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Bantu negative verbs: a typological-comparative investigation of form, function and distribution

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ABSTRACT

This paper investigates the use of verbs in the expression of negation across Bantu. The development of erstwhile lexical verbs into markers of negation is an understudied yet widespread phenomenon across the language family. In this sample of 100 languages, we identify a range of pathways as well as specific functions performed by such verbs. Specifically, we identify the use of both intrinsic negative verbs — i.e. those with inherent negative meanings — and extrinsic negative verbs — i.e. those which do not have an inherently negative meaning, but which have assumed dedicated negative functions through their use in specific constructions. This latter category can further be divided into two subtypes: those with negative inflectional material and those without. Across our sample, we explore the use of negative verbs in main clauses, non-declarative clauses such as prohibitives and interrogatives, non-verbal predicative clauses, as well as in non-main clause contexts such as in complement, relative and adverbial clauses. We further explore negative verbs for negation of infinitives and in non-clausal negation. In this endeavor, we offer a refined understanding of the development and distribution of verbs as negators in Bantu languages, while also broadening our understanding of negation in general.

KEYWORDS

Bantu languages, grammaticalization, negation, negative verbs

RÉSUMÉ

Cet article étudie l'utilisation des verbes dans l'expression de la négation dans les langues bantoues. L'évolution des anciens verbes lexicaux en marqueurs de négation est un phénomène peu étudié et pourtant très répandu dans cette famille de langues. Dans cet échantillon de 100 langues, nous identifions une série de chemins de grammaticalisation ainsi que des fonctions spécifiques remplies par de tels verbes. Plus précisément, nous identifions l'utilisation de verbes négatifs intrinsèques (c'est-à-dire ceux qui ont une signification négative inhérente), et de verbes négatifs extrinsèques (c'est-à-dire ceux qui n'ont pas de signification négative inhérente, mais qui ont assumé des fonctions négatives spécifiques par le biais de leur utilisation dans des constructions particulières). Cette dernière catégorie peut être divisée en deux sous-types : ceux qui ont un marquage flexionnel de la négation et ceux qui n'en ont pas. Dans notre échantillon, nous étudions l'utilisation de verbes négatifs dans les propositions principales, les propositions non déclaratives telles que les prohibitives et les interrogatives, les propositions

prédicatives non verbales, ainsi que dans des contextes de propositions subordonnées telles que les propositions complétives, relatives et adverbiales. Nous étudions également les verbes négatifs pour la négation de l’infinitif et la négation non propositionnelle. Ce faisant, nous offrons une compréhension fine du développement et de la distribution des verbes en tant que négateurs dans les langues bantoues, tout en élargissant notre compréhension de la négation en général.

MOTS CLÉS

grammaticalisation, langues bantoues, négation, verbes négatifs

1. INTRODUCTION

The purpose of this study is to offer a fine-grained investigation of verbs used for negation within the Bantu language family.¹ The development of initially lexical verbs into markers of negation occurs constantly and rapidly across the Bantu family, adhering to a larger tendency where new grammatical material is derived from verbs (Givón 1973; 2001: 382-383; Güldemann 1996: 261-284; 1999; Nurse 2008; Devos Forthcoming). However, this omnipresence of negative verbs in Bantu has been largely ignored in typological investigations, since their grammatical function(s) are typically (but, as we will see, not exclusively) related to non-standard negation, a considerably less well-studied topic in the languages of the world in comparison to that of standard negation (cf. Dahl 2010; Miestamo 2017).

Bantu languages most commonly mark sentential negation through verb-internal prefixes, typically occurring in the pre-initial (i.e. before the subject marker) or the post-initial (i.e. after the subject marker) slot. The pre-initial negation strategy is typically used for standard negation, whereas the post-initial negation strategy tends to be reserved for the negation of infinitives, subjunctives, imperatives, relatives and dependent clauses (Güldemann 1996; 1999).² Verb-external negative particles/clitics either used in combination with the verb-internal negative markers or used exclusively by themselves are also well-attested in the language family (cf. Meeussen 1967; Kamba Muzenga 1981; Güldemann 1996; 1999; Nurse 2008; Devos & van der Auwera 2013; Devos Forthcoming). In addition to these three strategies, a number of Bantu languages employ “negative verbs”. These verbs either have an inherent negative meaning (1), or they do not but they trigger a negative reading through the specific context/construction in which they occur (2).

- (1) Ndamba (G52; Edelsten & Lijongwa 2010: 111, ex. 186)³

ndembo ka-lem-a ku-yend-a

9.elephant SM1.PRF-refuse-FV INF-go-FV

‘the elephant has refused to go’ $\supset$ ‘the elephant has not gone’

- (2) Shi (JD53; Polak-Bynon 1975: 227)

oo-mány-e w-áa-derh-a máashi

SM2SG-know-SBJV SM2SG-PRS-say-FV please

‘beware that you speak, please’ $\supset$ ‘please, don’t say anything!’

1. Cited languages are given with their “Guthrie code” as commonly used when referring to Bantu languages, based on the alpha-numeric referential coding system introduced by Guthrie (1948; 1967-1971) and later updated by Maho (2003; 2009); see also Hammarström (2019). Codes containing the letters A, B, C, H, L and R exclusively refer to western languages in the Bantu phylogenetic tree (Grollemund *et al.* 2015), whereas codes containing the letters E, F, G, JD, JE, M, N, P and S exclusively refer to eastern languages. Codes containing the (single) letters D and K refer either to western or eastern Bantu languages.

2. Historically, Güldemann (1996; 1999) links the pre-initial strategy to the merger of an illocutionary particle with a (dependent) verb form, whereas the post-initial strategy is said to derive from periphrastic negation. Both the simplex and the (originally) complex constructions are attested in present-day languages, and Güldemann (1996; 1999) subsumes functionally related constructions under either the (extended) pre-initial or post-initial negation strategy.

3. We added or adapted segmentation and glossing and translated all examples to English for the sake of consistency and clarity.

Example (1) shows the use of the negative lexical verb *lema* ‘refuse’ to mark sentential negation, whilst Example (2) shows the use of the verb *manya* ‘know’ to express prohibition. The prohibitive reading most probably originates in an admonition (cf. also Devos & Van Olmen 2013: 32). For the purposes of this paper, both verbs are considered negative verbs as both perform a grammatical negative function.

Negative verbs often function as auxiliaries in complex verb-verb constructions, as is the case in (1)-(2). However, it is important to point out from the start that this is far from always the case, not even when following the broad definitions of auxiliary verbs given by Anderson (2006; 2011) and Heine (1993). Indeed, some negative verbs perform the grammatical function of negation but operate on words or constructions different from verbs. Negative verbs serving as negators in clauses with non-verbal predicates are cases in point (3).

(3) Lunyole (JE35 Wicks 2006: 70)

Mwima a-bul-a=mo mu nyumba
 Mwima SM1-lack-FV=LOC LOC18 9.house
 ‘Mwima is not in the house’

Moreover, a negative verb used as a negative marker may lose most, if not all, of its verbal properties arguably triggering a change of word class from verb into adverb(ial), coordinator or other (multi-) functional word class. The abessive marker in (4) clearly involves the negative verb *dzila* ‘abstain from’ but is used as an adjective taking a nominal prefix in agreement with the head noun.

