

Rasmus Bernander\*

# The grammaticalization of *-kotok-* into a negative marker in Manda (Bantu N.11)

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**Abstract:** It is common both crosslinguistically and specifically in Bantu languages for the prohibitive to be formed by a construction consisting of a cessative verb in collocation with a non-finite verb. This is also the case in Manda, an understudied Southern Tanzanian Bantu language. In Manda, a negative imperative is expressed by the auxiliary *-kotok-*, with the (lexical) meaning ‘leave (off), stop’, operating on an infinitive full verb. Intriguingly, there is variation in this construction, as *-kotok-* may be both formally reduced and may be used more broadly to denote non-factivity in other “non-main” (or non-standard) contexts. The aim of this study is to demonstrate that this functional and formal variation reflects a historical and ongoing process of grammaticalization along the verb-to-affix cline. Drawing on field data, the available historical data and (micro-)comparative data, this study argues that *-kotok-* is transforming into a more general non-main negation marker. These changes corroborate Güldemann’s hypothesis (Güldemann, Tom. 1999. The genesis of verbal negation in Bantu and its dependency on functional features of clause types. In Jean-Marie Hombert & Larry Hyman (eds.), *Bantu historical linguistics*, 545–587. Stanford, CA: CSLI Publications) that the salient category of non-standard secondary negative markers in Bantu is derived from constructions with an auxiliary and a non-finite verb.

**Keywords:** Bantu, negation, non-standard negation, grammaticalization, cessative verb

## 1 Introduction

The set of “negative verbs”, i.e., (inflected) auxiliary verbs that function as negators of the full verb of a clause, represents a typologically salient category

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\*Corresponding author: Rasmus Bernander, Department of Languages and Literatures, University of Gothenburg, Box 200, 405 30 Gothenburg, Sweden,  
E-mail: rasmus.bernander@sprak.gu.se

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of negation markers (cf. Dahl 2010). It is particularly common for a prohibitive, or a negative imperative, to be formed by the use of a negative verb, typically of cessative lexical origin (Aikhenvald 2010: 358–359; Van Der Auwera 2010). As demonstrated by Devos and Van Olmen (2013), a prohibitive construction containing a cessative verb is a prevalent pattern in Bantu languages as well. One example of such a Bantu language is Manda, spoken on the eastern shores of Lake Malawi (Nyasa) in Tanzania. Here – as well as in the neighboring languages (cf. Ngonyani 2013) – a negative command is expressed with the auxiliary verb *-koto-*, with the (lexical) meaning ‘leave (off), stop’, preceding a full verb in the infinitive. What is especially intriguing with this construction in Manda, however, is that both function and form exhibit variation. On the one hand, *-koto-* is used as a negator beyond expressions of prohibition and, on the other hand, it may occur with reduced syntactic autonomy and phonemic substance.

The aim of this study is to demonstrate that these variations reflect diachronic stages of change, a historical and ongoing process of grammaticalization along the verb-to-affix cline (Hopper and Traugott 2003: 6–7, 111–115). The study draws on inter- and intra-speaker variation in synchronic Manda data,<sup>1</sup> and on the available historical data and (micro-)comparative data, in order to reconstruct the set of changes involved in a shift from a referential to a grammatical use of *-koto-*. Based on this analysis, it is argued that the intermediate stages of variation/change in the *-koto-* construction fill an interesting position in relation to earlier attempts at reconstructing the overarching mechanisms involved in the genesis of negation markers in Bantu (e.g., Güldemann 1999). Furthermore, by accounting for the variation in the Manda data, the paper also aims to fulfil a secondary purpose of properly describing and analyzing the synchronic state of one aspect of this under-described language.

The rest of the paper will be organized in the following way: Section 2 offers an introduction to Manda and Bantu negation and describes the functional range of the grammaticalized *-koto-* construction. Section 3 covers the lexical source verb and follows its semasiological development from Proto-Bantu to synchronic Manda. Section 4 contains an analysis of the grammaticalization process and accounts for the various functional and formal

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<sup>1</sup> The synchronic data was collected by the author over a total of six months of field work in the Manda speaking area, using various methods of sentence elicitation and text recordings (see Johnstone 2000; Bower 2008; Sakel and Everett 2012; Matthewson 2004). Bernander (2017) is a more extensive description and analysis of the language Manda with special focus on its verbal system.

diagnostics of such a scenario. Section 5 places the Manda analysis in a crosslinguistic perspective by comparing it to studies within the field of Bantuistics and negation. Finally, the paper ends with a brief summary and a set of conclusions.

## 2 Manda, Bantu and (the evolution of) negation

Before embarking on the analysis, the negation strategies of Manda will be sketched in relation to the general typology of Bantu languages. The main focus of this section is the negation strategies where *-koto-* is used.

Manda belongs to the Eastern Bantu languages, and has been coded as N.11 by Guthrie (1948, 1967–1971) in his (geographical) classification of Bantu languages, as well as in the later update by Maho (2009). It is spoken by approximately 30 000 speakers (Lewis et al. 2016; Muzale and Rugemalira 2008: 80) along the (north)-eastern shores of Lake Malawi (Nyasa) in Southern Tanzania. The language is under-researched and almost undocumented. One of the few previous studies that draws on Manda linguistic data is a comparison with surrounding languages done by Nurse (1988). That study suggests that Manda belonged historically to one (genealogical) subgroup of Bantu languages, the Southern Highland group (which is analogous to Guthrie's G.60 group). However, it has changed due to heavy influence over a long period of time from another language subgroup, the Ruvuma group (roughly consisting of Guthrie's set of N.10 languages), and also the language Nyakyusa (M.31). The claim that Manda is originally a Southern Highland language has been questioned recently, however (Gray and Roth 2016). As the genealogical history of Manda is uncertain, the comparative parts of this paper will refer to an areal set of neighboring (or geographically proximal) languages, rather than to any genealogical set.<sup>2</sup>

Bantu languages, including Manda, are agglutinative. Generally, they exhibit a rich set of different grammatical categories inflected on the verb base, in different positions or slots, as roughly sketched in the template in (1).

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2 To facilitate for the reader, all languages will be discussed in this text with their number of reference (their "Guthrie number"). In addition, a map of the Manda speaking area and neighboring languages is found in the appendix.

(1) **NEG1-SM-TA/NEG2-(OM)-verb base-TAM**

As seen in the sketch and exemplified with Swahili (G.42) in (2), negation is one of several grammatical concepts typically included in the “morphotaxis” (Güldemann 2003) of the verbal word. Prototypically (and admittedly a bit simplified), a Bantu language is characterized by a syntactically based and syntagmatically coded “division of labor” between two negative affixes (here in bold).

