' belonging to noun class 5/6 in Swahili and not 7/8 as *-pambiku* in Manda).

nyóngó' wávi akaánsa kushángála
nyongolo u-avi a-ka-ans[Sw.]-a ku-shangal-a
NCP1-mother ACP2-POSS3PL SM3SG-CONS-begin-FV INF-be.astonished-FV
their (second) mother begun to wonder:

"mbóna njála vaiwóna lépe?
mbona [Sw.] njala va-i-won-a lepe
why NCP9.hunger SM3PL-OM9-see-FV NEG
"why aren't they hungry (lit. why don' they see hunger)?

vála kulíki?"
va-l-a kulɪki
SM3PL-eat-FV where
where are they eating?"

vakavakísíla, ligóno limónga
va-ka-va-kɪs-ɪl-a li-gono li-monga
SM3PL-CONS-OM3PL-follow-APPL-FV NCP5-day ACP5-one
(so) they (the second wife and the father) followed after them (the children) one day

dádi akavakóléla kʊ́la
dadi a-ka-va-kol-ɪl-a
NCP1a.father SM3SG-CONS-OM3PL-meet-APPL-FV
(and) the father met them there

vána váwi vála fipámbíku fíla
kʊla va-ana va-awi va-l-a fi-pambiku fɪla
DIST.DEM17 NCP2-children ACP2-POSS3PL SM3PL-eat-FV NCP5-fruit DIST.DEM8
their children, eating those fruits

dádi akajóva:
dadi a-ka-jov-a
NCP1a.father SM3SG-CONS-say-FV
the father said:

"*kuwánsa lɪlínu*
ku-wans-a lɪlɪnu
INF-start-FV today
starting today

musiwonekáni kavílɪ ápa
mu-si-wonekan-i [Sw.] ka-vɪlɪ apa
SM2PL-NEG-be.visible-SBJ ACP12-two PROX.DEM16
you shall not be seen here again

hínu, abítéye mwéne na muhána múndu wa kavílɪ yʊ́la
hɪnu a-bɪt-eye mu-ene na mu-hana mundu wa ka-vɪlɪ yʊla
now SM3SG-go-P.I1 NCP1-self COM NCP1-wife POSS3SG CP2 NCP12-two DIST.DEM1
now, he himself would go with that second wife

na wákwe múndu kʊ́la
na va-ana mundu wakwe [Sw.] mundu kʊla
COM NCP2-children POSS3SG relative POSS3SG DIST.DEM17
and with his (other) relatives, there

vána vála kíla ligóno hínu: njála
va-ana vala kila [Sw.] li-gono hınu njala
NCP2-children DIST.DEM2 every ACP5-day now NCP9.hunger
those children, every day now: hunger

vabíta kóla pakéya tu
va-bıt-a ku-l-a pa-keya tu
SM3PL-go-FV INF-eat-FV LOC16-side just
they went there just standing by

pamwéya valolakésa
pa-mweya va-lolakes-a
LOC16-side SM3PL-watch-FV
standing by, they were watching (the others eat)

vaka<u>ánsa</u> kulíla
va-ka-ans-a ku-lıl-a
SM3PL-CONS-start-FV INF-cry-FV
they started to cry

hínu kavalíla, kíla masóli gála
hınu ka-va-lıl-a kila [Sw.] ma-soli gala
now REL7-SM3PL-cry-FV every NCP6-tear DIST.DEM6
now, as they were crying, all the tears

gabíta kóla kung'kóngo kóla
ga-bıt-a kɒla ku-mu-kongo kɒla
SM6-go-FV DIST.DEM17 LOC17-NCP3-tree DIST.DEM17
went there, towards that tree

kung'kóngo, fipámbíku fíla
ku-mu-kongo fi-pambiku fıla
LOC17-NCP3-tree ACP8-fruit DIST.DEM8
at the tree, those fruits…

ng'kóngo góla, kúmbi!,
mu-kongo gɒla kumbi [Sw.]
NCP3-tree DIST.DEM3 gosh
that tree, gosh!,

máchi gawánsa kuhegáléla
ma-chi ga-wans-a [Sw.] ku-hegalel-a
NCP6-water ACP6-start-FV INF-approach-FV
the water started to approach

fipámbíku mugáti móla
fi-pambiku mu-gati mɒla
NCP8-fruit LOC18-inside DIST.DEM18
the fruit, inside there

básı, vamányí' hé ngáti máchi gafyúla mupási
basi va-many-iti he ngati ma-chi ga-fyul-a mu-pasi
so SM3PL-know-PRF NEG that NCP6-water SM6-flow-fv LOC18-down
so, they did not know that the water had flown inside

máchi gatwéka
ma-chi ga-twek-a
NCP6-water SM6-collapse-FV
the water broke out

mwíshu lahidí' liwúmba liváha sána
mwishu [Sw.] li-a-hid-iti li-wumba li-vaha sana [nyamuhopi]
at.last SM5-P2-come-P2 ACP5-wave ACP5-big very
(and) at last there came a very big wave

vándu vagésa kukímbíla vakáfwa tu
va-ndu va-ges-a ku-kɪmbɪl-a u-oha va-ka-fw-a tu
NCP2-people SM3PL-try-FV INF-run-FV ACP2-all SM3PL-CONS-die-FV just
the people tried to run, (but) they just died

ikáya mwíshu wa vándu vála pála
i-ka-y-a mwishu [Sw.] wa va-ndu vala pala
SM9-CONS-be-FV NCP3.end CP3 NCP2-people DIST.DEM2 DIST.DEM16
it was the end of those people there

na vána vála vakawóka kubíta ndíma góngi
na va-ana vala va-ka-wɔk-a ku-bɪt-a mu-lɪma gɔ-ngi
COM NCP2-children DIST.DEM2 SM3PL-CONS-depart-FV INF-go-FV NCP3.land ACP3-another
and those children they left, going some place else

vakahámíla kóla
va-ka-hamil-a kɔla
SM3PL-CONS-move-FV DIST.DEM17
they moved from there

íyɪ fúmu vailekili vándu va mwándi
ɪyɪ fumu va-i-lek-ili va-ndu va mwandi
PROX.DEM9 NCP9.story SM3PL-OM9-leave-PRF NCP2-people CP2 past
this story has the people of the past left

kugána kulása ngáti ukíti' múndu kya mavífu
ku-gan-a ku-las-a ngati u-kɪt-iti mu-ndu kya ma-vifu
INF-like-FV INF-show-FV if SM-do-PRF NCP1-person CP7 NCP6-bad
with the intention to show that if you have done something bad to someone,

na wénga ngaulipíwi pamavífu
na wenga nga-u-lip-iw-iti pa-ma-vifu
FOC PERS2SG COND-SM2SG-pay-PASS-COND LOC16-NCP6-bad
you yourself will be get payed back with something bad.'

II. KUBENA MAYAWU
Sauda Masasi (22-06-15)

mayáwu gála gatilímíli gatáma myési síta
ma-yawu gala ga-ti-lım-ili ga-tam-a mi-esi sita [ntánda]
NCP6-cassava DIST.DEM6 SM6-SM1PL-cultivate-PRF SM6-sit-FV NCP4-month six
'the cassava which we have cultivated sit (in the ground) for six months

myési sítaaaa, titúpú' máyáwu
mi-esi sita [ntánda] ti-tupul-a ma-yawu
NCP4-month six SM1PL-uproot.SEP-FV NCP6-cassava
(after) six month, we uproot the cassava

wóna titúpwíli, tihónda
wona ti-tupul-ili ti-hond-a
if SM1PL-uproot-PRF SM1PL-peel-FV
when we have uprooted (them), we peel (them)

gángi tihótó' kutumbika
ga-ngi ti-hotol-a ku-tumbik-a
ACP6-(an)other SM1PL-POSS-FV inf-soak.IMPOS-FV
some of them we might soak

gángi tihótó' kuvíka méwa
ga-ngi ti-hotol-a ku-vık-a mewa
ACP6-(an)other SM1PL-POSS-FV INF-put-FV like.this
some of them we might put like this

ga kuyaníkíla
ga ku-yanıkıl-a
CP6 INF-dry-FV
to dry

wóna tiyáníki au titúmbíki
wona ti-yanıkıl-ili au ti-tumbik-ili
when SM1PL-dry-PRF or SM1PL-soak.IMPOS-PRF
when we have dried, or soaked (them),

tifówó' mumáchi
ti-fowol-a mu-ma-chi
SM1PL-remove.from-water-FV LOC18-NCP6-water
we take (them) out of the water

wóna tifówí' mumáchi, tipónda mulítóli
wona ti-fowol-ili mu-ma-chi ti-pɒnd-a mu-li-tɒli
when SM1PL-remove.from.water-PRF LOC18-NCP6-water SM1PL-pound-FV LOC18-NCP5-mortar
when we have taken them out from the water, we pound (them) in the mortar

wóna tipóndí' mulítóli tiyaníki' pamípása
wona ti-pɒnd-ili mu-li-tɒli ti-yanık-ıl-a pa-mi-pasa
when SM1PL-pound-PRF LOC18-NCP5-pestle SM1PL-spread.out-APPL-FV LOC16-NCP4-mat
when we have pounded (them) in the pestle, we spread (them) out on the mats

wóna tiyániki' pamípása tigayánóla
wona ti-yanıkıl-ili pa-mi-pasa ti-ga-yanɒl-a
when SM1PL-spread.out-PRF LOC16-NCP4-mat SM1PL-OM6-take.out.SEP-FV
when we have spread them out on the mats, we take them out (of the sun)

wóna tiyánwíli, tibí' kupóla
wona ti-yanʊl-ili ti-bɪt-a ku-pʊl-a
when SM1PL-take.out-PRF SM1PL-go-FV INF-pound-FV
when we have taken them out (of the sun), we go to pound

kupóla mulítóli
ku-pʊl-a mu-li-tʊli
INF-pound -FV LOC18-NCP5-mortar
to pound in the mortar

wó' tipólíli, tiséfa
wona ti-pol-ili ti-sef-a
when SM1PL-pound-PRF SM1PL-sift-FV
when we have pounded, we sift

'óna tiséfíli upatikána sémbe
wona ti-sef-ili u-patikana [Sw.] sembe
when SM1PL-sift-PRF SM14-be.available.FV NCP14.flour
when we have sifted, there is flour

sémbe góla tivíka mumaplástíki
sembe gʊla ti-vɪk-a mu-ma-plastiki [Sw.]
NCP14-flour DIST.DEM14 SM1PL-put-FV LOC18-NCP6-plastic.buckets
we put the flour in plastic buckets,

'óna tivíki mumaplástíki,
wona ti-vɪk-ili mu-ma-plastiki [Sw.]
when SM1PL-put-PRF LOC18-NCP6-plastic.bucket
when we have put (them) in the plastic buckets

ndí titóla kidógo
ndi ti-tol-a kidogo [Sw.]
EMPH.COP SM1PL-take-FV a.little
indeed, we take a little

tibí' kutéléka gwáli
ti-bɪt-a ku-telek-a gwali
SM1PL-go-FV INF-cook-FV NCP14.*ugali*
we go to prepare *ugali*

wóna titélíki gwali, ndo gupíta gwáli
wona ti-telek-ili gwali ndo gu-pɪt-a gwali
when SM1PL-cook-FV NCP14.*ugali* EMPH.COP SM3-pass-FV NCP14.ugali
when we have cooked the ugali, indeed there is *ugali*

tíla
ti-l-a
SM1PL-eat-FV
we eat.'