(4) Bena (G63; Priebsch 1935: 94)

uju, umu-nu umu-dzila li-voko
 DEM1 1-person 1-without(< abstain from) 5-arm
 ‘this is a person without an arm’

As long as the marker performs a negative function and its etymon can be shown to be a verb, it falls within the scope of this paper. The aim of this paper is to provide an inventory of negative verbs and to account for their formal and functional versatility and their distribution as they occur in a convenience sample of 100 Bantu languages. We aimed at building a large and geographically diversified sample. Although we have data from all phylogenetic groups (i.e. North-Western, Central-Western, West-Western, South-Western and Eastern) (Grollemund *et al.* 2015), our sample shows a bias towards Eastern Bantu languages for which we obtained more detailed and diversified data. It should also be noted that we did browse dozens of grammars of especially North-Western and Central-Western languages without coming across any negative verbs. Further research is therefore needed to find out whether this reflects a true scarcity of negative verbs in these groups.

This paper is structured as follows: Section 2 examines the source types, i.e. the actual set of erstwhile lexical verbs involved in these negative constructions. Section 3 examines the distribution of negative verbs, looking at negative verbs as negators in main clauses, non-declarative clauses, non-verbal predication, non-main clause contexts, negation of infinitives and negative verbs in non-clausal negation (such as negative replies and interjections). Section 4 addresses some diachronic aspects of functional co-expressions and clausal overlap and the formal indications of further grammaticalization of a negative verb once it has become an exponent of negation. A summary and conclusions are given in Section 5.

2. THE SOURCE TYPES

2.1 Introduction

In this section, we suggest a typology of negative verbs, i.e. the lexical source elements which in a given construction are used as negators and can clearly be said to derive from verbs. Following our taxonomy, there are two main types/categories of source verbs. The first category entails verbs which have a negative meaning inherent in their semantic configuration (Category 1). The second category covers verbs which do not carry negative lexical semantics but which have become “contaminated” with a negative reading, either through the incorporation of negative inflectional morphology (Category 2a) or through a specific contextual setting (Category 2b).

It should be noted from the outset that Category 1 forms the by far most common category of negative verbs in our data. Representatives of this type are attested in 82 out of 100 languages, whereas the Categories 2a and 2b are only represented in respectively 33 (2a) and 14 (2b) languages of the 100 languages of our sample.

2.2 Intrinsic negative verbs

We refer to verbs with a negative reading inherent in their semantic configuration, such as those exemplified in (1), (3) and (4) above, as “intrinsic” negative verbs. They typically correspond to what Givón (1973; 1978; 2001) considers “negative-implicative” verbs. Givón (1973) mentions the following verbs: ‘avoid’, ‘neglect’, ‘escape’, ‘fail’, ‘forget’, ‘refuse’, ‘decline’ and also ‘lack, miss’. These verbs have in common that they imply the falsity of their complement sentences. To his list, Givón (1973) further adds ‘stop’, ‘finish’ and ‘complete’, noting that these verbs may also be considered negative-implicative in the sense that they imply the falsity of the event encoded in the complement in reference to the time directly following the event. The lexical use of *kotoka* ‘stop, cease’ in Manda (N11) in (5) may serve as an illustration of this fact.

- (5) Manda (N11; Bernander 2018: 663)
ni-kótwiki kú-kin-a m-píla
 SM1SG-stop.PFV INF-play-FV 3-ball
 ‘I quit playing football’ ⊃ ‘I do NOT play football (here and now)’

Whereas ‘finish’ and ‘complete’ do not occur as negation sources in Bantu (except as extrinsic verbs with concomitant negative morphology; cf. §2.3 and the Supplementary material),⁴ the use of the cessative ‘stop’ — and the similar ‘quit’ and ‘cease’ — are ubiquitous as negation sources, *kotoka* in Manda thus not forming an exception.

In these constructions, the negative implication inherent in the negative verbs is easily foregrounded and conventionalized and with the concomitant desemanticization of some of the lexical semantics, the verbs become reanalyzed as negative (function) words (cf. Givón 1973; 1978; 2001; see also the discussion in Krasnoukhova *et al.* 2021). Once reanalyzed, the negative verb constructions may be subject to further structural reduction and morphologisation. Consider, for example, Givón’s (1973) own example with *bula* ‘lack, miss’, a reflex of *búd ‘lack, be lacking, be lost’ (see Table 1) in Bemba having become the (prefixal) negator in counterfactual conditions (6). Another case in point is *kan* in Yansi, probably a reflex of *kààn ‘refuse’ (see Table 1) which has developed into a (prefixal) negative modal (necessity) marker, as illustrated in (7).⁵

4. More specifically, we have one instance of a negator derived from ‘finish’ in our database, and none with ‘complete’. Instead ‘die’, also essentially a terminative verb, occurs in a few languages, expressing NEVER in Shona (S11; Fortune 1955: 358) and acting as a negative existential in Kaonde (L41) and Kisanga (L35), respectively (cf. Bernander *et al.* 2022b; see also (65) in §3.4.2). The [supplementary material](#) contains an overview table of the 100 languages of our sample with the attested verbs and their meanings, along with the associated references.

5. The change of the vowel quality of the negative verb is triggered by the presence of an adhortative final suffix *i* which causes umlaut of the preceding stem vowel. The adhortative final suffix has merged with the negative prefix *ê-*. The latter

- (6) Bemba (M42; Givón 1973: 917)
à-ba-bulaa-bomb-a
 COND-SM2-lack-work-FV
 ‘had they not worked’
- (7) Yansi (B85; Rottland 1970: 84)
mε n-kān-ε-fuub
 I SM1SG/PL-should_not-ADH.NEG-roast
 ‘I should/must not roast (< I refuse to roast)’

Some of the recurrent negative verbs are reflexes of reconstructed Proto-Bantu lexical verbs (cf. Bastin *et al.* 2002; Nurse 2008: 183). These are listed in Table 1⁶ together with their relative frequencies (i.e. the percentage of languages of our sample in which they are found) and the Guthrie-codes of the languages of our sample that make use of the negative verbs in question (cf. also the Supplementary material).

Table 1 — Negative verbs as reflexes of Proto-Bantu lexical verbs

Verb root	Frequency	Languages
BLR 905 *dèk ‘let go, cease, allow’	30%	B25, E74a, F21, F22, F31, F33, G11, G33, G35, G36, G51, G52, G61, G66, JD53, JD66, JE15, JE31c, K31, L31a, L52, L53, M61, M64, N21, N31c, N43, N44, P231, S11
BLR 295 *bód ‘lack, be lacking, be lost’	11%	D14, JE35, L33, L52, L53, L62, M54, M61, M62, M64, N21
BLR 2910 *tíg ‘leave behind’	10%	B11, E51, E54, E55, E56, F32, JE253, JE402, K21, S53
BLR 1701 *káàn ‘deny, refuse’	8%	B85, C101, G52, K14, N10x, P11, P13, P21
BLR 1394 *gid ‘abstain from, avoid, refuse, be taboo, be punished’	8%	F31, G63, G66, JD66, K402, N21, N43, R41
BLR 907/909 *dèm ‘be heavy, be tired, fail, be too difficult for’	3%	E55, G35, G52

By far the most common negative verb employed across the Bantu-speaking family is a reflex of *dèk ‘let go, cease, allow’, which has been reconstructed for Proto-Bantu or at least very early Bantu. Bastin *et al.* (2002) does not mention any attestations of this verb stem in Zone A and B, containing the north-western-most languages and the branches highest up in the Bantu phylogenetic tree. However, our data show a possible attestation in Kota, a language of zone B, as seen in (8). The invariable negative marker *ndéka* is analyzed as a Class 9 noun by Piron (1990: 116), but it could well be derived from *dèk.

should probably be analysed as an instance of expletive negation also attested in other Bantu languages following verbs expressing ‘refuse’, as in the following Kiswahili (G43) example: *ni-li-kata-a a-si-end-e* (SM1SG-PST-refuse-FV SM1-NEG-go-SBJV) ‘I refused for her/him to go’ (see also (45) in §3.3.1).