- (2) a. *hatujaendelea*  
**ha**-tu-ja-endele-a  
 NEG1-1PL-PFV-continue-FV  
 ‘we haven’t continued’  
 (Swahili G.42)
- b. *tusiendelea*  
 tu-**si**-endele-e  
 1PL-NEG2-continue-FV  
 ‘let’s not continue’  
 (Swahili G.42)

Nurse (2008) refers to these as “primary” and “secondary” negative markers (hence the glossing 1 and 2 respectively). Their complementary distribution is based on markedness. The former occurs in the pre-initial position, before the subject marker (SM), and indicates the crosslinguistically typical “main” or “standard” negation. It is used for negating declarative, less marked constructions, prototypically associated with finiteness and consequently occurring more frequently in discourse (cf. Dahl 2010; Miestamo 2005; Mosegaard Hansen 2011). The latter marker, the secondary negator, is typically used for the negation of “non-main” or more marked clauses and for expressing semantic rather than propositional negation, i.e., with scope over the lexical stem rather than the whole proposition (Güldemann 1999: 576–577; see also Nurse 2008: 193–194). With regard to position, the secondary negative typically occurs in the slot right after the (Subject Marker) SM, the so-called “post-initial slot”, which is also the canonical position for Bantu tense-aspect prefixes. (This will be of importance for the discussion in Section 5.)

The linguistic system of Manda, however, does not adhere to this generalized template of Bantu negative constructions.<sup>3</sup> First, like several languages of

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<sup>3</sup> As seen in the following examples, Manda is a tonal language. It has a restricted tone system, as is the case for several languages in this area. Typically for Manda, a word consists of a high tone realized on the antepenult and a falling tone on the penult or only with a high (falling) tone on the penult. High tones are marked with an accent in the examples.

this area (cf. Devos and van der Auwera 2013), its main negation strategy is not a pre-initial prefix but a postposed particle, *he* or *lepa/lepe*,<sup>4</sup> occurring after the verb complex.

- (3) *ampéle hé gwáli*  
 a-mu-p-ili                    **he** gwali  
 3SG-OM3SG-give-PFV NEG food  
 ‘he did not give him food’

- (4) *lépe, nipáti’ lépe [...]*<sup>5</sup>  
 lepe, ni-pat-ili            **lepe**  
 no 1SG-get-PFV NEG  
 ‘No, I didn’t get (any) [...]’

There is no post-initial negation prefix in Manda either.<sup>6</sup> As will be argued in this paper, however, there are both structural and functional indications that the construction with *-kotok-* is (developing into) such a marker.

In synchronic Manda, *-kotok-* is either expressed as a fully inflected verbal word or surfaces in a reduced form. In its full form, it may be inflected in two ways. Firstly, it occurs with the plain subjunctive (SBJ1), marked with a final *-e*. More often, however, it is inflected with the secondary subjunctive (SBJ2), consisting of a final suffix *-ayi* (often shortened to just *-ay’* or *-a’*). I analyze the latter suffix as historically consisting of the “pluractional” or “imperfective” suffix *\*-a(n)g-* and a final vowel. In synchronic Manda, however, the secondary subjunctive is a non-compositional formative.<sup>7</sup>

<sup>4</sup> These two forms often stand in free variation but there might be a subtle difference between *he* and *lepa/lepe/lepi* in the sense that the latter is (supposedly) more emphatic or encompasses a stronger denial. The form *lepa/lepe/lepi* is, for example, used to express ‘never’, which is not possible with *he* (according to some informants).

<sup>5</sup> As seen in this example, there is a homophonous *lepe*, an interjection meaning ‘no’. It is most likely the case that the negative particle is derived from a Jespersen’s cycle scenario and a semantic reanalysis: interjection > emphatic marker > negator (Bernander 2017).

<sup>6</sup> At least, this is not the case in synchronic Manda. There are some indications in the Manda New Testament in Manda (1937) that there is a post-initial negative morpheme *si-*, identified as archaic Manda by (some) speakers.

<sup>7</sup> The morpheme *\*-a(n)g-* (reconstructed for Proto-Bantu) is a morpheme often used across Bantu languages to denote imperfectiveness. In constructions like this it is commonly used to make the expression more emphatic or intense (cf. Mieke 1989; Devos and Van Olmen 2013). In Manda, however, this form has petrified and has been reanalyzed as an obligatory formal part of the imperative (which is exceptional but is claimed to occur in other Bantu languages as well; Devos and Van Olmen 2013). It is also commonly attached on the subjunctive form in Manda,

In both the reduced and full forms, *-kotok-* is used for negative marking in several non-main domains. To start with, it is used as a prohibitive or negative imperative (5).

- (5) [...]ni **ukotoke** kuyananga mafuta nu mvinyo  
 ni u-**kotok**-e ku-yanang-a mafuta na mvinyo  
 and 2SG-NEG-SBJ1 INF-damage-FV oil and wine  
 ‘...and do not damage the oil and the wine!’ [Revelation 6:6; NT 1937]

However, *-kotok-* appears in non-directive and milder commands and obligations as well, e.g., in a deontic necessity clause like (6) and in negating the future obligative (7).

- (6) **ukotó** kugénda ná múndu úyú, ndáva mwífi  
 u-**koto** ku-gend-a na mundu úyú ndava mwifi  
 2SG-NEG INF-walk-FV with person DEM1 because thief  
 ‘you shouldn’t hang out with him, because he is a thief’

- (7) **mwakóto** kutúmíla sénde jóha múgímbrí  
 mu-a-**koto** ku-tumil-a sende jóha mu-gimbrí  
 2PL-FUT.OBL-NEG INF-use-FV money all LOC18-alcohol  
 ‘You should not spend all the money on alcohol!’  
 {if you get a seat on the bus to Ludewa tomorrow}

Moreover, *-kotok-* is used to negate the itive, a form encompassing a directive of movement out of the deictic center (roughly ‘go and X’).<sup>8</sup>

- (8) **ukakóto** kuhóláléla!  
 u-ka-**koto** ku-holalel-a  
 2SG-ITV-NEG INF-think(.over)-FV  
 ‘(go away and) don’t think about it!’

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and attached to both forms it triggers a sound change of the final vowel of *-kotok-*, raising it from /ɔ/ to /u/. Moreover, speakers of Manda tend to omit the final vowel in speech. In those (standard) cases, the imperative and the subjunctive form have the exact same form and tone pattern, as well as a very similar function, as the subjunctive form is designated as having a “general non-factive use” in Bantu languages (Devos and Van Olmen 2013:15). It thus has two functions in Manda (and in general) as both a polite or milder directive and as a marker for dependent clauses.