III. LIGINIKO (‘respect’)
John Ngolibaha (22-07-15)

ngáti múndu úyí’ na ligíníko kwa vándu,
ngati mu-ndu u-y-i na li-giniko kwa va-ndu
if NCP1-person SM2SG-be(come)-PRF COM NCP5-respect CP17 NCP2-person
‘if a person has respect among people,

vándu yavakúgáni wénga ndáva ya ligíníko lákо
va-ndu ya-va-ku-gan-i wenga ndava ya li-giniko li-ako
NCP2-person F1-SM3PL-OM2SG-love-SBJ PERS2SG NCP9.reason CP9 NCP5-respect ACP5-POSS2SG
people will love you because of your respect

na kúya
na ku-y-a
COM INF-be(come)-FV
and to be

wa kunyenyékéla kwa vándu
CP1 ku-nyenyekel-a kwa va-ndu
COM INF-be.trusted-FV CP17 NCP2-person
trusted among people

ndáva ngáti vándu vakugána wénga
ndava ngati va-ndu va-ku-gan-a wenga
because if NCP2-person SM3PL-OM2SG-like-FV PERS2SG
because if people like you

yaupáti kyokyóha kíla, háka kapási
ya-u-pat-i ki-o ki-oha kıla haka ka pasi
F1-SM2SG-get-F1 ACP7-QUANT ACP7-QUANT PROX.DEM7 even CP7 LOC16.below
you will get whatever (you need), even what is hard to get (lit. below)’

kya mfíyu wénga yaukipáti
kya mu-fiyu wenga ya-u-ki-pat-i
CP7 NCP3-secret PERS2SG F1-SM2SG-OM7-get-F1
what is secret, you will get it

ndáva kuhúmíla kwa ligíníko lákо
ndava ku-hum-ıl-a kwa li-giniko li-ako
because INF-come.from-APPL-FV CP17 NCP5-respect ACP5-POSS2SG
because of what comes from your respect

kóma ngáti úna likómo wénga
koma ngati u-na li-komo wenga
but if SM2SG-COM NCP5-contempt PERS2
but if you are contemptuous

háka kutáma kwáku
haka ku-tam-a ku-aku
even INF-live-FV ACP15-POSS2SG
even your living (among others)

kúya lépe kwa kindámba háka pachokópi
ku-y-a lepe kwa ki-ndamba haka pa-chokopi
INF-be(come)-FV NEG CP17 NCP7-peace even LOC16-little
will not be peaceful, (not) even the slightest

ndáva kíla yɔmónga yakudádilayi wénga
ndava kila [Sw.] yɔ-monga ya-a-ku-dad-ıl-ayi wenga
reason every ACP1-one F1-SM3SG-OM2SG-be.angry-APPL-F1 PERS2SG
because everyone will be angry with you

kúya múndu wa mbífu
kuya mu-ndu wa mu-vifu
COMPL NCP1-person CP1 NCP1-bad
that you are a bad person,

wénga múndu wa likómo,
wenga mu-ndu wa li-komo
PERS2SG NCP1-person CP1 NCP5-contemp
(that) you are a person of contempt,

wénga ulónda lépe kulóngéla na vayínu wíchu
wenga u-lond-a lepe ku-longel-a na va-yınu wichu
PERS2SG SM2SG-want-FV NEG INF-talk-FV COM NCP2-fellow well
you don't want to speak well with your fellows,

kóma wénga uwóna wénga ni wénga tú
koma wenga u-won-a wenga ni wenga tu
but PERS2SG SM2SG-see-FV PERS2SG COP PERS2SG just
instead you think you are the only one,

áyí' lépe yóngi pandíma ápa
a-y-ili lepe yɔ-ngi pa-mu-lıma apa
SM3SG-be-PRF NEG ACP1-other LOC16-NCP3-earth LOC16
(that) there are no others on this earth

kwa víla, néno kuwónga, mwanángu
kwa vıla neno [li-lóvi] ku-wɔng-a mu-ana=angu
CP17 DIST.DEM17 NCP5-word INF-advice-FV NCP1-child=POSS1SG
hence, a word of advice, my child

kukíta wóna ulónda kutáma wíchu na vándu
kukıta wona u-lond-a ku-tam-a wichu na va-ndu
COMPL if SM2SG-want-FV INF-live-FV well COM NCP2-people
that if you want to live well with (other) people

uyenéléka kuvagána vándu -
u-yenelek-a ku-va-gan-a va-ndu
SM2SG-NEC-FV INF-OM3PL-love-FV NCP2-people
you must love people -

vakulúmba na vachokovachóko - pawénga
va-kulumba na va-chokovachoko pa-wenga
NCP2-big COM NCP2-small.RED LOC16-PERS2SG
the big and small ones - where you are at

na vándu vóha yavakuhíkalıli
na va-ndu va-oha ya-va-ku-hıkalıl-i
COM NCP2-people ACP2-all F1-SM3PL-OM2SG-praise-F1
and everyone will praise you.’

References

Aikhenvald, A. 2010. *Imperatives and commands*. Oxford: Oxford University Press.

Anderson, G. 2006. *Auxiliary verb constructions*. Oxford: Oxford University Press.

Anderson, G. 2011. Auxiliary verb constructions in the languages of Africa. *Studies in African Linguistics* 40(1&2), pp. 1–409.

Anderson, H., Krüger, S. & Nagler, L. 2003. *A sociolinguistic survey of the Manda language community*. Ms.

Ashton, E. O. 1947. *Swahili grammar(including intonation*). London: Longmans, Green & Co.

Anderson-Morshead, A.E.M. & Blood, A.G. 1955. *The history of the universities' mission to Central Africa. 1, 1859-1909.* [New & rev. edn.]. London: Office of the Universities' Mission to Central Africa.

Auwera, J. van der & Plungian, V. 1998. Modality's Semantic Map. *Linguistic Typology* 2, pp 79-124.

Auwera, J. van der. 2009. The Jespersen cycles. In Gelderen, E. van (ed.), *Cyclical change.* pp 35–71. Amsterdam: Benjamins.

Auwera, J. van der. 2010. *On the diachrony of negation.* In Horn, L. (ed.), *The Expression of Negation*, pp 73–101. Berlin & New York: Mouton de Gruyter.

Baar, T. van. 2011. *Particles*. In: Devriendt, B., Goossens, L. & Auwera, J. van der (eds.), *Complex Structures. A Functionalist Perspective*, pp 259-302. Berlin, Boston: De Gruyter Mouton.

Barnes, B. H. 1933. *Johnson of Nyasaland, a study of the life and work of William Percival Johnson, D.D., archdeacon of Nyasa, missionary pioneer 1876-1928*. London: Universities' Mission to Central Africa.

Barwick, L. 2011. Including Music and the Temporal Arts in Language Documentation. In Thieberger, N. (ed.) *The Oxford Handbook of Linguistic Fieldwork*, pp 166-179. Oxford: Oxford University Press.

Bastin, Y. 1983. *La finale verbale -ide et l'imbrication en bantou.* Tervuren: Musée royal de l'Afrique centrale.

Bastin, Y, Coupez, A., Mumba, E. & Schadeberg, T. (eds.). 2002.
Bantu lexical reconstructions 3 / Reconstructions lexicales bantoues 3. Tervuren: Royal Museum for Central Africa, online database.
http://www.africamuseum.be/collections/browsecollections/humansciences/blr

Batibo, H. 2000. The Linguistic situation of Tanzania. In Kulikoyela, K. Kihore, Y. & Mous, M. (eds.) *Lugha za Tanzania = Languages of Tanzania*, pp 5-18. Leiden: Universität Leiden.

Batibo, H. 2005. *Language Decline and Death in Africa*. Clevedon: Multilingual Matters.

Batibo, H. 2009. The inter-cultural dimension in the use of languages of wider communication by minority language speakers. *Journal of Multicultural discourses* 4(2), pp 89-102.

Beijering, K. 2012. *Expressions of epistemic modality in Mainland Scandinavian*. Ph.D thesis, University of Groningen.

Bernander, R. 2012. *Contact induced change in Bena (G63) – A study of 'swahilization' in a Tanzanian vernacular language*. MA (magister) thesis, University of Gothenburg.

Bernander, R. Forthcoming. The grammaticalization of -kotok- into a negative marker in Manda (Bantu N.11). *Linguistics* 56, 2018 [to appear]

Bernander, R., Gibson, H., Devos, M. 2017. The negative existential cycle in Bantu. Paper presented at the workshop The Negative Existential Cycle from a historical-comparative perspective, Stockholm, 4-5 May.

Besha, R. M. 1985. A study of tense and aspect in Kishambala. Ph. D. thesis, University of Dar- es-Salaam.

Bickmore, L. 2007. *Cilungu phonology*. Stanford: CSLI.

Blommaert, J. 2014. *State ideology and language in Tanzania*. [2nd and rev. edn.].

Blois, K. F. de. 1970. The augment in Bantu languages. *Africana linguistica* 4, pp 85-165.

Bloom Ström, E-M & Petzell, M. Forthcoming. Micro-variation approaches to Bantu language varieties. In Marten, L., Hurst, E., Kula, N. & Zeller, J. (eds.) *The Oxford Guide to the Bantu Languages.*

Bostoen, K. 2004. Linguistics for the use of African history and the comparative study of Bantu pottery vocabulary. In Brisard, F., d'Hondt, S. & Mortelmans, T. (eds.) *Language and Revolution II Language and Time*, pp 131-54. Antwerp: University of Antwerp, Antwerp Papers in Linguistics.

Bostoen, K. 2008. Bantu spirantization. Morphologization, lexicalization and historical classification. *Diachronica* 25(3), pp 299–356.

Bostoen, K. & Bastin, Y. 2016. Bantu Lexical Reconstruction. *Oxford Handbooks online.* DOI: 10.1093/oxfordhb/9780199935345.013.36

Bostoen, K, Mberamihigo, F. & de Schryver, G-M. 2012. Grammaticalization and subjectification in the semantic domain of possibility in Kirundi (Bantu, JD62). *Africana linguistica* 18, pp 5-40.

Botne, R. 1986. The temporal role of eastern Bantu -ba and -li. *Studies in African Linguistics*, 17, pp 303–317.

Botne, R. 1993. Differentiating the auxiliaries -ti and -va in Tumbuka (N.21). *Linguistique Africaine* 10, pp 7-28.

Botne, R. 1998. The evolution of future tenses from serial 'say' constructions in Central Eastern Bantu. *Diachronica* 15(2), pp 207–230.