6. In the remainder of this paper, all reconstructed forms (marked with *) are from Bastin *et al.* (2002) unless otherwise indicated.

- (8) Kota (B25 Piron 1990: 154)
ndéka a-jén-é m-oto
 not SM1-see-FV 1-person
 ‘he does not see anyone/he sees nobody’

Moreover, Nurse (Nurse 2008: 193, fn 25; see also Devos Forthcoming) suggests that several languages in Zones A and C have negative morphemes of the shapes [*lɛ*, *dɛ*, *le*, *dɛ*] which may derive from **dèk*. Consider the post-initial negative marker *lɛ* in Tunen (9).

- (9) Tunen (A44; Mous 2003: 298)
wàmiá món àtà mɔ̀tè à lè lè na
 1.my 1.child even one SM1 NEG FAR.PST ill
 ‘none of my children has ever been ill’

Other negative verbs are related to verbs with a more limited distribution and can be considered local innovations. The use of such regionally confined verbs as negative markers indicates areally significant traits. The reflexes of **kòt-uk* are a good example of this. Schadeberg (n.d.: 8-9; 2002: 187-188) reconstructs the verb **kòt-uk* as a derived verb stem consisting of a reflex of the separative extension *-*uk* suffixed to the verb **kòt* ‘stoop, be bent’, thus yielding the separative meaning ‘straighten (one-self)’ and, by extension, ‘quit and go home from work’. As shown by Bernander (2018) for Manda and neighboring languages that have developed a negator out of reflexes of this verb, however, the verb has undergone a lexico-semantic shift to a more generalized cessative verb ‘quit, stop’, as in (5) above.

Finally, we ignore the etymology of yet other negative verbs, but the provided lexical meanings paired with further comparative evidence (as with *gaya* in §3.4.2; cf. the discussion in §2.4.3) allow for them to be classified as negative verbs with an inherent negative reading.

2.3 Extrinsic negative verbs

“Extrinsic” negative verbs are those verbs which do not carry an inherent negative reading but which have gained a dedicated negative function through their use in specific constructional contexts. This second source type further falls into two subtypes:

- **Subtype 2a) positive lexical verbs with negative inflection:** non-intrinsic negative verbs which together with negative morphology have undergone reanalysis to express a specific negative function⁷
- **Subtype 2b) positive lexical verbs within a specific context:** non-intrinsic negative verbs which, through specific contextual circumstances triggering a negative reading, have undergone reanalysis to express a negative function

As was also seen with the negative-implicative verbs above, these verbs have a dedicated negative function. They undergo semantic shifts which separate them from their source meanings. Importantly, for those constructions involving a positive lexical verb and negative inflection (Subtype 2a), the new negative function is non-compositional. That is, it shows reduced transparency in terms of the original content meaning of the lexical verb. At the same time, it can be assumed that the original meaning of

7. Curiously, there are also examples from Bantu languages of a kind of inverted subtype, i.e. where a verb in a negative context gains a dedicated positive function. This is the case with *bolo* ‘recently do’ + negation rendering ‘do long time ago’ (i.e. ‘not having recently done’) in Tswana (S31; Cole 1955: 293). See also the modal (possibility) auxiliaries *bóla* and *bólala* only used in the negative with an affirmative reading in Tunen (A44; Dugast 1971: 365). In Shangaji (P312), the intrinsically negative verb *thaw* ‘lack’ inflected in the negative perfective functions as an auxiliary indicating that the main verb is carried out excessively (Devos [field notes]).

the lexical verb is not completely bleached but adds something into the mix — i.e. a flavor which steers the direction of the negative construction into a specific functional niche. This is in line with Hopper’s (1991) principle of “persistence” where “details of [a grammatical form’s] lexical history may be reflected in constraints on its grammatical distribution”. The development of the verb *ijua* ‘know’ into a negative marker expressing ‘not yet’ or ‘never’ in some Swahili varieties, such as Vumba in (10), is certainly related to its experiential source meaning. Similarly, negatively inflected ‘come’-verbs occur as specialized negators in many different clausal contexts in our dataset, often with a “persistent” prospective component, as is the case in the negative purpose clause in Ngoreme in (11).

- (10) Vumba (G42H; Lambert 1957: 56)

k’e-ju-a *pofy-w-a* *ni* *m-t’u* *yo* *y-osi*
 NEG.SM1-know-FV propose-PASS-FV COM 1-person 1.REL 1-all
 ‘she has not yet received a proposal from anybody (i.e. a proposal is outside her experience)’

- (11) Ngoreme (JE401; Bernander [field notes])

βa-yá-átí-a *há-no* *βa-tá-úí-a* *ku-γóót-ú* *na* *aβa-sírikare*
 SM2-NARR-come-FV 16-DEM SM2-NEG-come-FV INF-catch-PASS COM 2-police
 ‘they came here so that they would not get caught by the police’

The second subtype of extrinsic negative verbs (Subtype 2b) entails negative constructions with a positive lexical verb and no (overt) negative inflection. These forms can be assumed to have undergone reanalysis resulting in the expression of a negative function. This is the case, for example, with reflexes of PB *màny ‘know’, which has a positive lexical meaning but in certain contexts has been reanalyzed as a negative marker, most prominently as a prohibitive (see Devos & Van Olmen 2013; see also §3.3.1), as is the case in Shi (12) repeated from (2), but also in non-main clauses, as in the negative purpose clause in Ndali (13).

- (12) Shi (JD53; Polak-Bynon 1975: 227)

oo-mány-e *w-áa-derh-a* *máashi*
 SM2SG-know-SBJV SM2SG-PRS-say-FV please
 ‘please, don’t say anything’

- (13) Ndali (M301; Botne 2008: 132)

ba-kéét-a *ífi-kuúbi* *many’é* *fi-kól-ag-e* *íinguku*
 SM2-watch-FV AUG.8-chicken_hawk know.SBJV SM8-catch-PLUR-SBJV AUG.10.chicken
 ‘they watch for chicken hawks [so that] they won’t catch chickens’

2.4 Delimitations and caveats

2.4.1 The construction

To begin with, we wish to emphasize that although our primary focus is on the verbs — this being the point of departure for our data collection and analysis — the categories we present ultimately refer to source constructions, not to the verbs in isolation. Other contextual elements beyond the verb play a crucial role in the development of negative meanings, most importantly the predicate (usually a verb) on which the negative verb operates, as well as the specific inflectional form in which the negative verb and this predicate occur. This is a prerequisite for the development of Category 2 verbs, particularly Subtype 2b, where a negative reading only arises from the constructional context.

A telling example is the constructional minimal pairs attested in Shona (S11), Venda (S21) and Gogo (G11), involving the intrinsic negative verb ‘leave’ in non-declarative constructions. Shona and Venda have *rega* ‘stop’ and *leka* ‘leave’, both reflexes of *dèk (Table 1), whereas Venda has *litsha* ‘leave, leave alone, let go’ with an unclear etymology. Taking Shona as the illustrative example, *rega* only comes with a negative force when operating on a predicative verb in the infinitive form. It then expresses a prohibitive, as in (14a). The same verb may also operate on a finite predicate verb inflected in the subjunctive verb form (14b). In this particular construction, it has an affirmative hortative reading. Thus, the inflection of the predicate verb, rather than the negative verb itself, has a crucial effect on the meaning of the utterance.