<sup>8</sup> The affirmative variant of this construction is (*u*)-*ka-hólalil-ayi* ‘(go and) think about it’.

The *-kotok-* complex also appears in subordinate clauses such as purposive clauses (9) and the protasis clause of conditionals (10).

- (9) *akanfutíli kúnyúma, ikótó kung'kánga*  
 a-ka-mu-futíli kunyuma, i-koto ku-mu-kang-a  
 3SG-PST1-OM3SG-pull.PFV back CL9-NEG INF-OM3SG-gore-FV  
 'he pulls him back, so that it (the bull) doesn't gore him'
- (10) *Kuyáy ngáti ikotúkáy' kuđindóla mapéma...*  
 Ku-y-ayi ngati i-kotok-ayi ku-dindul-a mapema  
 INF-be-SBJ2 COND 9CL-NEG-SBJ2 INF-open-FV early  
 'if it hadn't opened early...'

Finally, the construction is used for negating infinitives.

- (11) *kukótóka kúya wákápi*  
 ku-kotok-a ku-y-a wakapi  
 INF-NEG-FV INF-be-FV alone  
 'to not be alone'

This functional range of *-kotok-* fits very well with Güldemann's (1999) typology of secondary negatives. According to him, the secondary negative canonically appears in five specific clause types in Bantu languages, namely: prohibitives, subjunctives, verbal nouns (*-*infinitives), hypotactic adverbial clauses and relative clauses. As seen from the examples above, the *-kotok-* complex actually covers four out of five of these clause types in Manda, the only exception being relative clauses, where it is not used. Thus, given these criteria of occurrence in specific parts of discourse, *-kotok-* is a good candidate to be designated as a secondary negative in synchronic Manda. This will be further discussed in Section 5. In the following two sections, however, the circumstances and processes leading up to this synchronic state will be addressed.

### 3 Etymology of source verb

In order to understand the grammaticalization process under scrutiny better, this section will offer a description of the semasiological history of the source verb *-kotok-* as well as its synchronic lexical properties in Manda.

The lexical verb *-kotok-* has been reconstructed for Proto-Bantu as *\*-kot-uk-*, with the rather peculiar meaning 'go home from work' (Bastin et al.

2002). The final *-vk-* is a verb-to-verb derivational suffix (commonly referred to as an *extension* in Bantuistics) called the “reversive” or “separative” (Rose et al. 2002: 76), denoting “movement out of some original position” (Schadeberg 2003:78). As suggested by Schadeberg (n.d.: 8–9), the verb *\*-kot-vk-* is originally a derivation from the verb *\*-kot-* ‘stoop, be bent’, with the reversive meaning ‘straighten (oneself)’, that later underwent semantic extension. Plausibly, this semantic reconstruction resides on a fundamental historical-cultural connection of ‘work’ to the act of cultivating for Bantu speakers<sup>9</sup> (see e.g., Russell et al. 2014). Farming has historically been (and is often still today) conducted by manual labor, with the use of a hoe. Thus, working the soil requires being in a *bent* position and as a consequence the act of straightening oneself implicates that it is time to stop working (and go home from the field).

As seen in Table 1 and in the glossed example from Nyakyusa (12),<sup>10</sup> a meaning similar to the one reconstructed for Proto-Bantu still surfaces synchronically in some of the neighboring languages to Manda.<sup>11</sup>

- (12) *paapo fiki ugwe v**kot**wike mbibimbibi pambombo?*  
 paapo fiki ugwe v-**kotok**-ile mbibimbibi pa-mbombo  
 why you SM2SG-quit-PFV fast LOC16-9.work  
 ‘why did you stop working so early (lit. why did you quit and go home from work early?)’  
 (Nyakyusa M.31)

However, for the majority of the languages in Table 1 it appears that this rather complex meaning has shifted via metonymy to encompass a more general cessative or terminative denotation.

In Manda the ideational meaning of *-kotok-* is also more general. The meaning is ‘stop, leave (off)’, both in the New Testament (1937) and in my own field data, as exemplified in (13) and (14). It often occurs with an infinitival complement, as shown in the latter of these examples.

<sup>9</sup> In a similar way, a single noun in Bantu often refers to both ‘cultivation’ and ‘work’, e.g., *malimo* in Bena (G.63).

<sup>10</sup> Dr. Jeffy Mwakalinga (native speaker of Nyakyusa) p.c. 22/01/2015.

<sup>11</sup> As seen in this Nyakyusa example, but also in the Manda examples (14) and (15), the perfective suffix *-ili* coalesces with *-kotok-* resulting in an irregular surface construction (commonly referred to as *imbrication*; Bastin 1983).



**Table 1:** Lexical denotation of Proto-Bantu reflex *\*-kot-uk-* in neighboring languages to Manda.

Language	Code	Reflex	Translation	Source
Pangwa	G.64	-	-	[not mentioned in Stirnimann (1983) or Nurse and Philippson (1975)]
Kinga	G.65	<i>-g'odok</i> <sup>12</sup>	'go to the house, go home, go from work to home'	Wolff (2015 [1905])
Kisi	G.67	<i>-kotok-</i>	'stop, leave off'	Gray (forthc.)
Nyakyusa	M.31	<i>-kotok-</i>	'quit and go home from work'	(Felberg 1996)
Ngoni	N.12	<i>-kotok-</i>	'leave off', 'stop, cease'	Spiss (1904), Ebner (1939: 26), Nurse and Philippson (1975), Ngonyani (2003, 2013)
Matengo	N.13	<i>-kotok-</i>	'leave (off)', 'quit something (e.g., alcohol)'	Nurse and Philippson (1975); Yoneda (2000, 2006)
Mpoto	N.14	<i>-kotok-</i>	'leave off'	Nurse and Philippson (1975)

- (13) [...] *na gakakotwiki, na lukagwili lumbwela*  
 na ga-ka-**kotok**-ili na lu-ka-gw-ili lumbwela  
 and SM6-PST1-stop-PFV and SM11-PST1-fall-PFV calm  
 ' [...] and they ceased, and there was a calm.'  
 (Luke 8:24; NT (1937))

- (14) *Nikótwiki kukína mpíla*  
 ni-**kotok**-ili ku-kin-a mpíla  
 1SG-stop-PFV INF-play-FV ball  
 'I quit playing football' ~ 'I gave up (playing) football'

As will be apparent in Section 4.3, it is only in Manda and in the other languages where *-kotok-* has a more generalized meaning that this verb has undergone grammaticalization. In Nyakyusa and Kinga, where *-kotok-* still reflects the original semantics, it remains a solely lexical word. It is worth noting that this is consistent with claims on grammaticalization in the literature that items of more general

<sup>12</sup> According to Wolff 2015 [1905]:3), the initial consonant, here orthographically represented as <g'>, stands for a voiced velar articulated with "throat closure" (*Kehlverschluss*), probably an implosive. Based on general sound laws, Schadeberg (n.d.:9) has reconstructed this lexeme as a reflex of *\*-kot-uk-*.

character and with a more basic reference are those that tend to be recruited for grammaticalization (see e.g., Heine 1993: 27–31).