Botne, R. 1999. Future and distal -ka-'s: proto-Bantu or nascent form(s)? In Hyman, L: & Hombert, J-M. (eds.), *Bantu historical linguistics: theoretical and empirical perspectives*, pp 473–515. Stanford: CSLI.

Botne, R. 2006. Motion, time, and tense: on the grammaticalization of come and go to future markers in Bantu. *Studies in African Linguistics* 35:2, pp 127-188.

Botne, R. 2010. Perfectives and perfects and pasts, oh my!: on the semantics of -ile in Bantu. *Africana Linguistica* 16, pp 31–63.

Botne, R. 2012. Remoteness distinctions. In Binnick, R. (ed.) *The Oxford handbook of tense and aspect*, pp 536-562. Oxford: Oxford University Press.

Botne, R. 2013. On the organizational properties of Bantu T/A Systems. Paper presented at the 5th International Conference on Bantu Languages, Paris 12-15 June.

Botne, R & Kershner, T. 2008. Tense and cognitive space: On the organization of tense/aspect systems in Bantu languages and beyond. *Cognitive linguistics* 19(2), pp 145 -218.

Botne, R. & Kulemeka, C. 2004. A learner's Chichewa and English dictionary. Köln: Rüdiger Köppe.

Botne, R & Schafer, L. 2008. *The Chindali language of Malawi*. Philadelphia: American Philosophical Society.

Bowern, C. 2008. *Linguistic fieldwork: a practical guide*. New York: Palgrave Macmillan.

Bowern, C. 2010. Fieldwork in contact situations. In Hickey, R (ed.), *The handbook of language contact*, pp 340-357. Chichester: Wiley-Blackwell.

Boye, K. & Harder, P. 2012. A usage-based theory of grammatical status and grammaticalization. *Language* 88(1), pp 1-44.

Breban, T. 2014. What is secondary grammaticalization? Trying to see the wood for the trees in a confusion of interpretations. *Folia Linguistica*, 48(2), pp. 469-502.

Breban, T. 2015. Refining secondary grammaticalization by looking at subprocesses of change. *Language sciences* 47, pp 161-171.

Brems, L. 2010. Size noun constructions as collocationally constrained constructions: Lexical and grammaticalized uses. *English Language and Linguistics* 14, pp 83-109.

Brinton, L. 1991. The origin and development of quasimodal *have to* in English. Paper presented at ICHL10, Amsterdam.

Brinton, L. & Traugott, E. Closs. 2005. *Lexicalization and language change*. Cambridge: Cambridge University Press.

Bulkens, A. 1997. Some Nominal Stems for "Canoe" in Bantu Languages. Paper presented at the 27th Colloquium on African languages and linguistics, Leiden, August.

Bybee, J. 2003. Mechanisms of change in grammaticization: The role of frequency. In Joseph, B. & Janda, R. (eds.), *The Handbook of historical linguistics*, pp 602-623. Oxford: Blackwell Publishers.

Bybee, J. 2006. From Usage to Grammar: The Mind's Response to Repetition. *Language*, 82(4), pp 711-733.

Bybee, J. & Dahl, Ö. 1989. The creation of tense and aspect systems in the languages of the world. *Studies in Language* 13, pp 51-103.

Bybee, J. & Pagliuca, W. 1985. Cross-linguistic comparison and the development of grammatical meaning. In Fisiak, J. (ed.), *Historical semantics, historical word formation*, pp 59-83. Berlin: Mouton.

Bybee, J. & Pagliuca, W. 1987. The evolution of future meaning. In Ramat, A. G., Carruba O. & Bernini, G. (eds.), *Papers from the VIIth International Conference on Historical Linguistics*, pp 109-22. Amsterdam: John Benjamins.

Bybee, J., Perkins, R. & Pagliuca, W. 1991. Back to the future. In Traugott, E. & Heine, E. (eds.), *Approaches to grammaticalization, vol 2*. pp 17-58. Amsterdam: Benjamins.

Bybee, J., Perkins, R. & Pagliuca, W. 1994. *Evolution of grammar: tense, aspect, and modality in the languages of the world*. Chicago: University of Chicago Press.

Chavula, J. 2016. *Verbal Derivation and Valency in Citumbuka*. Ph. D. Dissertation, Leiden University.

Cheng, L. & Downing, L. 2010. Locative relatives in Durban Zulu. *ZAS Papers in Linguistics* 53, pp 33-52.

Coates, J. 1983. *The Semantics of the Modal Auxiliaries*. London: Croom Helm.

Comrie, B. 1976. *Aspect: an introduction to the study of verbal aspect and related problems.* Cambridge: Cambridge University Press.

Comrie, B. 1985. *Tense*. Cambridge: Cambridge University Press.

Comrie, B. 2002. Reconstruction, typology and reality. In Hickey, R. (ed.) *Motives for language change*, pp 243-57. Cambridge: Cambridge University Press.

Corbett, G. 1991. *Gender*. Cambridge: Cambridge University Press.

Contini-Morava, E. 1997. Noun classification in Swahili: A cognitive-semantic analysis using a computer database. In Herbert, R. K. (ed.), *African languages at the crossroads: papers from Kwaluseni*, pp 599-628. Köln: Rüdiger Köppe.

Cope, A. T. 1984. An outline of Zulu grammar. *African Studies* 43(2), pp 83-102.

Cover, R. 2015. Semantic Fieldwork on TAM. In Matthewson, L. & Bochnak, M. R. (eds.), *Methodologies in semantic fieldwork*, pp 233–268. Oxford: Oxford University Press.

Coussé, E. 2013. The grammaticalization of the have perfect in Dutch – a corpus study of contextual extension and semantic generalization. *Language Sciences* 36, pp 103-112.

Coussé, E. 2015. Constructional complexification. The rise of double modal constructions in Dutch. *Taal en tongval*, 67(2), pp 147-176.

Crane, T. 2012. -ile and the pragmatic pathways of the resultative in Bantu Botatwe. *Africana Linguistica* 18, pp 41-96.

Crane, T. 2013. Resultatives, progressives, statives, and relevance: The temporal pragmatics of the -ite Suffix in Totela. *Lingua* 133, pp 164-188

Croft, W. 1991. The evolution of negation. *Journal of Linguistics* 27(1), pp 1–27.

Croft, W. 2000. *Explaining language change: an evolutionary approach*. Harlow, England: Longman.

Croft, W. 2003. *Typology and universals.* Cambridge: University Press.

Croft, W. 2013. Radical consturction grammar. In Hoffmann, T. & Trousdale, G. (eds.), *The Oxford Handbook of Construction Grammar*, pp 212-232. Oxford: Oxford University Press.

Cuyckens, H, Davidse, K. & Vandelanotte, L. 2010. Introduction. In: Davidse, K., Vandelanotte, L. & Cuyckens, H. (eds.) *Subjectification, Intersubjectification and Grammaticalization*, pp 29-70. Berlin: De Gruyter Mouton.

Dahl, Ö. 1979. Typology of sentence negation. *Linguistics* 17, pp 79–106.

Dahl, Ö. 1985. *Tense and aspect systems*. Oxford: Blackwell.

Dahl, Ö. 2000. The grammar of future time reference in European languages. In Dahl, Ö. (ed.), *Tense and aspect in the languages of Europe*, pp 309-328. Berlin: de Gruyter.

Dahl, Ö. 2010. Typology of negation. In: Horn, L. (ed.), *The expression of negation*, pp 9-38. Berlin & New York: Mouton de Gruyter.

Dahl, Ö. 2013. Tense-aspect-mood-evidentiality (TAME) and the Organization of Human Memory. In Molsing, K. M. & Tramunt Ibaños, A.-M. (eds.) *Time and TAME in language*, pp 22-53. Newcastle upon Tyne: Cambridge Scholars Publishing.

Dahl, Ö. 2014. Studying TAME systems by questionnaires and parallel corpora. Lecture given at the International Summer School in Language Documentation and Linguistic Diversity, University of Stockholm, 23 June - 4 July.

Davidse, K. Vandelanotte, L. & Cuyckens, H. (eds.). 2010. *Subjectification, Intersubjectification and Grammaticalization*, Berlin: De Gruyter Mouton.

Davy, J. & Nurse, D. 1982. Synchronic Versions of Dahl's Law: The Multiple Applications of a Phonological Dissimilation Rule. *Journal of African Languages and Linguistics* 4, pp 157 - 195.

De Kind, J., Dom, S., de Schryver, G.-M. & Bostoen, K. 2015. Event-centrality and the pragmatics-semantics interface in Kikongo: From predication focus to progressive aspect and vice versa. *Folia Linguistica Historica* 36, pp 113‑63.

Deutsches Kolonial-Handbuch. 1901. Berlin: H. Paetel.

Devos, M. 2008a. *A grammar of Makwe (Studies in African Linguistics 71).* Munich: Lincom Europa.

Devos, M. 2008b. *The expression of modality in Shangaci*. Africana Linguistica 14, pp 3-37.

Devos, M. 2013. Vowel length in Shangaci -when lexical vowel length and penultimate lengthening co-occur. *Africana Linguistica* 19, pp 85-107.

Devos, M. 2014. Motion verbs in Shangaci. In Devos, M. & Wal, J. van der (eds.), *COME and GO off the beaten grammaticalization path*. Berlin: De Gruyter.

Devos, M. & Auwera, J. van der. 2013. Jespersen cycles in Bantu: double and triple negation. *Journal of African Languages and Linguistics* 34(2), pp 205-274.

Devos, M. & Bostoen, K. 2012. Bantu do/say polysemy and the grammaticalization of quotatives in Shangaci. Africana Linguistica 18, pp 97-133.

Devos, M. & Van Olmen, D. 2013. Describing and explaining the variation of Bantu imperatives and prohibitives. *Studies in Language* 37(1), pp 1-57.

Devos, M. & Wal, J. van der. 2010. 'Go' on a rare grammaticalisation path to focus. In Nouwen, Rick and Jacqueline van Kampen (eds) *Linguistics in the Netherlands* 27, pp 45-58. Amsterdam: John Benjamins.

Diewald, G. 1999. *Die Modalverben im Deutschen: Grammatikalisierung und Polyfunktionalität.* Tübingen: Niemeyer.

Diewald, G. 2002. A model for relevant types of contexts in grammaticalization. In Wischer, I. & Diewald, G. (eds.), *New Reflections on Grammaticalization. International Symposium, Potsdam, 17-19 June*, pp 103-120. Amsterdam: Benjamins.

Dimmendaal, G. 2001. Places and people: Field sites and informants. In Newman, P. & Ratliff, M. (eds.), *Linguistic Fieldwork*, pp. 55-75. Cambridge: Cambridge University Press.

Dimmendaal, G. 2011. *Historical linguistics and the comparative study of African languages.* Amsterdam: John Benjamins.

Dixon, R. 1982. *Where have all the adjectives gone? and other essays in semantics and syntax.* Berlin: Mouton de Gruyter.