(14) Shona (S11; Fortune 1955: 269, 312)

- a. *reg-a ku-tor-a!*
 stop-IMP INF-take-FV
 ‘stop taking!/don’t take!’
- b. *reg-a ndi-pind-e*
 stop-IMP SM1SG-enter-SBJV
 ‘let me enter’

The inflection of the negative verb may also give rise to semantic differences. In Yeyi, a prohibitive with *siya* ‘leave’ (< *tíg, Table 1) may be formed with the negative verb occurring either with the consecutive (15a) or the subjunctive (15b) verb form. Where both forms express prohibition and collocate with an infinitive predicate verb, the consecutive in (15a) additionally “lend[s] a habitual or pluractional implication to the event”.

(15) Yeyi (R41; Seidel 2008: 327)

- a. *u-ku-siy-a ku-shit-a akyo’o ba-nyana*
 SM2SG-CONS-leave-FV INF-refuse-FV like_that 2-man
 ‘you should not always refuse men like that’
- b. *u-siy-e ku-shit-a akyo’o ba-nyana*
 SM2SG-leave-SBJV INF-refuse-FV like_that 2-man
 ‘you should not refuse men like that’

2.4.2 Borderline cases

The strict focus on (erstwhile) lexical verbs might appear straightforward but it demands a delicate set of delimitations and weeding out of borderline cases. Indeed, there are several types of negative markers and constructions that we do not include in our investigation, several of which have been referred to as negative verbs in previous studies.

Most crucially, we have delimited our study to constructions where the verb expressing negation originally had a clear lexical function, i.e. it had some substantive semantic weight, rather than being a mere “dummy” auxiliary.⁸ More concretely, this means that we do not take into account negated copula verbs, most commonly reflexes of *b, *dɪ, which are only used for the indexation of a negative prefix, functioning as either a referential anchor or for (pragmatic) foregrounding effects. Unlike Sub-type 2a, such constructions, we argue, do not add any semantic content of their own to the negative

8. Admittedly, one strong reason for this strategy is to get a more controllable sample, as negative copulas of this type can permeate the whole inventory of complex TAM constructions of a Bantu language.

construction but act as placeholders for the negative prefix. Example (16) from Kinyarwanda serves as an illustration.⁹

- (16) Kinyarwanda (JD61; Kimenyi 1980: 10)
aba-gabo nti-bá-záa-b-a bâ-som-a
 2-men NEG-SM2-FUT-COP-FV SM2-read-ASP
 ‘the men will not be reading’

We have also excluded other (semi-)copula verbs like reflexes of *yikad. This verb is reconstructed with a semantically weighty meaning of ‘sit, stay...’. However, it has evolved into a copula verb in many languages and in some cases this is the only function that remains (but see Botne 1991 for an alternative analysis of the original meaning and semantic development of this verb). We have excluded those instances where it is clear that the negative function derives from the mere negation of the *yikad reflex as a copula and thus as a placeholder for the negative prefix. We have also excluded instances like Cuwabo’s (P34) negative possessive construction with *káana* ‘have’, illustrated in (17), which consists of *kala* (< *yikad) fused with the comitative *na* (‘with’) (cf. Guérois 2015: 445). In this case, the negative variant is merely expressed through standard, morphological negation (here with the negative prefix *hi-*) of the affirmative construction.

- (17) Cuwabo (P34; Guérois 2015: 446)
mu-hi-ná-káana ebaribari mu-náá-váh-e koóbilri=dha
 SM2PL-NEG-CE-have 9.truth.PL SM2PL-FUT-give-PROH 10a.money=10.DEF
 ‘as long as you are not sure, do not give the money’

An example of where we have included a reflex of *yikad, however, comes from Shona (S11), where *gara* has the semantically substantive meaning ‘become seated’ as in (18a), but when inflected in the perfective and operating on infinitive predicate verbs it gains a negative ‘not yet’-function, as in (18b), thus being a negative verb of Subtype 2b.

- (18) Shona (S11; Fortune 1955: 277)
 a. *nda-ci-gar-a*
 SM1SG.PST-PRF-become_seated-FV
 ‘now I am seated’
 b. *ndi-gere ku-pedz-a*
 SM1SG-become_seated.PFV INF-finish-FV
 ‘I am not yet finished’

Next, we have excluded reflexes of the quotative *ti, which in spite of often being translated and glossed as ‘do/say’, has a murky history in terms of its status as a verb at all (cf. Güldemann 2012; Veselinova & Devos 2021). More importantly however, just as with copula verbs, the quotative tends to be merely used as a host for a negative morpheme that through its inflection is foregrounded and reinforced rather than adding any semantic weight to the construction (see also Veselinova & Devos 2021). As further laid out in §3.4, we similarly do not consider the invariable copula-like elements referred to as “predicative indexes” (Meeussen 1967: 115), or “illocutionary particles” (Güldemann

9. Compare this with the similar role of Bantu copula verbs as indexing a second referential point in the formation of complex TA constructions (Botne 1986; 1989), e.g. the Swahili pluperfect *ni-li-kuwa ni-me-kula* [SM1-PST-copula SM1-PFV-eat] ‘I had eaten’ which is a combination of a copula inflected with past tense morphology and the predicate verb inflected in the perfect(ive) verb form.

1999), neither the dedicated negative index *ti (Kamba Muzenga 2005), nor those common variants that are reflexes of the affirmative index *ni in combination with a negative marker.

As mentioned above, we do not discard a negative element based on its present word class membership. If it has lost almost all verbal properties but can be proven to have its origins in a verb, it is included. A telling example in this respect is *dzila* in Bena (G63), which takes nominal prefixes when performing the function of a (noun phrase internal) abessive preposition ‘without’ (19) (see §3.7 for more information on abessives). However, *dzila* is derived from the language-internal lexical verb ‘avoid’ (cf. Morrison n.d.), which in turn is a reflex of the reconstructed verb root *gid ‘abstain from; avoid; refuse; be taboo; be punished’ (see Table 1).

(19) Bena (G63 Priebusch 1935: 94-95)

uju, umu-nu umu-dzila li-voko
 DEM.1 1-person 1-avoid 5-arm
 ‘that is a person without an arm’

On the other hand, we omit elements that have travelled the other route, i.e. elements of non-verbal origin that have gained verbal properties (similar to reflexes of *ti mentioned above). The nondum *kona* ‘not yet’ in several N10 languages shows such a situation. It has been reconstructed as originating from a pronoun which became copulative and was subsequently borrowed from Nguni (see Bernander 2021). Another example comes from Kami (G36) and involves *bure*, an adverb/adjective borrowed from Swahili meaning ‘empty, in vain’ and by extension ‘only, just’. This *bure* has expanded its functional range into a negative possessive marker through the addition of a verbal subject prefix (20a), and into an existential marker through the addition of locative agreement marking (20b) (cf. Devos & van der Auwera 2013; Bernander *et al.* 2022b; Forthcoming).

(20) Kami (G36; Petzell & Aunio 2019: 586-587)

- a. *wa-bule heshima*
 SM2-NEG.COP 9.respect
 ‘they have no respect/they are without respect’
- b. *Sweden ha-bule tangawizi*
 Sweden SM16-NEG.COP 9.ginger
 ‘there is no ginger in Sweden’

In §3.4.2 (see also §3.7) we discuss elements which in many ways appear and behave like *bure* above, but which do originally come from verbs. In these cases, we have to postulate a complex developmental pattern where these verbs shifted to adverbs and only then, by analogy with *bure*, regained (a limited) set of verbal properties.