## 4 Diagnostics of grammaticalization

In this section, I argue that the lexical verb *-kotok-*, in a compound construction with an infinitive, has been grammaticalized to a negator, i.e., that it has changed in meaning and is also continuing to change syntagmatically along the verb-to-affix continuum. Such a *panchronic* approach (cf. Kuteva 2001; Heine and Kuteva 2007; Anderson 2006; Anderson 2011) also entails treating and referring to the formulaic negative *-kotok-* as an auxiliary, given that it is a “verbal element on a diachronic form-function continuum standing between a fully lexical verb and a bound grammatical affix” (Anderson 2011: 2).

This section portrays the various diagnostics of the grammaticalization of *-kotok-* encountered in the Manda data and discusses both functional and formal issues, reflecting both the proposed initiation of change and a fundamental conviction that linguistic change in general is functionally motivated. Thus, whereas Section 4.1 sets out to describe the conceptual (pragmatic-semantic) change of the *-kotok-* construction, Section 4.2 accounts for the formal (morphosyntactic and phonemic) outcome of this reconceptualization. It is important to point out, however, that functional and formal processes of change are often not so neatly delineated chronologically but tend to occur in tandem. It will for example be apparent already in the examples of Section 4.1 that the “*-kotok-* schema” has undergone formal changes as well; for the sake of clarity, these will be dealt with only in Section 4.2. Due to the general lack of documentation of this language and the subsequent lack of extensive diachronic data (or a proper synchronic corpus), the reconstruction and the proposed pathway of change that will be presented must necessarily be seen as hypothetical. In order to strengthen the analysis, however, different levels of comparison will be employed. Hence, Section 4.3 contains additional comparative and historical data to support the proposed grammaticalization path sketched in the earlier sections. Here, the synchronic data will be compared with the only chronolect of Manda that exists, namely the New Testament from 1937.<sup>13</sup> It will also be compared with both historical and synchronic data from related and neighboring languages, consisting of both secondary data and my own field notes.<sup>14</sup>

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<sup>13</sup> The extracts from this document are represented with their original orthography (e.g., with tones unmarked).

<sup>14</sup> If not otherwise stated, examples come from the data I have collected myself.

## 4.1 Conceptual change

One premise on which this paper is based this paper is that the grammaticalization of *-kotok-* into a negator started out in the prohibitive domain. This is supported not only by the historical and comparative data in Section 4.3 but it also adheres to cross-Bantu and crosslinguistically induced generalizations of both conceptually (semantic and functionally) and formally (structural) motivated patterns of change.

Prohibitives and other negative constructions are prone to change in Bantu languages (Nurse 2008; Güldemann 1999; Givón 1973; Givón 2001: 382–383) and, according to Nurse (2008: 191), “negative imperatives appears to be a major conduit through which innovation occurs”. According to Devos and Van Olmen (2013), the motivation for change in this linguistic domain is connected to questions of focus (as both negation and auxiliaries are inherently focused in Bantu) and to the need to reinforce the expressivity of directive utterances, as they tend to be conventionalized and their pragmatic force to be diluted (see also Hopper and Traugott 2003: 42). Both crosslinguistic and cross-Bantu studies show that a cessative verb is then typically recruited for such a grammatical function (see Aikhenvald 2010; Heine and Kuteva 2007: 77–78; Heine and Kuteva 2002<sup>15</sup>; Devos and Van Olmen 2013). In Devos and Van Olmen’s sample of 100 Bantu languages, 22 languages have a negative imperative auxiliary derived from a lexical verb with a cessative meaning.

Givón (1973) proposes that an explanation for this reconceptualization of cessative verbs may lie in their inherent lexical aspect. Verbs like ‘stop, quit’ are inherently “negative implicative” in the sense that they imply that an event encoded in their complement does not occur (or does not hold “truth”) in reference to the time directly following that event. For example, the inference of (14) (repeated here as (15)) is that the subject is not playing football at the reference time.

- (15) *Nikótwiki kúkína mpíla*  
 ni-**kotok**-ili ku-kin-a mpíla  
 1SG-stop-PFV INF-play-FV ball  
 ‘I quit playing football’  
 ⊃ I do NOT play football (here and now)

Thus, an exhortation to stop or quit an activity also implies to *not* pursue that activity.

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<sup>15</sup> Heine and Kuteva (2002: 192-193) discuss the grammaticalization of cessative verbs to negators in more general terms and not only with regard to prohibitives.

Indeed, there are several examples in both the diachronic and the synchronic data where *-kotok-* in a directive construction is ambiguous between a terminative and a “plain” negative reading. An illustrative example is (16), which is a verse from the Manda New Testament containing *-kotok-*. As seen, however, the parallel verse varies in the different English versions (i.e., the New American Standard Bible version versus the King James Bible version) between using ‘stop’ or ‘not’.

- (16) *Wana wadala wa Yerusalem, mukotoke kunililila nenga*  
 Vana vadala va Yerusalem mu-**kotok**-e ku-ni-lilil-a  
 Female children of Jerusalem 2PL-stop/NEG-SBJ1 INF-OM1SG-cry(for)-FV  
 nenga  
 me  
 (i) “[...] Daughters of Jerusalem, stop weeping for Me [...]”  
 (Luke 23:28; NT (1937); New American Standard Bible version)  
 (ii) “[...] Daughters of Jerusalem, weep not for me [...]”  
 (Luke 23:28; NT (1937); King James version)

According to Heine, such an ambiguous proposition serves as a “bridging context” (Heine 2002; Heine and Dunham 2010) for an invited inference to be conventionalized into a new meaning. In this case, it seems to have triggered the negative implication inherent in the *-kotok-* verb being semanticized and reanalyzed into a negative (function) word of its own.