Dixon, R. 2004. Adjective classes in typological perspective. In Dixon, R. and Aikhenvald, A. (eds.), *Adjective Classes: A Cross-linguistic Typology*, pp 1-49. Oxford: Oxford University Press.

Doke, C. 1930. *Textbook of Zulu grammar*. Cape Town: Masker Miller Longman.

Doke, C. 1954. *The Southern Bantu languages*. London/New York: Published for the International African Institute by Oxford University Press.

Doke, C. (ed.). 1990 [1953]. *English-Zulu, Zulu-English dictionary*. London: UCL Press.

Dom, S. & Bostoen, K. 2015. Examining variation in the expression of tense/aspect to classify the Kikongo Language Cluster. *Africana Linguistica* 21, pp 163–211.

Dom, S., Segerer, G. & Bostoen, K. 2015. Antipassive/associative polysemy in Cilubà (Bantu, L31a): A plurality of relations analysis. *Studies in language* 39(2), pp 354 -385.

Downing, L. 2003. Compounding and tonal non-transfer in Bantu languages. *Phonology* 20, pp 1-42.

Downing, L. 2010. Accent in African languages. In: Hulst, H. van der, Goedemans, R. & Zanten, E. van (eds.), *A Survey of word accentual patterns in the languages of the world*, pp 381-427. Berlin: De Gruyter.

Downing, L. 2012. On the (Non-)congruence of Focus and Prominence in Tumbuka. *Selected Proceedings of the 42nd Annual Conference on African Linguistics*, pp 122-133. Sommerville: Cascadilla Proceedings Projects.

Downing, L. & Hyman, L. 2016. In Féry, C. & Ishihara, S. (eds.), *Oxford Handbook of Information Structure*, pp. 790-813. Oxford: Oxford University Press.

Dryer, M. 2007. Clause types. In Shopen, T. (ed.), *Language Typology and Syntactic Description. Vol. I: Clause Structure* [2nd edn.], pp 224–275. Cambridge: Cambridge University Press.

Ebner, E. 1939. *Kisutu Grammatik*. Mission Magagura, Tanganyika. Peramiho: St. Benedictine Mission. Ms.

Ebner, E. 1953. *Wörterbuch der Sprache der Neu-Kingoni*. Ms.

Ebner, E. 1955. *The history of the Wangoni. Peramiho*. Ndanda: Benedictine Publications.

Ehret C. 1999. Subclassifying Bantu: The evidence of stem morpheme innovation. In Hombert J-M. & Hyman L. (eds) *Bantu Historical Linguistics: Theoretical and Empirical Perspectives*, pp 43–147. Stanford: CSLI Publications.

Elmslie, W. A. 1891. Introductory grammar of the Ngoni (Zulu) language: as spoken in Mombera's country. Aberdeen: G. & W. Fraser.

Emanatian, M. 1991. *Grammatical Polysemy: The Systematicity of Multiple Meanings in Grammar*. Ph.D. thesis, University of California (Berkeley).

Emanatian, M. 1992. Chagga 'come' and 'go': metaphor and the development of tense-aspect. *Studies in Language* 16, pp 1-33.

Felberg, K. 1996. *Nyakyusa-English-Swahili and English-Nyakyusa dictionary*. Dar es Salaam: Mkuki na Nyota Publishing.

Fischer, O. 2007. *Morphosyntactic change: Functional and formal perspectives*. Oxford: Oxford University Press.

Fleisch, A. 2008. The Reconstruction of Lexical Semantics in Bantu. *Sprache und Geschichte in Afrika* 19, pp 67–106.

Fox, A. 1995. *Linguistic reconstruction: an introduction to theory and method*. Oxford: Oxford University Press.

Friedman, V. 2012. Tense-Aspect and Language Contact. In Binnick, R. (ed.), *The Oxford Handbook of Tense and Aspect*, pp 398-427. Oxford: Oxford University Press.

Fülleborn, F. 1906. *Das Deutsche Njassa- u. Ruwuma-Gebiet, Land und Leute, nebst Bemerkungen über die Schire-Länder*. Berlin: Reimer.

Gelderen, E. van. 2008. Negative Cycles. *Linguistic Typology* 12, pp 195-243.

Gibson, H. & Wilhelmsen, V. 2015. Cycles of negation in Rangi and Mbugwe. *Africana Lingusitica* 21, pp. 233-257.

Givón, T. 1971. Historical syntax and synchronic morphology: An archaelogist's field trip. *Chicago Linguistic Society*, 7 pp 394-415.

Givón, T. 1973. The Time-Axis Phenomenon. *Language* 49, pp 890–925.

Givón, T. 1979. *On Understanding Grammar*. New York: Academic Press.

Givón, T. 2000. Internal reconstruction: as method, as theory. In Gildea, S. (ed.). *Reconstructing grammar: comparative linguistics and grammaticalization*, pp. 107-159. Amsterdam: John Benjamins.

Givón, T. 2001. *Syntax: an introduction. Vol. 1 & 2*. Philadelphia: John Benjamins.

Givón, T. 2015. *The diachrony of grammar*. Amsterdam: John Benjamins.

Gluckman, J., Bowler, M, Sifuna, M. & Diercks, M. 2017. *Modality in Luhya: A typological study*. Poster presented at LSA, January 6, 2017.

Good, J. 2005. Reconstructing morpheme order in Bantu - The case of causativization and applicativization. *Diachronica* 22(1), pp 3–57.

Gowlett, F. 1979. A structural typology for Bantu riddles. *African Studies*, 38(1), pp 47-65.

Gray, H. Forthcoming. *Kisi grammar sketch*. Dallas: SIL International.

Gray, H & Mitterhoffer, B. 2016. *A sociolinguistic survey of the Manda/Matumba language communities.* Ms.

Gray, H. & Roth, T. 2016. New perspectives on the genetic classification of Manda (Bantu N.11). *SIL Electronic Working Papers 2016-001*. Dallas: SIL International.

Grossman, E. & Polis, S.2014. On the pragmatics of subjectification: The grammaticalization of verbless allative futures (with a case study in Ancient Egyptian). *Acta Linguistica Hafniensia* 46(1), pp 25-63.

Grout, L. 1859. *The Isizulu: A Grammar Of The Zulu Languages*. Kessinger Publishing.

Gulliver, P.H. 1955. A history of the Songea Ngoni. *Tanganyika Notes and Records* 41, pp. 16-30.

Gulliver, P.H. 1974. Political evolution in the Songea Ngoni chiefdoms 1850–1905. *Bulletin of the School of Oriental and African Studies* 37, pp 82–97.

Guthrie, M. 1948. *The classification of the Bantu languages*. London: Oxford University Press.

Guthrie, M. 1967-1971. *Comparative Bantu: an introduction to the comparative linguistics and pre-history of the Bantu languages*. London: Gregg.

Güldemann, T. 1996. *Verbalmorphologie und Nebenprädikationen im Bantu: Eine Studie zur funktional motivierten Genese eines konjugationalen Subsystems*. Bochum: Brockmeyer.

Güldemann, T. 1998. The relation between imperfective and simultaneous taxis in Bantu: late stages of grammaticalization. In Fiedler, I., Griefenow-Mewis, C. & Reineke, B. (eds.),

Afrikanische Sprachen im Brennpunkt der Forschung: Linguistische Beiträge zum 12. Afrikanistentag Berlin, 3.-6. Oktober 1996, pp 157-177. Köln: Rüdiger Köppe.

Güldemann, T. 1999. The genesis of verbal negation in Bantu and its dependency on functional features of clause types. In Hombert, J-M. & Hyman, L. (eds.), *Bantu historical linguistics*, pp 545–587. Stanford: CSLI.

Güldemann, T. 2003. Grammaticalization. In Nurse, D. & Philippson, G. (eds.), *The Bantu languages*. pp 182-194. New York: Routledge.

Güldemann, T. 2008. *Quotative indexes in African languages: a synchronic and diachronic survey*. Berlin: de Gruyter.

Haan, F. de. 2006. Typological approaches to modality. In Frawley, W. (ed.), *The expression of Modality*, pp 40-69. New York/Amsterdam: Mouton de Gruyter.

Harjula, L. 2004. *The Ha language of Tanzania.* Köln: Rüdiger Köppe.

Harjula, L. 2006. The Ha Noun Class System Revisited. *A Man of Measure: Festschrift in Honour of Fred Karlsson, SKY Journal of Linguistics* 19, pp 200–208.

Harries, L. 1950. *A grammar of Mwera*. Johannesburg: Witwatersrand University.

Haselow, A. 2015. Left vs. right periphery in grammaticalization. In Smith, A., Trousdale, G. & Waltereit, R. (eds.), *New directions in grammaticalization research*, pp 157-186. Amsterdam: John Benjamins.

Haspelmath, M. 2009. Lexical borrowing: Concept and issues. In Haspelmath, M. & Tadmor, U. (eds.), *Loanwords in the world's languages: a comparative handbook*, pp 35-54. Berlin: De Gruyter Mouton.

Haule, C. 2016. *Kimanda noun class system - A Study Conducted in Ludewa District, Njombe Region*. MA thesis, University of Dar-es-Salaam.

Haule, E. 2004.*The Role of Agricultural Omens in Manda Ethnic Community*. MA thesis, University of Dar-es-Salaam.

Haule, F. 2008. *Songs as a logbook of the community's memory. The case of mganda songs of the Manda.* MA thesis, University of Dar-es-Salaam.

Heine, B. 1993. *Auxiliaries: Cognitive forces and grammaticalization*. New York: Oxford University Press.

Heine, B.1994. Grammaticalization as an Explanatory Parameter. In Pagliuca, W. (ed.), *Perspectives on Grammaticalization*, pp 255-87. Amsterdam: Benjamins.

Heine, B. 1997. Grammaticalization theory and its relevance to African linguistics. In Herbert, R.K. (ed.), *African Linguistics at the crossroads: Papers from Kwaluseni*, pp 1-15. Köln: Rüdiger Köppe.

Heine, B. 2002. On the role of context in grammaticalization. In Wischer, I. & Diewald, G. (eds.), *New reflections on grammaticalization (Typological Studies in Language, 49.)*, pp 83-101. Amsterdam, Philadelphia: Benjamins.

Heine, B. 2003. Grammaticalization. In Joseph, B. & Janda, R. (eds.), *The handbook of historical linguistics*, pp 575-601. Oxford: Blackwell.

Heine, B.2011. Grammaticalization in African languages. In Narrog, H. & Heine, B. (eds.), *The Oxford Handbook of Grammaticalization*, pp. 696-707. Oxford: Oxford University Press.

Heine, B., Claudi, U. & Hünnemeyer, F. 1991a. *Grammaticalization: A conceptual framework*. Chicago: University of Chicago Press.

Heine, B., Claudi, U. & Hünnemeyer, F. 1991b. From cognition to grammar: evidence from African languages. In Traugott, E. & Heine, B. (eds.), *Approaches to grammaticalization, volume I*, pp. 149-87. Amsterdam: John Benjamins.