2.4.3 The absence of clear etymologies

We end this section with a final caveat. The results of the survey here are dependent on the exhaustiveness of the grammatical descriptions (and other linguistic works) which we have been able to consult. Naturally, given that for the vast majority of languages we are relying on published sources and descriptions, we have limited access to the etymology of a given element. In some instances, this has made it difficult to decide whether to include or omit certain negative markers. This is the case, for example, with the Zulu negative imperative construction which consists of the prohibitive marker *musa(ni)* followed by the main predicate in the infinitive. This structure could be said to involve the verb *-muka* ‘go away’ or the verb *-misa* ‘make stand’ (Güldemann 1999: 560; Van Eeden 1956: 339) but then the sound changes remain unexplained.

- (21) Zulu (S42; Van Eeden 1956: 339)

musa uku-hamb-a

PROH INF-run-FV

‘don’t run!’

Similarly, Nyakyusa and neighbouring languages (e.g. Kisi, Ndali) make use of a prohibitive marker *somma* ~ *syoma* ~ *somu*, which Persohn (2017) suggests is of non-verbal origin despite its auxiliary-like position before an infinitive predicate verb. Instead, Persohn (2017: 325) links the form *somma*, and the variant *komma*, to the particle *mma* ‘no’, but has difficulties explaining the initial /Co/-sequence.

- (22) Nyakyusa (M31; Persohn 2017: 325)

somma ōko-paasy-a

PROH INF-worry-FV

‘don’t worry!’

Indeed, there are no direct verbal etymons available in the relevant languages, and the word-medial geminate /m/ does not adhere to any canonical Bantu verb phonotactics. There are also no examples of the form including subject prefixation in Nyakyusa or in Ndali. However, the omission of verb indexation is expected with prohibitives, at least when a single person is being addressed (cf. Devos & Van Olmen 2013). It is interesting to note in this regard that in Kisi, which quite likely borrowed the prohibitive marker from Nyakyusa (cf. Nurse 1988; Bernander Forthcoming), the variants *syoma* ~ *somu* do inflect for subject marking in plural prohibitives (23).

- (23) Kisi (G67; Ngonyani 2011: 132)

n-somu ku-yis-a

SM2PL-NEG INF-come-FV

‘do not come (pl)’

However, in the absence of further etymological data, we cannot confirm the original word class of *somma* ~ *syoma* ~ *somu*. Does the Kisi-variant constitute a more original form, with the subsequent drop of the subject marker in Nyakyusa (and Ndali) being a case of further formal grammaticalization? If so, the element was a verb originally and should consequently be included in our inventory. Or, is the element indeed of non-verbal origin as suggested by Persohn, with the Kisi variant being a similar case of categorical expansion through the addition of verbal prefixes as described for *bure* in §2.4.2? In that case, it should not be included as a negative verb. The lack of any lexical verb as a viable source candidate forces us to leave *somma* (etc.) out of our inventory of negative verbs.

We may also be criticised for being too liberal when it comes to including lexical negative verbs in cases where it is admittedly questionable that they have really gained a specialized or generalized grammatical meaning in the language. It is true that there is very seldom any clear formal evidence of their grammaticalization as negative markers. The most common instance of this kind of lexico-grammatical ambiguity is found with cessative verbs (‘stop’ etc.), used in prohibitive constructions. In these cases, it is not clear how much, if any, semantic or formal change from the original cessative collocation has taken place. However, we take the fact that such a construction has made it into a grammar as a sign of a relatively high productivity relative to other lexical collocations. This is of course also important when probing the developmental pathway of these negative verbs.

We also acknowledge the fact that Bantu languages tend to undergo morphologisation and concomitant phonological reduction of erstwhile lexical but then grammatical verbs into verb-internal

prefixes, which then become hard to link to the original verbal etymon.¹⁰ We are fully aware that we have probably overlooked quite a few grammatical markers that originate from verbs but where this origin is opaque due to extensive formal reductions. In §4.1.1 we discuss transparent cases of incipient (and ongoing) grammaticalization and thus more transparent instances of formal condensation of grammatical constructions involving negative verbs.

3. THE DISTRIBUTION OF NEGATIVE VERBS

3.1 Introduction

This section describes the distribution of negative verbs as negators in our cross-Bantu sample. We have structured the analysis following the typologically informed taxonomy developed in Miestamo (2017), Miestamo & Veselinova (Forthcoming); see also van der Auwera & Krasnoukhova (2020) for a similar taxonomy and for references to earlier typological survey chapters on negation. Thus, we account for the use of negative verbs in various clausal environments as well as in their non-clausal use. This approach comes with the advantage of including a more varied set of negation types, including non-verbal and non-clausal negation, usually given scant attention in comparative Bantu studies, which typically focus on negation of verbal predicates. However, and as will be clear over the course of the paper, Bantu negative verbs exhibit extensive functional overlap between various clausal contexts, often reflecting the same type of multi-functionality as witnessed in the corresponding affirmative construction (see also Guérois *et al.* Forthcoming). This is the case for example in the Bantu subjunctive verb form, which tends to be used both in non-declarative clausal contexts as a (typically milder) imperative or hortative marker, while simultaneously having a subordinating function in various non-main clause constructions (cf. Nurse & Devos 2019). In addition, due to a close conceptual relationship of non-factivity between the functions expressed with the subjunctive and the notion of future tense, the subjunctive often gets involved in the development of new future tense constructions, thus breaking its way also into the main clause. Correspondingly, negative verbs used as the negative equivalent of the affirmative subjunctive, being inflected in the subjunctive, tend to cover the same range of functional categories.

Infinitive verbs/deverbal nouns in Bantu, and their concomitant negated variants, represent another category that permeates different clausal contexts. As implied by the designation, the infinitives/deverbals even permeate word class boundaries, exhibiting both verb-like and noun-like qualities. This, together with the fact that infinitives/deverbals very often are negated through negative verbs, has led us to treat this specific linguistic category in a section of its own in §3.6.

It should also be stressed that the use of a negative verb is not necessarily the only strategy employed by a language for the negation of a certain clausal or non-clausal context. Instead, they often occur in competition with other means (e.g. verb-internal morphemes, particles, etc.) for the expression of identical or similar negative functions (Guérois *et al.* Forthcoming).

In the remainder of this section, we first look at the use of negative verbs in main clauses, more specifically declarative clauses (§3.2), non-declarative clauses (§3.3) and non-verbal predicate clauses (§3.4). We then investigate negative verbs in non-main clauses (§3.5), the negation of infinitives (§3.6) and, last but not least, negative verbs as negators in non-clausal contexts (§3.7).

3.2 Negative verbs as main clause negators (not standard negators)

Miestamo (2005: 39-50; 2017; see also Dahl 2010) has developed the notion of standard negation as a comparative concept defined as “negation of main clauses with a verbal predicate, more precisely the pragmatically neutral and productive strategies that languages use for this function” (Miestamo 2017: 407-408). In 54 out of 100 languages of our sample, we find a negative verb that is used in main, i.e. independent, declarative clauses operating on a verbal predicate. Yet, very seldom can it be argued that the negative verb functions as the standard negator in such languages, one exception being those

10. But in some instances, it has been possible to secure the relationship between a contemporary prefix with a historical verb. For example, the Swahili negative perfect(ive) verb form with prefix *ja-* can be linked to the source verb *ja* ‘come’ (a reflex of *jjj ‘come’; Bastin *et al.* 2002) as an extrinsic Type 2a-verb. Such cases have been included in our sample.

cases where erstwhile negative verbs have been re-analyzed as post-verbal negative particles (see §3.2.4). The employment of negative verbs in main clauses is instead typically devoted to expressing specific and/or pragmatically marked function(s). Thus, the negative verbs occur in complementary distribution with (an)other negative marker(s), with this other marker (typically a verb-internal prefix or a particle) then constituting the “more” standard negator.