That such a reanalysis has taken place and that *-kotok-* has been reinterpreted as a negative marker and lost the rest of its lexical semantics is in turn apparent from its use in constructions where it would be infelicitous to interpret it with its lexical cessative meaning, i.e., Heine’s (2002) “switch context”. To start with, it can co-occur with verbs of opposite semantics, such as verbs of inceptive/inchoative *Aktionsart*, like *-tumbul-* ‘to begin’ in (17).<sup>16</sup>

- (17) *kotúkáy’ kutúmbúla kulóva sómba!*  
 Ø-**kotok**-ayi ku-tumbul-a ku-lov-a somba  
 Ø-NEG-SBJ2 INF-begin-FV INF-fish-FV fish  
 ‘Don’t begin to fish’  
 \*\*‘Stop begin to fish’

<sup>16</sup> Note that the subject marker for 2<sup>nd</sup> person singular is (optionally) not indexed on the verb in Manda in directive constructions. This is common in other Bantu languages as well (Devos and Van Olmen 2013) and corresponds to a general crosslinguistic pattern where the imperative form tends to be minimal in inflectional weight (Aikhenvald 2010).

This means 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. The most obvious example of such a semantic mismatch can be deduced from examples such as (18), where *-kotok-* co-occurs with its own lexical counterpart as a second verb.

- (18) **ukótó** *kukótóka kulémba méséji*  
 u-**koto** ku-kotok-a ku-lemb-a meseji  
 2SG-NEG INF-stop-FV INF-write-FV SMS  
 ‘Don’t stop writing the SMS’

These are all examples of the relaxation of selectional restrictions (Grossman and Polis 2014) or host class expansion (Himmelmann 2004). That is, the supply of types of verbs that *-kotok-* may co-occur with has expanded. This entails, furthermore, that two parallel processes must have occurred. On the one hand, the full lexical meaning, with which such constructions would not have been acceptable, must have been bleached. On the other hand, it has expanded into a broader, more formulaic or functional meaning of negation.

A final, somewhat obvious, albeit crucial, indication of a semantic shift in the *-kotok-* construction is that it may be translated by the informants into the corresponding negative construction and not to the corresponding lexeme in Swahili (G.42),<sup>17</sup> the contact and working language used during the collection of the Manda data. Similarly, 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 version(s), also serve as indications of the negative reading of *-kotok-*. An example is this excerpt from Mark 5:60, where English *do not be afraid* and Swahili *m-si-ogop-e*, surface in Manda as *mu-kotok-e ku-yogop-a*.

Taken together, these diagnostics reflect a conceptual divergence or semantic split of *-kotok-* from the full lexical verb of ‘stop, leave (off)’ into a more abstract use as a grammatical marker. Moreover, they suggest that there has been a conceptual shift of the whole construction from a periphrastic, analytical concept of lexical verb and complement to an auxiliary + full verb complex. Thus, not only has *-kotok-* been re-conceptualized as a negator, but the status of the second verb has also shifted from a verb complement to describing the main event of the proposition. The formal indications of such a shift are what we will turn our attention to in the next subsection.

<sup>17</sup> The corresponding negator is a prefix *si-* in the post-initial slot in Swahili.

## 4.2 Formal change

As argued for in the analysis above, the *-kotok-* complex has been re-conceptualized, with *-kotok-* having shifted semantically to functioning as a negator when it is the infinitive complement of the main verb. However, there are both morpho-syntactic and phonological indications of the changed status of the *-kotok-* + second verb complex as well, as demonstrated in the following discussion.

From a syntactic point of view, the reanalysis of the *-kotok-* construction from (cessative) full verb + complement verb > (negative) auxiliary + full verb is marked by rigidification, i.e., a stronger cohesion between the two verbs of the construction (Croft 2003: 258). Hence, when *-kotok-* functions as a negator it has to stand in direct connection to the full verb. An adverbial, for example, is not allowed to occur between the grammaticalized *-kotok-* and the second infinitive verb. A sentence like (19a) is not ungrammatical but necessarily conveys a lexical cessative reading of *-kotok-*. Thus, the minimal pair sentences (19a) and (19b) are seen as mutually exclusive by the speaker, discriminating between the lexical and the non-lexical meaning of *-kotok-*, where (19a) necessarily operates on an already initiated event, whereas this is not necessarily the case in (19b).

- (19) a. *nilónða akotúkáy' hínu kuľíma*  
 ni-lond-a a-**kotok**-ayi hmu ku-lm-a  
 1SG-wish-FV 3SG-stop-SBJ2 now INF-cultivate-FV  
 'I wish he would stop cultivating now'
- b. *nilónða akótó kuľíma hínu*  
 ni-lond-a a-**koto** ku-lma hmu  
 1SG-wish-FV 3SG-NEG INF-cultivate now  
 'I wish he would not cultivate now'

Another syntactic indication of the categorical reanalysis of *-kotok-* from lexical verb to an auxiliary is the loss of syntactic autonomy in connection with its use in anaphoric reference. It is a general syntactic trait in Manda that a verb complement, including an infinitive, may be elided in propositions where information previously mentioned in discourse is reiterated (cf. Nkonyani (2000) for an analysis of this phenomenon in the neighboring language Ndendeule [N.101]). In the light of this characteristic, it is telling to look at Example (20) below. An answer like (20b), where the second verb is elided, *must* be interpreted with the lexical meaning of *-kotok-* and it cannot be interpreted as a negator.

- (20) a. *nikotúkáy' kúlya?*  
 ni-**kotok**-ayi ku-ly-a  
 1SG-stop-SBJ2 INF-eat-FV  
 'should I stop eating? / should I not eat?'  
 b. *ukotúkáyí*  
 u-**kotok**-ayi  
 2SG-stop-SBJ2  
 'you should (stop)' (\*\*you should not)

However, in answer to a proposition where *-kotok-* occurs in collocation with a member of the semantically expanded set of verbs (as exemplified in (17) and (18) above), both verbs *must* stand together. Thus, in the answer to (21a), where *-kotok-* occurs with its lexical counterpart as the second verb, a clear case of host-class expansion as discussed above, this verb cannot be omitted as it renders the proposition ungrammatical or incomplete.

- (21) a. *nikotúkáy' kukótóka kulémba?*  
 ni-**kotok**-ayi ku-kotok-a ku-lemba  
 1SG-NEG-SBJ2 INF-stop-FV INF-write  
 'should I not stop writing?'  
 b. *ukotúkáy' kukótóka*  
 u-**kotok**-ayi kukotoka  
 1SG-NEG-SBJ2 INF-stop  
 'you should not (stop writing)'  
 c. **\*\*ukotúkáyí**

This shows that the syntactic freedom of the grammaticalized *-kotok-* 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. Simultaneously, it is also an indication of the reinterpretation of the formal status of the second verb. As the second verb compromises the main event of the clause and is consequently analyzed as a full verb and not a complement, it may not be elided (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).