Heine, B. & Dunham, M. 2010. Grammaticalization in Bantu languages with special reference to Swahili. In Legère, K. & Thornell, C. (eds.), *Bantu Languages – Analyses, Description & Theory*, pp 31-45. Köln: Rüdiger Köppe.

Heine, B., Güldemann, T., Kilian-Hatz, C. & Lessau, D. A., Roberg, H., Schladt, M., Stolz, T. 1993. Conceptual Shift. A lexicon of grammaticalization processes in African languages. *Afrikanistische Arbeitspapiere* 34/35.

Heine, B. & Kuteva, T. 2002. *World lexicon of grammaticalization*. Cambridge: Cambridge University Press.

Heine, B. & Kuteva, T. 2005. *Language contact and grammatical change*. New York: Cambridge University Press.

Heine, B. & Kuteva, T. 2007. *The genesis of grammar: A reconstruction*. Oxford: Oxford University Press.

Heine, B. & Kuteva, T. 2011. The areal dimension of grammaticalization. In Narrog, H. & Heine, B. (eds.) *The Oxford Handbook of Grammaticalization*, pp. 291-301. Oxford: Oxford University Press.

Heine, B. & Miyashita, H. 2008. Accounting for a functional category: German drohen ‘to threaten’. *Language Sciences* 30, pp 53-101.

Heine, B. & Narrog, H. 2009. Grammaticalization and linguistic analysis. In Heine, B. & Narrog, H. (eds.), *The Oxford handbook of linguistic analysis*, pp 401-423. Oxford: Oxford University Press.

Heine, B. & Reh, M. 1982. *Patterns of Grammaticalization in African Languages*. Köln: AKUP.

Heine, B. & Reh, M. 1984. Grammaticalization and reanalysis in African languages. Hamburg: Buske.

Hengeveld, K. 2004. Illocution, Mood and modality. In Booij, G., Lehmann, C. & Mugdan, J. (eds.), *Morphology. An International handbook on Inflection and Word-formation (Volume 2)*, pp 1190-1201. Berlin, New York: Walter de Gruyter.

Hewson, J. 2012. Tense. In Binnick, R. (ed.) *The Oxford Handbook of Tense and Aspect*, pp. 507–535.

Hewson, J., Nurse, D. & Muzale, H. 2000. Chronogenetic staging of tense in Ruhaya. *Studies in African Linguistics* 29(2), pp 34-56.

Hewson, J. & Nurse, D. 2005. The relationship of tense and aspect in the Gikuyu verb. In Bostoen, K. & Maniacky, J. (eds.). *Studies in African comparative Linguistics with special focus on Bantu and Mande; essays in honour of Y. Bastin and C. Grégoire*. pp 281-311. Tervuren: Koninklijk Museum Midden Afrika.

Hill, Stephen. 2002. *Machini kubwa!: group dancing, politics, and modernity in Umatengo, Tanzania.* Ph. D. thesis, University of Illinois at Urbana-Champaign.

Himmelmann, N. 2004. Lexicalization and grammaticalization: Opposite or orthogonal? In Bisang, W., Himmelmann, N. & Wiemer, B (eds.), *What makes grammaticalization? – A look from its fringes and its components*, pp 21-42. Berlin, Boston: De Gruyter Mouton.

Hopper, P. 1991. On some principles of grammaticization. In Traugott, E. Closs & Heine, B. (eds.), *Approaches to Grammaticalization, Vol. 1*, pp. 17-35. Amsterdam: Benjamins.

Hopper, P. & Traugott, E. 2003. *Grammaticalization* [2. edn.]. Cambridge: Cambridge University Press.

Hyman, L. 1995. *Minimality and the prosodic morphology of Cibemba imbrication*. Journal of African language and linguistics 16, pp 3-39.

Hyman, L. 2002. Suffix ordering in Bantu: a morphocentric approach. In Booji, G. (ed.), *Yearbook of morphology*, pp 423–458. Dordrecht, London: Kluwer.

Hyman, L. 2003. Segmental phonology. In Nurse, D. & Philippson, G. (eds.) *The Bantu languages*, pp 42-58. New York: Routledge.

Hyman, L. 2014. Do all languages have word accent? In Hulst, H. van der (ed.), *Word stress: Theoretical and typological issues*, pp 56-82. Cambridge University Press.

Hyman, L. & Ngunga, A. 1994. On the non-universality of tonal association ‘conventions’: evidence from Ciyao. *Phonology* 11, pp 25-68.

Hyman, L. & Watters, J. 1984. *Auxiliary focus*. *Studies in African linguistics* 15 (3), pp 233-273.

Häflinger, J. 1909. *Kimatengo Wörterbuch*. MSOS vol 12, pp 31-214.

Jendraschek, G. 2014. Future tense, prospective aspect, and irrealis mood as part of the situation perspective: Insights from Basque, Turkish, and Papuan. In De Brabanter, P., Kissine, M. & Sharifzadeh, S.(eds.*) Future Times, Future Tenses*, pp 138-164. Oxford: Oxford University Press.

Johnson, P. W. 1912. *Chikalakala Choyera ndicho Malangano ya Kale ndi Malangano ya Chapano.* [The Holy Bible translated into Chinyanja]. London: British and Foreign Bible Society

Johnson, F. (ed.). 1939. *A standard Swahili-English dictionary (founded on Madan's Swahili-English dictionary).* Nairobi: Oxford University Press.

Johnston, H. 1919-1922. *A comparative study of the Bantu and semi-Bantu languages*. Oxford: Clarendon Press.

Johnstone, B. 2000. *Qualitative methods in sociolinguistics*. New York: Oxford University Press.

Kalinga, O. 1985. *A history of the Ngonde kingdom of Malawi*. Berlin: Mouton.

Kamba Muzenga, J. 1981. *Les formes verbales négatives dans les langues bantoues (Annales Sciences humaines 106)*. Tervuren: Musée Royal de l'Afrique Centrale.

Katamba, F. 2003. Bantu Nominal Morphology. In Nurse, D. & Philippson, G. (eds.) *The Bantu languages*, pp 103-120. New York: Routledge.

Kawalya, D., Bostoen, K. & de Schryver, G-M. 2014. Diachronic semantics of the modal verb -sóból- in Luganda: A corpus-driven approach. *International Journal of Corpus Linguistics* 19(1), pp 60-93.

Kershner, T. L. 2002. *The verb in Chisukwa: aspect, tense and time*. Ph. D. thesis, Indiana University.

Kiso, A. 2012. *Tense and aspect in Chichewa, Citumbuka and Cisena. A description and comparison of the tense-aspect systems in three southeastern Bantu languages*. Ph. D. thesis, University of Stockholm.

Kisseberth, C. & Abasheikh, M. 1976. On the interaction of phonology and morphology: a Chi-mwi:ni example. *Studies in African Linguistics* 7(1), pp 31-40.

Kisseberth, C. & Odden, D. 2003. Tone. In Nurse, D. & Philippson, G. (eds.) *The Bantu languages*, pp 59-70. New York: Routledge.

Koch, H. 1996. Reconstruction in morphology. In Durie, M. & Ross, M. (eds), *The comparative method reviewed Regularity and irregularity in language change*, pp. 218 -263. New York: Oxford University Press.

Koch, H. 2015. Morphological reconstruction. In Bowern, C. & Evans, B. (eds.), *The Routledge Handbook of Historical Linguistics*, pp 286-307. Abingdon, UK and New York, USA: Routledge Taylor & Francis Group.

Kraal, P. 2005. *A grammar of Makonde.* Ph.D. thesis, Leiden University.

Krug, M. 2011. Auxiliaries and grammaticalization. In Narrog, H. & Heine, B. (eds.), *The Oxford Handbook of grammaticalization*, pp 547-558. Oxford: Oxford University Press.

Kröger, H. 2011. Negation in Mozambican Ngoni. Paper presented at the 4th International Conference on Bantu languages, Berlin, 7-9 April.

Kröger, H. 2013. Demonstratives in Mozambican Ngoni. Paper presented at the 5th International Conference on Bantu languages, Paris 12-15 June.

Kuteva, T. 2001. *Auxiliation: an enquiry into the nature of grammaticalization*. Oxford: Oxford University Press.

Kuteva, T. & Heine, B. 2012. An integrative model of grammaticalization. In Wiemer, B, Wälchli, B. & Hansen, B. (eds.), *Grammatical replication and grammatical borrowing in language contact*. pp 159-198. Berlin: Mouton de Gruyter.

Kuryłowicz, J. 1965. The evolution of grammatical categories. *Diogenes* 51, pp 55–71.

Legère, K.1983. Factors influencing the emergence of a national language: the case of Swahili in Tanzania/Mainland. In Breme, G. & Büttner, T. (eds.), *African-studies/ Afrika-Studien - dedicated to the Vth international congress of African studies in Nigeria*, pp 57-71. Berlin: Akademie-Verlag.

Legère, K. 2006a. Language endangerment in Tanzania: Identifying and maintaining endangered languages. *South African Journal of African Languages* 26, pp 99-112.

Legère, K. 2006b. Swahili's current spread to a remote area. Data from primary schools in Vidunda Ward (Central Tanzania). In Harjula, L. and Ylänkö, M. (eds.), *Africa in the Long Run. Festschrift for Professor Arvi Hurskainen (Studia Orientalia)*, pp 93-109. Helsinki: Finnish Oriental Society.

Legère, K. 2007. Vidunda (G38) as an endangered language? *Selected Proceedings of the 37th Annual Conference on African Linguistics*, pp 43-54. Somerville, Massachusetts: Cascadilla Proceedings Project.

Legère, K. 2010. Swahili vs. English in Tanzania and the political discourse. *Studies of the Department of African Languages* 44, pp 47-67.

Lehmann, C. 1985. Grammaticalization: Synchronic variation and diachronic change. *Lingua e Stile* 20, pp 303-318.

Lehmann, C. 2004. Theory and method in grammaticalization. In Diewald, G. (ed.), *Grammatikalisierung, Special issue of Zeitschrift für Germanistische Linguistik* 32, pp 152-187.

Lehmann, C. 2015. *Thoughts on grammaticalization*. [3rd edn. (Classics in Linguistics 1)]. Berlin: Language Science Press.

Lewis, P., Simons, G. & Fennig, C. (eds.). 2016. *Ethnologue: Languages of the World.* [17th edn.]. Dallas, Texas: SIL International.

Lodhi, A. Y. 1994. Arabic Grammatical Loans in the languages of Eastern Africa *NTNU/ Trondheim University Working papers in linguistics* 22, pp. 60-74.

Lodhi, A. Y. 2000. *Oriental influences in Swahili: a study in language and culture contacts*. Göteborg: Acta Universitatis Gothoburgensis.

Lodhi, A. Y. 2002. Verbal derivation in Bantu (the case of Swahili and Nyamwezi). *Africa & Asia* 2, pp 4-26.

Lodhi, A. Y. & Otterbrandt, T. 1987. *Kortfattad swahili-svensk och svensk-swahili ordbok*. Uppsala: Nordiska Afrikainstitutet.