Interestingly, the use of the negative verbs in main clauses seems to serve orthogonal pragmatic causes. They may either be used for foregrounding effects and for re-enforcing negation, or, alternatively, to background the negative force of the predicate to put assertive focus on some other clausal constituent. In the latter case, it is often clear that we are dealing with the shift or expansion from a construction originating from non-main, non-declarative clauses.

The discussion below is structured as follows. We first look at negative verbs which perform specialized functions in main clauses and are in a complementary distribution with standard negative markers (§3.2.1). Next, we turn to negative verbs which appear to be in free variation with a standard negative marker (§3.2.2). The following section (§3.2.3) also involves “free variation” but only for specialized functions. In the last sub-section (§3.2.4), we study negative verbs which have turned into (standard) post-verbal negative markers.

3.2.1 Negative verbs versus standard negation: Functional specialization

Negative verbs are often reserved for specific functional categories with another, typically verb-internal, negative marker being used in (all) other main clause contexts. The negative functions thus performed by negative verbs in our dataset are listed in (24).

- (24) NOT YET
 NEVER
 NO LONGER
 NOT AGAIN
 NEGATIVE MODALITY
 NEGATIVE FUTURE
 NEGATIVE COMPLEX PERFECT
 NEGATIVE NARRATIVE

The languages in our dataset most frequently select a negative verb for the expression of NOT YET (see Veselinova & Devos 2021 for an extensive cross-Bantu treatment of the expression of NOT YET). Moreover, some of the other negative functions listed in (24) are semantically very close to such non-dums, and they may even be expressed by the same negative verb (Veselinova & Devos 2021). Indeed, in some cases in our sample one and the same negative verb is used for the expression of both experiential NOT YET and emphatic NEVER. However, the different interpretations are formally reflected by constructional differences. In Giryama (E72), for example, the expression of NEVER involves the extrinsic (Type 2a) negative verb *dza* (a reflex of **jjj* ‘come’) prefixed to the stem (i.e. the infinitive minus the nominal prefix) of the main predicate. (Recall from the discussion in §2.4.3, and in fn 11 in particular, that we also include present day prefixes like Giryama *dza-* in our sample of negative verbs, if they are safely reconstructable to a lexical verb source.) The expression of NOT YET, on the other hand, makes use of the same negative verb but this time it is prefixed to the dummy auxiliary *ngwe* (most probably a reflex of **gàmb* ‘say’), which is in turn followed by the main predicate in its infinitival form.

(25) Giryama (E72; Nurse 2008: Appendix)

- a. *kha-fu-dza-gul-a*
 NEG-SM1PL-come-buy-FV
 ‘we have never bought’
- b. *kha-fu-dza-ngwe ku-gul-a*
 NEG-SM1PL-come-say INF-buy-FV
 ‘we haven’t bought yet’

Another example comes from Lunda (L52) where both the expression of NOT YET and NEVER involve *kanda*, possibly derived from a lexical verb meaning ‘forbid’ (see Veselinova & Devos 2021),¹¹ followed by the main predicate in the subjunctive (this is a quite common extra-modal use of the subjunctive; Nurse & Devos 2019). Whereas *kanda* is optionally accompanied by the clause-final negative marker *ku* (also attested in standard negation) when helping to express NOT YET (26a), the main predicate obligatorily takes a Class 16 locative for the expression of NEVER (26b).¹²

(26) Lunda (L52; Kawasha 2003: 410)

- a. *a-kwénzi kanda a-man-ish-i mu-dimu=ku*
 2-youth NOT.YET SM2-finish-CAUS-SBJV 3-work=NEG
 ‘the youth have not yet finished the work’
- b. *kanda a-móni=hu mu-túpa*
 NOT.YET SM1-see-SBJV=LOC16 1-lion
 ‘s/he has never seen a lion’

On the other hand, languages like Shona recruit two different lexical verbs. NOT YET is expressed through a construction involving the extrinsic (Type 2b) negative verb *gara* ‘become seated’ in the perfective followed by the main predicate in the infinitive, as seen in (18) (§2.4.2). The expression of NEVER is built around the intrinsic negative verb *fa* ‘die’ (discussed in fn 4; §2.2).

In Ha (JD66), an intrinsic negative verb construction involving *heba* ‘stop’ is employed to express yet another category of phasal polarity, namely NO LONGER (27).¹³

(27) Ha (JD66; Harjula 2004: 109)

- ya-rá-hevye gu-kór-a*
 SM1.REC.PST-FOC-stop.PRF INF-work-FV
 ‘he is no longer working’

11. We do not exclude, however, that Lunda could belong to the band of languages in southwestern Africa with *ka*-initial free-standing negators (in which case we would rather deal with an extrinsic Type 2a negative verb). The remaining /anda/ could be the same verb stem as illustrated in (81) in §3.5.3. Güldemann (1999: 569) convincingly argues that this /ka/ originates from a negative prefix and that these negative words in turn stem from a construction *ka*-SM-VERB, where the subject prefix subsequently eroded. As all (other?) verbs of this type are construed with a dummy copula verb (cf. Kamba Muzenga 2005), these are not included in our study.

12. Note that the clause-final negative marker =*ku* is also derived from a locative marker (Class 17), which most probably originally had an emphatic/minimizing effect on negation (‘not a bit’; see Devos & van der Auwera 2013). The Class 16 locative enclitic likewise can be said to have an emphatic, but in this case generalizing (NEVER), effect. The emphatic reading has not (yet) bleached and the Class 16 locative enclitic is not used for standard negation in Lunda.

13. In non-main relative clauses, however, NO LONGER seems to be expressed through the verb-internal prefix *ta*- and the persistent *ki*- (i.e. the marker of ‘still’ and thus also part of the phasal polarity paradigm).

In Lozi (K21), a construction involving the extrinsic (Type 2a) negative verb *tola* ‘spend the day’ is also used to express NO LONGER, as in (28). Moreover, the translation seems to imply that this construction also has an emphatic NEVER-reading (as per the discussion above).

- (28) Lozi (K21; Fortune 2001: 97)

ha-ni-tol-i *ni-ez-a*
 NEG-SM1SG-spend_day-PRS SM1SG-do-FV
 ‘I never do it anymore’

Other functional concepts expressed with negative verb constructions include NEGATIVE MODALITY. To express negative possibility, Ndebele makes use of an extrinsic Type 2b-construction consisting of the verb *bhalelwa*, i.e. *bhalela* ‘overcome’ further derived with the passive (and with the full verb in the infinitive), as in (29).¹⁴

- (29) Ndebele (S44; Ziervogel 1959: 150)

bá-bhalél-w-a *ku-bón-a* *mú-ti:la*
 SM2-overcome-PASS-FV INF-see-FV 3-trail
 ‘they were unable to see the trail’

NEGATIVE FUTURE tenses are also sometimes expressed with negative verbs in our dataset. Examples are from Myene (B11) and Luguru (G35). In Myene, NEGATIVE FUTURES involve either the intrinsic negative verb *tiga* ‘leave’, from *tíg ‘leave behind’ or the extrinsic (Type 2a) negative verb *pila* ‘come from’ (30). In Luguru, the de-volitional future marker stemming from the verb *londa* ‘want’ is negated with its lexical antonym, i.e. the intrinsic (Type 1) negative verb *lema* ‘not want’ (31b) (as per the translation equivalent given by Seidel 1898: 441), a reflex of *dèm ‘be heavy, be tired, fail, be too difficult for’.¹⁵

- (30) Myene (B11; Teissieres 1957: 23)

mi be’ *pile* *dyena*
 I FUT.NEG come.from see
 ‘I will not see’

- (31) Luguru (G35; Seidel 1898: 441)

a. *no-lond-a* *ku-law-a*
 SM1SG.NPST-want-FV INF-go_out-FV
 ‘I will go out’
 b. *ndem-a* *ku-law-a*
 SM1SG.not_want-FV INF-go_out-FV
 ‘I will not go out’

In Venda, negation of different COMPLEX PERFECT constructions involves the negative verb *son-go* (with an unclear etymology).¹⁶ As can be seen in the pluperfect in (32), the negative verb marks

14. The colon in *mut:ila* is used as an orthographic convention in Ziervogel’s Ndebele grammar to indicate what he refers to as “full length” (1959: 23), i.e. a long vowel.