Moreover (as already touched on in Section 4.1), when *-kotok-* occurs with a negative function it must always be inflected in an irrealis form, i.e., with one of the two subjunctive suffixes *-e* or *-ayi*. This in turn entails a loss of (intra) paradigmatic variability (Lehmann 2015: 146-147) in comparison to the lexical

verb *-koto-*, which is not restricted to a certain set of TAM inflections (cf. Section 3). Another reduction for the auxiliary *-koto-* in comparison to its lexical counterpart is of course that it cannot be negated itself.

Finally, the phonological substance of the *-koto-* construction is exposed to attrition (Lehmann 2015) or erosion (Heine and Reh 1984; Heine and Narrog 2010). As already apparent in several of the examples above, the final syllable of the verb stem of *-koto-*, including the suffix(es), tends to be deleted, or to be reduced to just *-koto*.

- (22) *ukótó kulóngéla na nénga jinsi iyi!*  
 u-**koto** ku-longel-a na nenga jinsi iyi  
 2SG-NEG INF-talk-FV with me way DEM9  
 ‘don’t talk to me like that!’

- (23) *tukótó kúnywa gím̩bi nyamúhópi*  
 tu-**koto** ku-nyw-a gím̩bi nyamuhopi  
 1PL-NEG INF-drink-FV alcohol much  
 ‘we shouldn’t drink too much (alcohol)’

The final syllable deletion arguably contains a set of diagnostics for the grammaticalized status. To start with, *-koto* does not have the same independent word status as *-koto-*; 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. Furthermore, this loss of phonetic weight and simplification of the substance of the expression also marks a formal split from the lexical source, as the default interpretation of *-koto* is as a function word of negation and not ‘stop, leave (off)’.

However, as pointed out by e.g., Brems (2010), it is problematic to use such tendencies of reduction as an exclusive diagnostic of grammaticalization *per se*, “as such [are] no proof of grammaticalized status but typical of any routinization process” (Brems 2010: 94; see also Lehmann 2015: 135).<sup>18</sup> Besides, it is not possible to link this reduction to any signs of coalescence, i.e., to any further change(s) in prosodic or suprasegmental realizations in the spoken language. For example, there are no tone deletions or tone shifts indicative of univerbation. Curiously, however, in the few examples where my informants have written

<sup>18</sup> Brems discusses these issues in connection with spelling. It is assumed here that reduction in spelling also reflects reduction in actual speech.



the construction themselves, they tend to represent especially the fused form as one unit in their spelling.<sup>19</sup>

Another problematic issue with regard to this diagnostic is the general tendency in the Manda language to delete the final syllable of a verbal word when it occurs in a non-final position in a clause. Such phenomena of deletion of the verbal base are, however, usually restricted to verbs containing a coronal in the coda of the final syllable, which suggests that something else has motivated this reduction. Moreover, and even more intriguingly, there are indications in the data (from young speakers) that *-koto* is also eroding. As seen in the examples below, an additional syllable may optionally be dropped from *-koto-*, leaving only the initial CV-shaped *-ko* of the original verbal base.

- (24) *akanijovili nikó kuwóka*  
 a-ka-ni-jov-ili                      ni-**ko**      ku-wúk-a  
 3SG-PST1-OM1SG-say-PFV 1SG-NEG INF-leave-FV  
 ‘he told me that I shouldn’t go’

- (25) *Kuyáy’ tukó kumemésa ndóo...*  
 ku-y-ayi      tu-**ko**      ku-memes-a      ndoo  
 INF-be-SBJ2 1PL-NEG INF-fill-FV      bucket  
 ‘If we hadn’t filled the bucket...’

This supports the proposal that this must be more than just a case of final syllable deletion, as more substance than the final syllable of the verb is being reduced. This could be taken as an indication that the defective (and thus decategorized [Heine 1993: 56]) *-koto* has been reanalyzed as a verb stem of its own that in turn undergoes final syllable deletion. Alternatively, the further erosion is the result of a more generalized meaning.

The question of attrition and the way it operates on the *-koto-* construction in Manda will be further addressed from a general cross-Bantu perspective in Section 5.

### 4.3 Diachronic and comparative indications of change

Although admittedly meager in quantity, there are also diachronic and comparative data in support of the proposed path of evolution of *-koto-* from a full lexical verb + lexical complement to a (reduced) negative particle + full verb.

<sup>19</sup> As pointed out by one of the reviewers, this indicates that speakers cognitively treat the negative construction as a single grammatical unit. More data is needed, however, in order to draw firm conclusions on the regularity of this phenomenon.

In the chronoclect of the New Testament (1937), as exemplified in (5), (13) and (16) above, *-koto-* is only attested with a directive (prohibitive) use or in critical contexts where its interpretation is ambiguous between the lexical cessative or negative imperative reading and the subjunctive inflection. There are no examples of the extended use of *-koto-* as a negator in other non-factive, subordinate clauses. The reduced variant *-koto* occurs, but very rarely (only twice, to be specific).<sup>20</sup>

Turning instead to the comparative data, the results of a comparative study of Manda and its neighboring languages are presented in Table 2 below. The table only covers the languages where the use of *-koto-* has been extended from a lexical meaning (i.e., leaving aside Nyakyusa, Kinga and Pangwa, shown in the previous table). The abbreviation *f.n.* indicates my own field notes. A “yes” in the table means that the *-koto-* construction can be used in the specific clause type as a negator, which does not mean that other strategies of negation cannot be used there as well. The table is arranged in descending order from covering less to more clause types (based on Güldemann’s five types [1999] referred to in Section 2<sup>21</sup>) and forms an implicational hierarchy of change. The fact that all the languages in the table

**Table 2:** Comparison of clause type coverage of *-koto-* as a negative in Manda and its neighbors.<sup>22</sup>

Language	Code	Clause types					Source
		PROH	SUBJ	NEG INF	HYP	REL	
Matengo	N.13	yes (?)	no	no	no	no	Yoneda (2000, p.c.), f.n.
Kisi	G.67	yes (?)	yes (?)	no	no	no	Gray (forthc.), Ngonyani (2013, forthc.)
Ngoni	N.12	yes	yes	yes	no	no	Spiss (1904), Johnston (1919), Ebner (1939), Ngonyani (2003)
Mpoto	N.14	yes	yes	yes	no	yes	f.n.
Manda	N.11	yes	yes	yes	yes	no	f.n., NT (1937)

**20** It is of course possible that the low existence of formal reduction here is connected to socio-linguistic parameters, i.e., that the New Testament was deliberately not written in a style reflecting a more colloquial or informal reduced/coalesced pronunciation. If so, it still does not contradict the suggested pathway of change sketched above, as such variation in register could also be an indication of (ongoing) linguistic change. In the neighboring Ngoni, where there are more historical sources, Ebner (1939) already talks about a reduced form, whereas Spiss (1904) and Johnston (1919) do not.