Lyons, J. 1977. *Semantics.* Cambridge: Cambridge University Press.

Lönneborg, O. 1999. *Mwalimu och Ujamaa: Julius Kambarage Nyerere och nationsbildningen i Tanzania*. Umeå: Umeå universitet.

Maevangel ncheche. 1928.[The Four Gospels in Manda, tentative edition]. London: British and Foreign Bible Society.

Maho, J. 1999. *A comparative study of Bantu noun classes.* Göteborg: Acta Universitatis Gothoburgensis.

Maho, J. 2007. The Linear Ordering of TAM/NEG Markers in the Bantu languages. *SOAS Working Papers in Linguistics* 15, pp 213–225.

Maho, J. 2008. Comparative TAM morphology in Niger-Congo: the case of persistive, and some other, markers in Bantu. In Josephson, F. & Söhrman, I. (eds.) *Interdependence of diachronic and synchronic analyses. (Studies in language, companion series, n. 103*), pp 283-298. Amsterdam: John Benjamins.

Maho, J. 2009. *NUGL Online: The online version of the New Updated Guthrie List. A referential classification of the Bantu languages.*

Maho, J. & Sands, B. 2002. *The languages of Tanzania: a bibliography*. Göteborg: Acta Universitatis Gothoburgensis.

Malik, N. 1996. Extension of Kiswahili during the German Colonial Administration in Continental Tanzania (Former Tanganyika), 1885-1917. *Swahili-Forum* 3, pp 155 -159.

Mapunda, B. 2001. The archaeology of the Ruhuhu river basin, eastern shore of Lake Nyasa. In Chami, F., Pwiti, G. & Radimilahy, M. de Chantal. (eds.), *People, contact, and the environment in the African past*, pp 98-112. Dar es Salaam: DUP.

Mapunda, G. 2016. *Ngoni–English–Swahili dictionary with English and Swahili Glosses*. Dar-es-Salaam: LOT Publications.

Mapunda, G. & Rosendal, T. 2015. Borrowing in Tanzanian Ngoni lexicon: Some semantic trends in a language contact situation. *Language Matters* 46(2), pp 180-194.

Marlo, M. 2013. Verb tone in Bantu languages: micro-typological patterns and research methods. *Africana Linguistica* 19, pp 137-233.

Marten, L. 2013. Structure and interpretation in Swahili existential constructions. *Italian Journal of Linguistics*, 25 (1), pp 45-73.

Marten, L. and Kula, N. 2012. Object marking and morphosyntactic variation in Bantu. *Southern African Linguistics and Applied Language* Studies, 30(2), pp 237-253.

Marten, L. & Wal, J. van der. 2014. A typology of Bantu subject inversion. Linguistic Variation 14(2), pp 318-368.

Matras, Y. 2007. The borrowability of structural categories. In Matras, Yaron & Sakel, Jeanette (eds.) *Grammatical Borrowing in Cross-Linguistic Perspective*, pp 31–74. Berlin, New York: Mouton de Gruyter.

Matthewson, L. 2004. On the methodology of semantic fieldwork. *International Journal of American Linguistics* 70(4), pp 369–415.

Mauri, C. & Sansò, A. 2011. How Directive Constructions Emerge: Grammaticalization, Constructionalization, Cooptation. *Journal of Pragmatics* 43, pp 3489–3521.

Mbaabu, I. 1985. *New horizons in Kiswahili: a synthesis in developments, research and literature*. Nairobi: Kenya Literature Bureau.

Meeussen, A. E. 1967. Bantu grammatical reconstructions. *Africana linguistica*, pp 79-121.

Meeussen, A. E. 1969. Bemerkung über die Zahlwörter von sechs bis zehn in Bantusprachen. In: Greschat, H.-J., & Jungrathmayer, H. (eds.), *Kalima na dini: Studien zur Afrikanistik, Missionswissenschaft, Religionswissenschaft ; Ernst Dammann zum 65. Geburtstag*, pp 11-18. Stuttgart: Evangelische Missionsverlag.

Meeussen, A.E. 1979. Vowel length in Proto-Bantu. *Journal of African Languages and Linguistics*, 1, pp 1-7.

Meeussen, A. E. 1980. *Bantu lexical reconstructions*. Tervuren: Musée royal de l'Afrique centrale.

Meillet, A. 1912. L'évolution des formes grammaticales. *Scientia (Rivista di Scienza)* 12(26).

Meinhof, C. 1948. *Grundzüge einer vergleichenden Grammatik der Bantusprachen*. (2nd rev. edn.). Hamburg: Eckardt & Messtorff.

Mekacha, R. 1993. *The sociolinguistic impact of Kiswahili on ethnic community languages in Tanzania: a case study of Ekinata*. Bayreuth: Breitinger.

Meyer, H. (ed.). 1909. *Meyers Grosses Konversations-Lexikon* [6 edn.]. Leipzig: Bibliographisches Institut.

Miehe, G. 1989. Verbal extensions in Swahili and neighbouring languages. *Logos* 9, pp 23-44.

Miehe, G. 2000. The use of nga and its composite form in some pre-Standard Swahili texts. In Kahigi, K. K., Kihore, Y. M. & Mous, M. (eds.), *Lugha za Tanzania/Languages of Tanzania: studies dedicated to the memory of Prof. Clement Maganga*, pp 127-137. Leiden: Research School of Asian, African and Amerindian Studies (CNWS), State University of Leiden.

Miestamo, M. 2005. *Standard negation: The Negation of Declarative Verbal Main Clauses in a Typological Perspective*. Berlin: Mouton de Gruyter.

Missa Mbalafu. [The gospel in Kimanda]. n.d. Likoma: UMCA press.

Mithun, M. 1991. The role of motivation in the emergence of grammatical categories: The grammaticization of subjects. In Heine, Bernd. & Traugott, E. (eds.), *Approaches to Grammaticalization, Vol 2*, pp 159-184. Amsterdam: John Benjamin.

Miti, L. M. 1996. Subgrouping Ngoni varieties within Nguni: a lexicostatistical approach, *South African Jorunal of African Languages,* 16, pp 82–92.

Mkude, D. 2011. The impact of Swahili on other languages in Tanzania. An illustration from Luguru. In Thornell, Christina & Karsten Legère (eds.) *North-South contributions to African languages*, pp 51-60. Köln: Rüdiger Köppe.

Morimoto, Y. 2013. *Grammatical Coding of PCF in Bantu*. Presentation of paper at the Workshop on Information Structure in Bantu Languages, Berlin 10-11 December.

Morrison, M. 2011. *A Reference Grammar of Bena.* Ph. D. thesis, Rice University.

Mosegaard Hansen, M-B. 2011. Negative cycles and grammaticalization. In Narrog, H. & Heine, B. (eds.), *The Oxford handbook of grammaticalization*, pp 570–579. Oxford: Oxford University Press.

Mosel, U. 2011. Morphosyntactic Analysis in the Field: A Guide to the Guides. In Thieberger, N. (ed.), *The Oxford Handbook of Linguistic Fieldwork*, pp 72-89. Oxford: Oxford University Press.

Moser, R. 1983. *Aspekte der Kulturgeschichte der Ngoni in der Mkoa wa Ruvuma, Tanzania. Materialien zum Kultur- und Sprachwandel*. (*Veroffentlichungen der Institute für Afrikanistik und Ägyptologie der Universität Wien, 24.)* Vienna: Afro-Publishing.

Mous, M. & Qorro, M. 2009. Loanwords in Iraqw, a Cushitic language of Tanzania. In Haspelmath, M. & Tadmor, U. (eds.), *Loanwords in the world's languages: a comparative handbook*, pp 103-123. Berlin: De Gruyter Mouton.

Msanjila, Y. 2003. Kushuka kwa hadhi ya lugha za Jamii nchini Tanzania. *Nordic journal of African studies* 12(3), pp 296-309.

Munro, P. 2006. Modal expression in Valley Zapotec. In Frawley, W., Eschenroeder, E. , Mills, S. & Nguyen, T. (eds.), *The expression of modality*, pp 177-209. Berlin: Mouton de Gruyter.

Muzale, H. 1998. *A reconstruction of the Proto-Rutaran tense/aspect system*. Ph. D thesis Memorial University of Newfoundland.

Muzale, H. & Rugemalira, J. 2008. Researching and documenting the languages of Tanzania. *Language Documentation and Conservation* 2(1), pp 68-108.

Myers-Scotton, Carol. 2006. *Multiple voices: an introduction to bilingualism.* Malden, Massachusetts: Blackwell.

Narrog, H. & Heine, B. 2011. Introduction. In Narrog, H. & Heine, B. (eds.), *The Oxford Handbook of Grammaticalization*, pp 1-15.

Nassenstein, N. 2015. *Kisangani Swahili: choices and variation in a multilingual urban space*. München: LINCOM.

New Testament in Manda. 1937. *Kilagano kya hino kya Bambo witu nu njokosi witu Yesu Kristo*. London: British and Foreign Bible Society.

Ngonyani, D. 2000. VP ellipsis in Kindendeule. In Kahigi, K., Kihore, Y. & Mous, M. (eds.), *Lugha za Tanzania / Languages of Tanzania: studies dedicated to the memory of Prof. Clement Maganga*, pp 215-232. Leiden: Research School of Asian, African and Amerindian Studies (CNWS), State University of Leiden.

Ngonyani, D. 2001.The Evolution of Tanzanian Ngoni. In Nurse, D. (ed.) *Historical language contact*, pp 321–353. Köln: Rüdiger Köppe.

Ngonyani, D. 2003. *A Grammar of Chingoni*. München: Lincom Europa.

Ngonyani, D. 2011. *A grammar of Kikisi*. Ms.

Ngonyani, D. 2013a. The subjunctive mood in Kikisi, Kindendeule and Chingoni. *Journal of linguistics and language in education* 7(2), pp 1-19.

Ngonyani, D. 2013b. Surrogate Imperatives in Bantu Languages with Postverbal Negative Particles. *Selected Proceedings of the 43rd Annual Conference on African Linguistics*, pp 177-187.

Ngunga, A. 2000. *Phonology and morphology of the Ciyao verb*. Stanford: CSLI Publications.

Nichols, P. 2011. *A morpho-semantic analysis of the persistive, alterative and inceptive aspects in siSwati*. Ph. D. thesis, SOAS (School of Oriental and African Studies, London).

Nicolle, S. 2002. The grammaticalisation of movement verbs in Digo and English. *Revue de Sémantique et Pragmatique* 11, pp 47–67.

Nicolle, S. 2003. Distal aspects in Bantu languages. In Jascoltz, K & Turner, K. (eds.), *Meaning through language contrast, vol 2*, pp 3-22. Amsterdam/Philadelphia: John Benjamins.

Nicolle, S. 2007. The grammaticalization of tense markers: A pragmatic reanalysis. *Cahiers Chronos* 17, pp 47-65.