15. The 1SG subject marker in Luguru is *ni-*. It surfaces either in its full form or in its syncopated form, e.g. *ni-baw-a* ~ *n-bawa* ~ *mbawa* ‘I have picked’ (Seidel 1898: 446). The syncopated form in (31b) causes strengthening of stem-initial /l/ to /d/.

16. Venda *songo* is definitely a borderline case (cf. the discussion in §2.4.2). Van Warmelo (1989: 273, 327, 342) links it to the amalgamation of the negative prefix *sá-* and *-ngo* < *nga* ‘be like’ coalesced with the infinitive *u-* of the following predi-

the predicate verb rather than the auxiliary ‘be’. This suggests that its use here is directly relatable to its use as a negator of (adverbial-like) participial verb forms (see §3.5.3), adhering to a typical Bantu pattern whereby the predicate verb form in complex verb constructions appears not in the infinitive but rather in a finite albeit dependent verb form (Meeussen 1967: 113; Nurse 2008: 309). The use of *songo* in (32) is thus reminiscent of its use in non-main clauses. (Note that we have altered the original orthography found in Poulos (1990) — where there is spacing between pre-radical elements — in line with a request from an anonymous reviewer.)

(32) Venda (S21; Poulos 1990: 325)

ṭhanga dzo-vha dzi-songo-hwal-w-a nga mu-ya
 10.roof SM10.PST-be SM10-NEG-carry_load-PASS-FV by 3-wind
 ‘the roofs had not been blown off by the wind’

Finally, an instance of the expression of a NEGATIVE NARRATIVE through a negative verb construction is found in Nyakyusa (M31). As is seen in (33), the narrative verb form with the prefix *lnko-* is obligatory negated with the negative verb *sita*, probably relatable to the lexical verb *síita* ‘hesitate, refuse, deny, reject, renounce, resist’ (Felberg 1996: 90).

(33) Nyakyusa (M31; Persohn 2017: 193, 222)

- a. *po kalolo a-linko-lembuk-a*
 then 1.hare SM1-NARR-awake-FV
 ‘then hare woke up’
- b. *to-linko-sit-a ko-job-a*
 SM1PL-NARR-NEG.AUX-FV INF-speak-FV
 ‘we did not speak’

As a way of concluding this section, it should be pointed out that there appears to be quite an extensive overlap in the functional use of negative verbs discussed in this section and summarized in (24). For example, many of the same functional categories treated here show up in Veselinova & Devos’ (2021) discussion on nondums and the variety of senses they may express. An interesting topic for further research would be to look more carefully and holistically at these different functions, disentangling if, and in that case how, these functions may be interconnected to one another on a conceptual level, e.g. by arranging them in a semantic space (as in Veselinova & Devos 2021: 469).

3.2.2 Negative verbs in “free” variation with a standard negator

The second subtype refers to instances where negative verbs do not perform specialized negative functions but have a more general distribution in main clausal contexts. At first sight, they seem to be in free variation with other negative markers more readily considered to be the standard negator.

In Ndamba, the standard post-verbal negative particle *ng’odu/duhu* (34a) is reported to be replaceable by a negative verb, in this particular case the intrinsic negative verb *lem* ‘refuse’, but *kana* ‘deny’ and *kotoka* ‘refuse’,¹⁷ also intrinsic negative verbs, are attested as main clause negators as well.

cate verb, and hence we treat it as an extrinsic verb of Category 2a. However, it is admittedly questionable whether ‘be like’ falls within our scope of non-copular verbs. Here, we chose to follow Van Warmelo, who categorizes it as a verb in Venda, and Bastin *et al.* (2002), who treats the reconstructed root *ngà ‘be like’ (from which Venda *nga* most probably originates) as a verb (rather than a conjunction, as Nurse 2008: 288 does).

17. Edelsten & Lijongwa (2010: 111) provide the translation ‘refuse’ for *kotoka* both in this example and the appended dictionary (2010: 143), although cognate forms to this verb seem to mean ‘stop, quit, cease’ in neighboring languages (see §4.2). Novotná (2005: passim), the other main Ndamba source, consistently glosses *kotoka* as ‘leave’.

(34) Ndamba (G52; Edelsten & Lijongwa 2010: 111)

- a. *ndembo ka-yend-a duhu*
 9.elephant SM1.PRF-go-FV NEG
 ‘the elephant has not gone’
- b. *ndembo ka-lem-a ku-yend-a*
 9.elephant SM1.PRF-refuse-FV INF-go-FV
 ‘the elephant has refused to go’, i.e. ‘the elephant has not gone’

For Tumbuka, which has double negation involving pre-verbal *kuti* and post-verbal (clause-final) *chara* as its standard negation strategy, Young (1932) claims that the intrinsic negative verb *reka* ‘stop, cease, give up’ (from *dèk, Table 1) may alternatively be used to mark negation “in all tenses”, as with the negative past tense in (35). The same author also reports the use of *wura* — which we believe is a reflex of *bód (Table 1) — as having a similarly wide distributional range. The anonymous source cited in the appendix of Nurse (2008) agrees (albeit with *bura* represented with), as seen in (36).

(35) Tumbuka (N21; Young 1932: 139)

- nda-rek-a ku-wuk-a*
 SM1SG.PST-stop-FV INF-rise-FV
 ‘I had stopped to rise’, i.e. ‘I’m not making a start’

(36) Tumbuka (N21; Nurse 2008: Appendix)

- ni-ka-bur-a ku-many-a*
 SM1SG-PST-fail-FV INF-know-FV
 ‘I didn’t know’

Often the information concerning any functional differentiation between the use of the standard negator vis-à-vis the negative verb is slim. However, as can be inferred from both examples, there is a transparent connection to the source semantics of the negative verb provided in the meta-text and/or in the gloss. We are aware that it is somewhat questionable whether these instances should be treated as grammatical(ized) negators or whether the negative reading is still only an invited inference (see also §2.4.2). We believe, however, that the mere fact that the authors included these constructions as negative markers in their grammatical descriptions, suggests that they are indeed frequently used and generalized enough to be more than just lexical verbs. Still, it would appear that these negative verbs used in main clause negation still carry at least part of their lexical source meaning. Following Givón (1973), that would mean that they still have one leg in the (positive) presuppositions associated with these verbs, e.g. ‘stop, cease’ presupposes a preceding event, ‘fail’ presupposes a preceding attempt and ‘refuse’ presupposes some known obligation. However, a firmer stand on this claim would require more fine-grained usage-based studies. We propose that persistence of the lexical semantics also constitutes the pragmatic factor underlying their use, i.e. the inherent negativity of the verb is employed together with other similarly inherent semantic components. In the examples above, the use of a ‘refuse’-verb (34) signals negation but also agentivity and a known prior obligation, whereas the ‘stop’-verb in (35) signals negation of an event as the consequence of its termination (see the discussion on prospective and retrospective prohibitives in §3.3.2 for a similar line of reasoning).