**21** As far as the data can show, the use of *-koto-* as a negative outside of these domains does not exist in any of the languages.

**22** The abbreviations in the table stand for: prohibitive; subjunctive; negative infinitive; hypotactic clause; relative clause.

minimally cover the prohibitive conforms to the general Bantu pattern that a negative auxiliary “rarely” exists in a language without covering directives (Nurse 2008: 193). Furthermore, this supports the hypothesis that the grammaticalization process in Manda started out in such contexts.

The behavior of *-kotok-* in the neighboring language Kisi (G.67) is especially interesting in regard to the question of the initiation of *-kotok-* as negator. According to Gray (forthc.), *-kotok-* may be used in negative commands. 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 forthc.: 118). Thus, the *-kotok-* construction in Kisi seems to exhibit a higher degree of persistence (i.e., a lesser degree of semantic bleaching) and consequently a lesser degree of host class expansion than its neighbor Manda, which in turn suggests that it is still 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 and Van Olmen (2013: 45; see also Aikhenvald 2010: 359), one of the reasons behind the genesis of a new prohibitive construction originated in the will to express specific subtypes of (negative) directives. This seems to be the case in Kisi, where *-kotok-* is exclusively used as a “retrospective” prohibitive, i.e., with an explicit focus on the termination of an action (Van Der Auwera 2010). Once in the “system”, however, such a construction may continue to change and acquire new functions, as may be reflected in its more extended use in Manda.

Mpoto stands in opposition to Kisi. Just like in Manda, *-kotok-* seems to be used for negating the lion’s share of marked clause types. Intriguingly, however, there is a crucial difference between Mpoto and Manda in regard to which domains *-kotok-* may appear in. Apparently, Mpoto cannot use *-kotok-* as a negator of hypotactical adverbial clauses like Manda can. On the other hand, it is used in constructions for negating relative clauses, i.e., the only clause type not covered by *-kotok-* in Manda.

- (26) *nimpala mbumba yula ywayukoto kuhwata inguo yikele*  
 ni-m-pal-a mbumba yula ywa-yu-**koto** ku-hwat-a inguo  
 1SG-OM1SG-love-FV lady DEM1 REL1-1SG-NEG INF-wear-FV clothes  
 yikele  
 red  
 ‘I love that lady, (she) who does not wear red clothes’  
 (Mpoto N14)

Finally, there is also a striking formal issue that can be deduced from the comparative data (not represented in the table). All of the neighboring languages

may reduce *-koto-* into *-koto*, just as Manda. Manda is, however, the only language within this comparative group that seems to allow the further reduction to *-ko* discussed in Section 4.2, Examples (24) and (25). This would suggest that Manda is in a more advanced stage of formal grammaticalization than its neighbors. As this change is limited to younger speakers of Manda, however, it cannot for the moment be excluded that this difference rather reflects sociolinguistic and language-internal differences and that the various results originate in differences in age of the informants of the various languages. This issue, together with the question of why *-koto-* has expanded in use differently in Mpotó and Manda, calls for further research.

## 5 Discussion

The preceding section presented the various steps of the evolution of *-koto-* into a negative marker in Manda. This section attempts to relate the specific findings in Manda to the general discussion of the genesis of verbal markers in Bantu languages, with an emphasis on a crosslinguistic perspective. It is proposed here that *-koto-* is on a path towards a position as a canonically inflected, post-initial, secondary negation marker. This proposal is based on both the functional and formal developments of *-koto-* that overlap with the criteria ascribed to such a negator (Güldemann 1999; Nurse 2008: 188). To begin with, the functional range of *-koto-* matches that of the canonical Bantu secondary negative. As explained in Section 2 and 4.3, such a negative marker is prototypically restricted to non-main constructions such as directive speech acts and non-finite contexts, which is also the case here. Moreover, the construction seems to change *structurally* in correspondence with the canonical path of verb-to-affix grammaticalization in Bantu, as sketched by several authors (Heine and Reh 1984; Muzale 1998; Givón 2001; Nurse 2008) and exemplified with the grammaticalization of ‘finish’ + infinitive to a perfect/perfective prefix in Swahili.

- (27) i \*tu-**mele** # ku-lima ‘we have finished cultivating’  
 1PL-finish # INF-cultivate  
 ii \*tu-**mee** # ku-lima ‘we have finished cultivating’  
 iii \*tu-**me** # ku-lima ‘we have finished cultivating/have cultivated’  
 iv tu-**me**-lima ‘we have cultivated’  
 1PL-TA-cultivate

[Swahili (Amu variety) G.42a; adapted from Nurse (2008: 60); see also Muzale (1998: 44)]

In this schema, the original construction is an auxiliary + infinitive and the endpoint is a prefix in the post-initial slot of the verbal complex. In this case the prefix comes to express an aspectual notion. However, as seen in the description of the Bantu morphotaxis (1) in Section 2, as also apparent in Example (2b) above and (29b) below, this position is not only reserved for marking tense-aspect but also for (secondary) negation. What can be further inferred from (27) is that when an auxiliary has reduced and fused into a post-initial prefix in Bantu it canonically appears in a CV-shape, a form in turn derived from the initial syllable of the former auxiliary. The Manda data in which *-kotok-* becomes *-ko* stands in direct analogy to such a formal development. It is thus possible to adapt the reconstructed stages in (27) with synchronic Manda data to account for the development of *-kotok-* into a negative marker.

- (28) i tu-**kotoke** # ku-lɪma ‘we should stop cultivating’  
 1PL-stop # INF-cultivate  
 ii tu-**koto** # ku-lɪma ‘we should stop / should not cultivate’  
 iii tu-**ko** # ku-lɪma ‘we should not cultivate’  
 1PL-NEG2 INF-cultivate

What is not attested in the Manda data is a ‘final step’ (stage iv) of condensation between SM-*ko* and the infinitive marker *ku-*, in which case Manda would exhibit a CV-shaped morpheme surfacing in the post-initial position marking non-main negation, just like 74% of other Bantu languages (Nurse 2008: 180).