Nicolle, S. 2012. Diachrony and grammaticalization. In Binnik, R. (ed), *The Oxford Handbook of Tense and Aspect*, pp 370-397. Oxford: Oxford University Press.

Nicolle, S. 2013. *A grammar of Digo: a Bantu language of Kenya and Tanzania*. Dallas, Texas: SIL International.

Nicolle, S. 2016. A linguistic cycle for quotatives in eastern Bantu languages. Paper presented at presented at the 6th International Conference on Bantu languages, Helsinki 20-22 June.

Norde, M. 2009. *Degrammaticalization*. Oxford: Oxford University Press.

Norde, M. & Beijering, K. 2014. Facing interfaces. A clustering approach to grammaticalization and related changes. *Folia Linguistica* 48(2), pp. 385-424.

Novotná, J. 2005. *A grammar of Ndamba*. Ph. D. thesis, Memorial University of Newfoundland.

Nurse, D. 1979. Description of sample Bantu languages of Tanzania [with contributions by E.R. Byarushengo, G. Philippson, E.M. Ntabaye, A.N.G. Naling'igwa, Mrs G.K. Puja, H.M. Batibo, C. Maganga, S.M. Mazengo, D.J. Mkude, M.R. Kizara, R.M. Besha, R.M. Mfugale, J.M.L. Hawanga, E. Lugalla, I.A.M. Makombe, J.S.M. Mwangomango, and M.J. Bushiri]. *African languages / Langues africaines* 5.

Nurse, D. 1982. Bantu expansion into East Africa: linguistic evidence. In Ehret, C. & Posnansky, M. (eds.) *The Archaeological and Linguistic Reconstruction of African History*, pp 199-222. Berkeley: University of California Press.

Nurse, D. 1985. Review of Moser, R, Aspekte der Kulturgeschichte der Ngoni in der Mkoa wa Ruvuma, Tansania. *Journal of African Languages and Linguistics* 7(1), pp. 207-11.

Nurse, D. 1988. The diachronic background to the language communities of southwestern Tanzania. *Sprache und Geschichte in Afrika* 9, pp 15-115.

Nurse, D. 1999. Towards a historical classification of East African Bantu languages. In Hombert, J. M. & Hyman, L. M. (eds.) *Bantu historical linguistics: theoretical and empirical perspectives*, pp 1-41. Stanford: CSLI.

Nurse, D. 2000. Diachronic Morphosyntactic Change in Western Tanzania. In Vossen, R, Mietzner, A. Meissner, A. (eds.), *Mehr als Worte, Afrikanische Beitraege zum 65. Geburtstag von Franz Rottland*, pp. 517-34. Cologne: Rüdiger Köppe.

Nurse, D. 2003. *Aspect and tense in Bantu languages*. In: Nurse, D. & Philippson, G. (eds.) *The Bantu languages*, pp 90-102. London: Routledge.

Nurse, D. 2006. Focus in Bantu. *ZAS Papers in Linguistics 43: Papers in Bantu Grammar and Description*, pp 189-207.

Nurse, D. 2007a. The emergence of tense in early Bantu. In Payne, D. & Peña, J. (eds.), *Selected proceedings of the 37th Annual Conference on African Linguistics*, pp 164–179. Sommerville: Cascadilla Proceedings Project.

Nurse, D. 2007b. Bantu tense and aspect systems. http://www.ucs.mun.ca/~dnurse/tabantu.html

Nurse, D. 2008. *Tense and aspect in Bantu*. Oxford: Oxford University Press.

Nurse, D. & Devos, M. Forthcoming. Aspect, Tense and Mood. In Bostoen, K. & Van de Velde, M. (eds.) *The Bantu languages* [2nd edn.]. London: Routledge.

Nurse, D. & Hinnebusch, T.J. 1993. *Swahili and Sabaki: a linguistic history*. Berkeley: University of California Press.

Nurse, D. & Philippson, G. 1975. *The Tanzanian Language Survey*.

Nurse, D. & Philippson, G. 1980. The Bantu Languages of East Africa: a Lexicostatical Survey. In Polomé, E.C. & Hill, C.P. (eds.), *Language in Tanzania*, pp 26-67. Oxford: Oxford University Press.

Nurse, D. & Philippson, G. 2003. Towards a historical classification of the Bantu langauges. In Derek Nurse & G. Philippson (eds.) *The Bantu languages*, pp 164-181. London: Routledge.

Nurse, D. & Philippson, G. 2006. Common tense-aspect markers in Bantu. *Journal of African Languages and Linguistics* 27, pp 153-194.

Nuyts, J. 2006. Modality: Overview and linguistic issues. In Frawley, W., Eschenroeder, E., Mills, S. & Nguyen, T. (eds.), *The Expression of Modality*, pp 1–26. Berlin: Mouton de Gruyter.

Nuyts, J. 2015. Subjectivity: Between discourse and conceptualization. *Journal of Pragmatics* 86, pp. 106-110.

Nuyts, J. 2016. Analyses of the modal meanings. In Nuyts, J. & Auwera, J. van der (eds.), *The Oxford handbook of modality and mood*, pp. 31-49. Oxford: Oxford University Press.

Nuyts, J. & Byloo, P. 2015. Competing modals: Beyond (inter)subjectification. *Diachronica* 32(1), pp 34 -68.

Nyembezi, S. 1978. *Learn more Zulu*. Johannesburg: Shuter & Shooter.

Odden, D. 1988. Predictable tone systems in Bantu. In Hulst, H. van der & Smith, N. (eds.) *Autosegmental Studies on Pitch Accent*, pp 225-251. Dordrecht: Foris.

Odden, D. 1996. *The phonology and morphology of Kimatuumbi*. New York: Clarendon Press.

Odden, D. 2003. Rufiji-Ruvuma (N10, P10-20). In Nurse, D. & Phillipson, G. (eds.), *The Bantu languages*, pp 529-545. London: Routledge.

Olsson, B. 2013. *Iamitives: Perfects in Southeast Asia and beyond.* MA thesis, University of Stockholm.

Palmer, F. 2001. *Mood and modality*. [2nd edn.] Cambridge: Cambridge University Press.

Park, G. 1988. Evolution of a regional culture in East Africa. *Sprache und Geschichte in Afrika* 9, pp 117-204.

Parokia ya Lituhi - Jubilei ya miaka [the Parish of Lituhi - anniversary celebration]. 2012. Peramiho: Peramiho printing press.

Pawliková-Vilhanová, V. 2006. Biblical Translations of Early Missionaries in East and Central Africa. 1. Translations into Swahili. *Asian and African Studies*, 15(2), pp 80-89.

Pelt, P. van .1971. *Bantu customs in mainland Tanzania* [2nd edn.]. Tabora: T.M.P. Book Dept.

Persohn, B. 2016. *The verb in Nyakyusa*. Ph. D. thesis, University of Cologne.

Persohn, B. & Bernander, R. Submitted. A note on the presents tenses in some southern Tanzanian Bantu languages. *Nordic journal of African studies*.

Petzell, M. 2003. What is the function of the pre-prefix in Kagulu? In Andréasson, M. & Karlsson, S. (eds). *langue.doc. Göteborg University Open Archive*, pp 1-13.

Petzell, M. 2007. *A linguistic description of Kagulu*. Ph. D. thesis, University of Gothenburg.

Petzell, M. 2008. *The Kagulu Language of Tanzania: Grammar, Texts and Vocabulary*. Köln: Rüdiger Köppe.

Petzell, M. 2012. The linguistic situation in Tanzania. *Moderna språk* 106(1), pp 136-144.

Petzell, M. & Hammarström, H. 2013. Grammatical and Lexical Comparison of the Greater Ruvu Bantu Languages. *Nordic Journal of African Studies* 22(3), pp 129-157.

Philippson, G. 1998. Tone reduction vs metrical attraction in the evolution of Eastern Bantu tone systems. In Hyman, L. & Kisseberth, C. (eds.), *Theoretical aspects of Bantu tone*, pp 315-329. Stanford: CSLI.

Plungian, V. 1999. A typology of phasal meanings. In Abraham, W. & Kulikov, L. (eds.), *Tense-aspect, transitivity and causativity: Essays in honour of Vladimir Nedjalkov*, pp 311-321. Amsterdam: John Benjamins.

Polomé, E. G.C. 1967. *Swahili language handbook*. Washington: Center for Applied Linguistics.

Quirk, R., Greenbaum, S., Leech, G. & Svartvik, J. 1985. *A Comprehensive Grammar of the English Language.* London: Longman.

Riedel, K. & Patin, C. 2011. Question structure and intonation in Fipa. In Downing, L. (ed.), *Questions in Bantu languages: prosodies and positions (ZAS Papers in Linguistics 55*), pp 211-225.

Redmond, P. 1985. *The Politics of Power in Songea Ngoni Society, 1860–1962*. Adams Press: Chicago.

Roberts, A. D. 1969. Political change in the nineteenth century. In Kimambo, I. N. & Temu, A. J. (eds) *A History of Tanzania*, pp. 57-84. Nairobi: E.A.P.H.

Rodney, W. 1980. The Political Economy of Colonial Tanganyika 1890-1930. In Kaniki, M. H. Y. (ed.) *Tanzania under Colonial Rule*, pp 128-136. London: Longman,

Romaine, S. 1999. The Grammaticalization of the Proximative in Tok Pisin. *Language* 75(2), pp 322-346.

Rose, S., Beaudoin-Lietz, C. & Nurse, D. 2002. *A glossary of terms for Bantu verbal categories: with special emphasis on tense and aspect*. München: Lincom Europa.

Rosendal, T. & Mapunda, G. 2014. Is the Tanzanian Ngoni Language threatened? A Survey of Lexical Borrowing from Swahili. *Journal of Multilingual and Multicultural Development* , 35(3), pp 271-288.

Rosendal, T. & Mapunda, G. 2016. Contact-induced language alternation in Tanzanian Ngoni – an empirical study of frequency and patterns. *International Journal of Multilingualism*. [e-publication ahead of print]

Russell, T., Silva, F. & Steele, J. 2014. Modelling the Spread of Farming in the Bantu-Speaking Regions of Africa: An Archaeology-Based Phylogeography. *PLoS ONE* 9(1).

Sakel, J. & Everett, D. 2012. *Linguistic fieldwork: a student guide*. Cambridge: Cambridge University Press.

Salim, A. 1998. The East African Coast & Hinterland, 1800-45. In: Ajayi, J. F. Ade (ed.) *General history of Africa. 6, Africa in the nineteenth century until the 1880s*, pp 79-87. London: Currey.

Samarin, W. 1967. *Field linguistics: a guide to linguistic field work*. New York: Holt, Rinehart and Winston.

Schadeberg, T. n.d. *A note on 'go home from work'*. Ms.

Schadeberg, T. 1990. Schon – noch – nicht – mehr: Das Unerwartete als grammatische Kategorie im KiSwahili. *Frankfurter Afrikanistische Blätter* 2, pp 1-15.

Schadeberg, T. 1992. *A sketch of Swahili morphology*. [3rd edn.]. Köln: Rüdiger Köppe.

Schadeberg, T. 1994. Die extensive extension im Bantu. In Geider, T. & Kastenholz, R. (eds.), *Sprachen und Sprachzeugnisse in Afrika: Eine Sammlung philosopischer beiträge, Wilhelm J.G. Möhlig zum 60 Geburstag zugeeignet*, pp. 357-366. Cologne: Rüdiger Köppe.

Schadeberg, T. 1994-95; Spirantization and the 7-to-5 vowel merger in Bantu. In Dominicy, M. & Demolin, D. (eds.) *Sound change*, pp 73-84. Amsterdam: John Benjamins.

Schadeberg, T. 2002. Progress in Bantu lexical reconstruction. *Journal of African Languages and Linguistics* 23(2), pp 183–195.

Schadeberg, T. 2003a. Derivation. In Nurse, D. & Philippson, G. (eds.), *The Bantu languages*, pp 71–89. London: Routledge.

Schadeberg, T. 2003b. Historical linguistics. In Nurse, D. & Philippson, G. (eds.) *The Bantu languages*, pp 143-163. New York: Routledge.

Schadeberg, T. 2009. *Loan words in Swahili.* In Haspelmath, M. & Tadmor, U. (eds.) Loanwords in the world's languages: a comparative handbook, pp 76-102. Berlin: De Gruyter Mouton.

Schladt, M. 1998. Reciprocals in Bantu languages: A case of grammaticalization. *Afrikanistische Arbeidspapieren* 53, pp 5–25.

Sebasoni, S. 1967. *La préfinale du verbe bantou.* Tervuren: Musée Royal de l'Afrique Centrale.

Silverstein, M. 1976. Hierarchy of Features and Ergativity. In Dixon, R. M. W. (ed.), *Grammatical Categories in Australian Languages*, pp 112-171. Canberra: Australian inst. of aboriginal studies.

Smet, H. de & Verstraete, J. 2006. Coming to terms with subjectivity. *Cognitive Linguistics* 17, pp 365-392.

Songea I. Tanganyika District books. [1965-1968]. [Regional and district books]. MF17. Dar es Salaam: Tanzania National Archives.

Spiss, C. 1904. Kingoni und Kisutu. *Mitteilungen des Seminars für Orientalische Sprachen zu Berlin, 3. Abteilung: Afrikanische Studien VII*, pp 270-414.

Stirnimann, H. 1983. *Praktische Grammatik der Pangwa-Sprache (SW-Tansania): Indaki cha luchovo lwa vaPangwa*. Freiburg, Schweiz: Universitätsverlag.

Stolz, T. & Veselinova, L. 2005. Derivation and suppletion of ordinal numerals. In: Haspelmath, M., Dryer, M., Gil, D. & Comrie, B. (eds.). *World Atlas of Language Structures*. Oxford: Oxford University Press.

Ström, E-M. 2013. *The Ndengeleko language of Tanzania*. Ph. D. thesis, University of Gothenburg.

Sundkler, B. & Steed, C. 2000. *A history of the church in Africa*. Cambridge: Cambridge University Press.

Sweetser, E. 1988. Grammaticalization and semantic bleaching. *Berkeley Linguistics Society*, pp. 389-405.

Thomason, S. & Kaufman, T. 1988. *Language contact, creolization and genetic linguistics*. Berkeley: University of California Press.

Timberlake, A. 2007. Aspect, tense, mood. In Shopen, T. (ed.) *Language Typology and Syntactic Description. Volume III: Grammatical categories and the lexicon* [2nd edn.], pp 280-333. Cambridge: Cambridge University Press.

Traugott, E. Closs. 1980. Meaning change in the development of grammatical markers. *Language Sciences* 2(1), pp 44-61.

Traugott, E. Closs. 1989. On the rise of epistemic meaning in English: an example of subjectification in semantic change. *Language* 65, pp 31-55.

Traugott, E. 2006. Historical aspects of modality. In Frawley, W. (ed.), *The Expression of Modality*, pp 107-139. Berlin: Mouton de Gruyter.

Traugott, E. 2010a. Grammaticalization. In Luraghi, S. & Bubenik, V. (eds.), *Continuum Companion to Historical Linguistics*, pp. 269-283. London: Continuum Press.

Traugott, E. 2010b. Revisiting subjectification and intersubjectification. In Davidse, K., Vandelanotte, L. & Cuyckens, H. (eds.), *Subjectification, Intersubjectification and Grammaticalization*, pp 29-70. Berlin: De Gruyter Mouton.

Traugott, E. 2015. Toward a coherent account of grammatical constructionalization. In Barðdal, J., Smirnova, E., Sommerer, L. & Gildea, S. (eds.), *Diachronic construction grammar*, pp 51-79. Amsterdam, John Benjamins.

Traugott, E. Closs & Dasher, R. 2002. *Regularity in semantic change*. Cambridge: Cambridge University Press.

Traugott, E. Closs & Heine, B. (eds.). 1991. *Approaches to grammaticalization.* Amsterdam: Benjamins

Traugott, E. Closs & Trousdale, G. 2010. Gradience, gradualness and grammaticalization – how do they intersect? In Traugott, E. Closs & Trousdale, G. (eds.), *Gradience, gradualness and grammaticalization*, pp 19-44. Amsterdam: Benjamins.

Traugott, E. Closs & Trousdale, G. 2013. *Constructionalization and constructional changes*. Oxford: Oxford University Press.

TUKI (University of Dar-es-Salaam, Institute of Kiswahili Research). 2001. *TUKI English-Swahili dictionary: Kamusi ya Kiingereza-Kiswahili.* Dar-es-Salaam: University of Dar-es-Salaam, Institute of Kiswahili research.

Turner, Wm. Y. 1996. *Tumbuka/Tonga - English and English Tumbuka/Tonga Dictionary*. Blantyre: Central Africana Limited.

Vail, H. L. 1972. *Aspects of the Tumbuka verb.* Ph. D. thesis, University of Wisconsin.

Vander Klok, J. 2013. Pure possibility and pure necessity modals in Paciran Javanese. *Oceanic Linguistics* 52(2), pp 341-374.

Vander Klok, J. n.d. *Questionnaire on modality for cross-linguistic use*. Retrieved from http://www.eva.mpg.de/lingua/tools-at-lingboard/questionnaires.php

Vander Klok, J. & Matthewson. L. 2015. Distinguishing already from perfect aspect: A case study on Javanese wis. *Oceanic Linguistics* 54(1), pp 172-205.

Velse, J. van. 1959. Notes on the history of the lakeside Tonga of Nyasaland, *African Studies* 18:3, pp 105-117.

Verstraete, J-C. 2001. Subjective and objective modality: Interpersonal and ideational functions in the English modal auxiliary system. *Journal of Pragmatics* 33(10), pp 1505-1528.

Verstraete, J-C. 2005. Scalar quantity implicatures and the interpretation of modality. Problems in the deontic domain. *Journal of Pragmatics* 37, pp 1401-1418.

Veselinova, L. 2013. Negative existentials: a cross linguistic study. *Italian Journal of Linguistics: Special Issue on Existential Constructions* 25, pp 107-146.

Veselinova, L. 2014. The Negative Existential Cycle Revisited. *Linguistics* 52(6), pp. 1327-1369.

Veselinova, L. 2016. The Negative Existential Cycle through the lens of comparative data. In Gelderen, E. van (ed.), *The Linguistic Cycle Continued*, pp 139-87. Amsterdam/New York: John Benjamins.

Visconti, J. 2004. Conditionals and subjectification: Implications for a theory of semantic change. In Fischer, O., Norde, M. & Perridon, H. (eds.), *Up and down the cline: The nature of grammaticalization,* pp 169-192. Amsterdam: John Benjamins.

Voeltz, E. 1977. *Proto Niger-Congo extensions*. Ph. D. thesis, University of California (Los Angeles).

Voeltz, E. 1980. The etymology of the Bantu perfect. In Bouquiax, L. (ed.), *L'Expansion Bantoue.* Paris: SELAF.

Voorhoeve, J. 1973. Safwa as a restricted tone system. *Studies in African Linguistics* 4(1), pp. 1–22.

Wal. J. van der. 2013. *What is the conjoint/disjoint alternation in Bantu languages*? Ms.

Wal, J van der. 2015. A note on the (non-existing) passive in Matengo. *Linguistique et Langues Africaines* 1, pp 81-98.

Wal, J van der & Maniacky, J. 2015. How 'person' got into focus: Grammaticalization of clefts in Lingala and Kikongo areas. *Linguistics* 53(1), pp 1-52.

Walsh, M. T. 1982. Nyakyusa Greetings. *Cambridge Anthropology,* 7(3), pp 31-44.

Watters, J. 1979. Focus in Aghem. In Hyman, L. M. (ed.) *Aghem grammatical structure,* pp 137-197. Los Angeles: University of Southern California.

Wenban-Smith, W. 1963. The Germans on Lake Nyasa, *Tanganyika Notes and Records* 61, pp 217-218.

Winford, D. & Migge, B. 2007. Substrate influence on the emergence of the TMA systems of the Surinamese creoles. *Journal of Pidgin and Creole Languages* 22(1), pp 73-99.

Whiteley, W. 1969. *Swahili: the rise of a national language*. London: Methuen.

Winford, D. 2003. *An introduction to contact linguistics*. Oxford: Blackwell.

Wolff, R. 2015 [1905]. *Grammatik der Kinga-Sprache: (Deutsch-Ostafrika, Nyassagebiet); nebst Texten und Wörter-Verzeichnis*. Berlin: LINCOM.

Yoneda, N. 2000. *A Descriptive Study of Matengo, a Bantu Language of Tanzania.* Ph. D. thesis, Tokyo University of Foreign Studies.

Yoneda, N. 2006. *Vocabulary of the Matengo language*. Tokyo: Research Institute for Languages and Cultures of Asia and Africa (ILCAA), Tokyo University of Foreign Studies.

Yoneda, N. 2010. “Swahilization” of ethnic languages in Tanzania: the case of Matengo. *African Study Monographs,* 31(3), pp 139-148.

Yoneda, N. 2016. Conjoint/disjoint distinction and focus in Matengo (N13). In Wal, J. van der & Hyman, L. (eds.) *The Conjoint/Disjoint Alternation in Bantu*. pp. 426-452. Berlin, Boston: De Gruyter Mouton.

Ziegeler, D. 2006. *Interfaces with English aspect: diachronic and empirical studies. (Studies in language companion series 82).* Amsterdam: Benjamins.

Ziegeler, D. 2011. The Grammaticalization of Modality. In Narrog, H. & Heine, B. (eds.), *The Oxford Handbook of Grammaticalization,* pp. 595-604. Oxford: Oxford University Press.

Ziegeler, D. 2016. Intersubjectivity and the diachronic development of counterfactual almost. *Journal of Historical Pragmatics*, 17(1), pp 1-25.

Zimmer, F. .n.d. [Matengo grammar sketch and dictionary]. Ms.