That there appear to be formal and functional connections between a periphrastic construction with a negative auxiliary and a post-initial secondary negative has already been noted in cross-Bantu studies, and an evolution across the path sketched above has been suggested, most notably by Güldemann (1996: 261–284, 1999; see also Nurse 2008: 194–196). However (as also stated by these two authors), it is difficult to find examples of an attested link between a secondary negative affix and its etymon in a single language. Consequently, most examples in Güldemann (1999) are comparisons between a more periphrastic negation marker in one language with a more fused negation marker in another, and the conclusions are drawn with regard to similarities in functional range and syntagmatic position rather than based on any direct formal similarities. A typical example from that study is the comparison between the functionally overlapping (both expressing negative subjunctive) but formally dissimilar auxiliary *-lek-* in Nilamba (F.31) and the post-initial prefix *-ngi-* in Zulu (S.42) (adapted from Güldemann 1999: 556).

- (29) a. *waleke kumukua*  
 wa-**lek**-e      ku -mu -ku-a  
 3SG-leave-FV    INF-OM3SG-beat-FV  
 ‘so that he may not beat him’ [Nilamba F.31]
- b. *singathandi*  
 si-**nga**-thand-i  
 1PL-NEG2-love-FV  
 ‘we should not love’ [Zulu S.42]

Similarly, the language-internal examples in the same study consist of affixes/clitics with some behavior similar to a lexical verb, e.g., the negator *sa* in Zigula (G.31), which may take an infinitive complement and be inflected in the subjunctive, but without any attested lexical semantics.

What is interesting with regard to this issue is that the Manda data offers a rare language-internal account of the proposed grammaticalization path of a secondary negation marker. Unlike the example from Zigula, Manda has a synchronically attested etymon, in the lexical verb *-koto-* ‘leave (off), stop’. Moreover – and unlike Nilamba, for example – this verb has demonstrably been recruited for grammaticalization along the “post-initial path” and exhibits several intermediate stages of functional and formal change all the way down to a CV-shaped marker. Simultaneously, the *-koto-* + infinitive complex in Manda not only shows structural and formal similarities with such a development path, but it also has a functional scope in correspondence with what has been prototypically stipulated for a secondary, post-initial negative. Manda can thus be seen as a “missing link” in support of Güldemann’s (1999) hypothesis.

## 6 Summary and conclusions

In this paper I have argued that the verb *-koto-* has grammaticalized into a non-main negative marker in Manda. Through a set of both functional and formal, language-internal and language-external diagnostics, it has been shown that *-koto-*, in a construction with an infinitive, has developed functions overlapping those of a characteristic Bantu secondary negative. It not only functions as a prohibitive but also as a marker of negation in other irrealis contexts and dependent clauses as well as in negative infinitives. Furthermore, it has been proposed that this grammaticalization occurs within the constructional constraints of the classical verb-to-affix chain of development found in Bantu languages. This, in turn, would corroborate the hypothesis that Bantu

secondary, post-initial, non-main negators are derived from periphrastic constructions consisting of an auxiliary and an infinitive verb. Thus, the Manda data offers rare language-internal evidence of the intermediate steps of this specific grammaticalization path.

The language-internal data from Manda presented in this paper also seems to corroborate two more general claims about Bantu, as given by Nurse (2008), that is, that there is a fast pace of change in grammatical markers in general and that negators tend to evolve particularly fast.

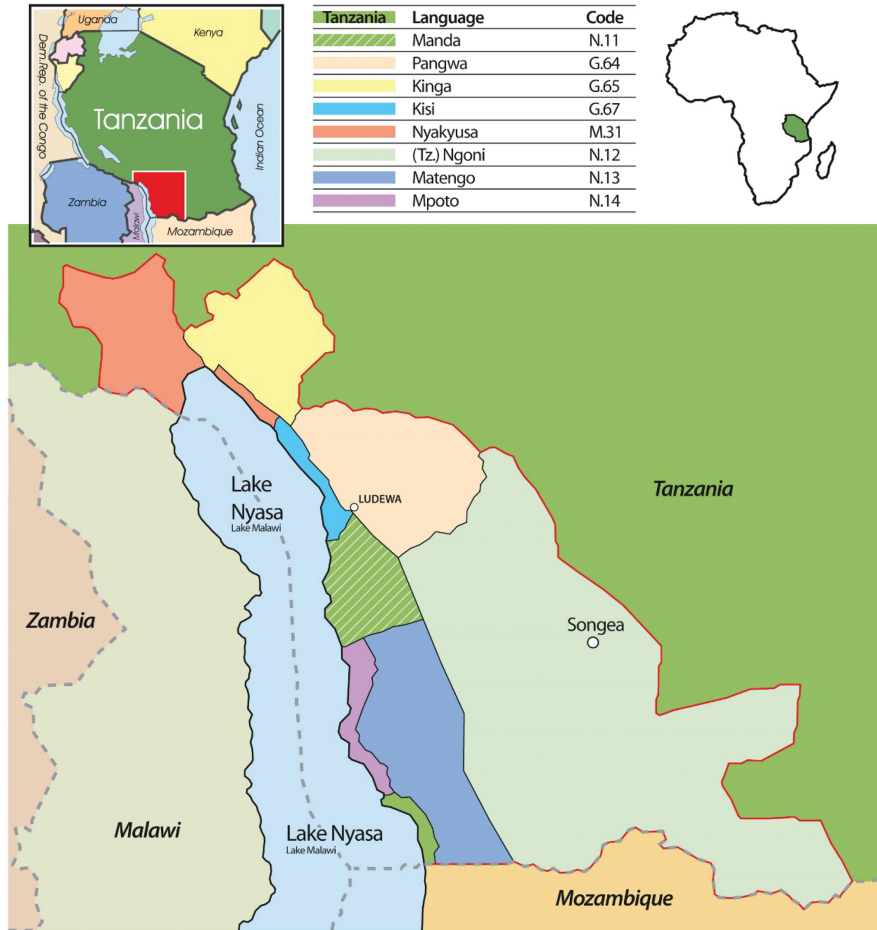
In turn, this stands in support of a more general and essential methodological axiom when describing a virtually unstudied language like Manda, namely the importance of trying to account for variations within an expression, as they may reflect important historical changes and (ongoing) grammatical processes.

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## Abbreviations

∅	zero morph
1, 2, 3	... noun class
1,2,3	SG / PL person
COND	conditional
DEM	demonstrative
FUT	future
FV	final vowel
INF	infinitive
ITV	itive
LOC	locative
NEG	negative
OBL	obligative
OM	object marker
PFV	perfective
PST	past tense
SBJ	subjunctive
SM	subject marker
TA(M)	tense, aspect (mood)

# Appendix: Map of Manda and its neighboring languages



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