A clearer case of functional differentiation, with a probably more semantically generalized negative verb, is found in Hunganna (H42) (Güldemann 1999: 563-564; Devos Forthcoming), where the intrinsic negative verb *khoona* ‘fail, lack, miss’ is used for negation in constituent focus constructions.

- (37) Hunganna (H42; Takizala 1972: 265; 1974: 224)
Kipès ká-khóón-in kù-súúm kít zóónó
 Kipese SM1-fail-PST INF-buy chair yesterday
 ‘Kipese did not buy a CHAIR yesterday’

Güldemann (1999: 564) argues that the Hunganna periphrastic negation, which he considers to be a subtype of the (extended) post-initial strategy (cf. §1), applies precisely when the negation is not part of the focal information of the utterance. This is in agreement with his claim that the post-initial negative strategy is typically reserved for marked clause types but, more generally, reflects the interrelationship between relatives (see §3.5.2), clefts, content interrogatives (see §3.3.3) and focus constructions. Additional data in Takizala (1974) indicate that constructions like the one in (37) are mono-clausal focus constructions but are related to bi-clausal cleft constructions and ultimately to (non-main) relative constructions (a common development in Bantu and also cross-linguistically, for which see, e.g., Hendery 2012).

Note that in the languages which display more or less free variation between negative verbs and another negative strategy, the latter typically lacks canonical verb-internal negative prefixes. The negative systems of Ndamba, Tumbuka, Hunganna and also (Mozambique) Ngoni (N10x) appear to be in flux with a high number of concurring negative markers.

3.2.3 Negative verbs as alternatives for standard negators in specific main clause contexts

Some negative verbs in our dataset combine the distributional and functional characteristics of the two preceding categories, i.e. they are optional (see §3.2.1) but also restricted to specific main clause contexts (see §3.2.2). The specialized negative functions in question are listed in (38).

- (38) NEGATIVE FUTURE
 NEGATIVE PAST
 NEGATIVE PERFECTIVE

The optional use of the intrinsic negative verb *sita*, most probably derived from the lexical verb *s(h)íta* ‘deny, disagree, refuse’ (Yukawa 1989: 37), to express a NEGATIVE FUTURE in Nilamba may serve as an example of this subtype (39a). It serves as an alternative to the simplex form in (39b) marked by the standard pre-initial negative marker *si(ka)-*.

- (39) Nilamba (F31; Johnson 1923-1926: 181)¹⁸
- a. *a-sít-i tend-a*
 SM1-refuse-FV do-FV
 ‘they will not do, have refused to do’
 - b. *si(ka)-ni-ki-tend-a*
 NEG-SM1SG-FUT-do-FV
 ‘I shall not do’

18. Note that the final vowel *-i* is not accounted for. It is said not to be an exponent of negation (Johnson 1923-1926: 180, fn 1). It also occurs in the negative subjunctive which is built with the intrinsic negative verb *leka* ‘leave’ (e.g. *ndeki tenda* ‘that I may not do’) or in the negative conditional, which employs either *leka* or *sita* (e.g. *kanga aza-usiti-leta/kanga aza-uileki-leta* ‘if you do not bring’), which seems to suggest that it somehow expresses non-factivity. However, affirmative subjunctives take final *-e*. In the affirmative domain, final *-i* is only attested with plural imperatives, probably due to merger between the default final *-a* and the plural addressee marker **Vni* (Van de Velde & van der Auwera 2010: 137).

In Soli, the intrinsic negative verb *vula* ‘lack’ (< *bód, Table 1) may be used as an alternative (40a) to the standard negator (40b) for the expression of a NEGATIVE PAST.

(40) Soli (M62; Van Eeden 1936: 37, 23)

- a. *nda-vul-a* *ku-y-a=ko*
 SM1SG.PST-lack-FV INF-go-FV=LOC17
 ‘I did not go there’
- b. *ka-nda-von-a*
 NEG-SM1SG.PST-see-FV
 ‘I did not see’

Batibo (1977: 284-288), finally, reports the optional use of *leka* (< *dèk, Table 1) for the negation of a verb form in Sukuma (F21), which he refers to as the “accompli non définitif antérieur” (perfect anterior). We list it in (38) as PERFECTIVE for short. The use of *leka* as a negator in Sukuma is further illustrated in §4.1.2.

3.2.4 Negative verbs as standard (post-verbal) negators

Finally, in some languages the standard negative marker is derived from an erstwhile lexical verb. Some N10-group languages, which are situated in a band of south-east Tanzanian languages characterized by a (single) post-verbal standard negator, make use of the negative particle *lepa* (~ *lepe*, *lepi*) for standard negation (41).

(41) Ngoni (N12; Ngonyani 2003: 86)

- ni-geg-a* *lepa* *ma-nji*
 SM1SG-carry-FV NEG 6-water
 ‘I am not carrying water’

As argued in Bernander *et al.* (2022a), this standard negative marker can be linked to the intrinsic negative verb *lepa* ‘fail’.¹⁹ Negative verbs as a source of post-verbal negators in a Jespersen’s Cycle is not discussed in Devos & van der Auwera (2013; see also Nurse 2008: 195; Kamba Muzenga 1981: 6-7; but see Maniacky 2007, who mentions negative verbs as possible sources for some Bantu post-verbal negative particles) or in cross-linguistic studies (van der Auwera 2009; 2010).²⁰ However, the verb in this case probably followed a diverted pathway, firstly developing into a non-clausal negative marker expressing ‘not/not at all’ (cf. §3.7 on non-clausal negation) before being recruited as a negative post-verbal particle (in adherence with a common pathway of development of post-verbal negators in Bantu, for which see Devos & van der Auwera 2013). That is to say, it was not *lepa* as a negative-implicative verb but rather *lepa* as a negative interjection/negative answer particle that was recruited as an exponent of (standard) negation. Probably, *lepa* first went through a stage where it

19. Curiously, in Mozambique Ngoni (N10x), *lepa* serves as a canonical negative pre-verbal auxiliary used in “free variation” with other strategies of negation in main clauses (like the verbs described in §3.2.2), as well as in relative clauses.

20. Note, however, that Krasnoukhova *et al.* (2021) and van Gelderen (2022) — both with specific reference to Givón’s work cited in §2.2 — do mention a potential diachronic relationship in terms of a cycle between negative verbs and post-verbal (standard) negators. Additionally, van der Auwera & Krasnoukhova (Forthcoming) discuss the use of negative verbs meaning ‘finish’ and ‘stop’ as post-verbal standard negators in the head-final Jê language family (Brazil). In a recent cross-linguistically oriented study, van der Auwera *et al.* (2022) discuss the presence of negative verbs in Jespersen’s Cycle-like scenarios in two other languages outside of Bantu, namely in the Takanan language Tacana and the language isolate Urarina. In both these languages, the negative verbs in question function as emphaticizers in a discontinuous negative construction, having initially passed through a stage as negative existentials. Note that in both these languages the negative verb occurs pre- rather than post-verbally, and that the Urarina verb does not really adhere to our strict delimitations of a negative verbs as it is a negated copula verb (cf. §2.4.2).

functioned as a negative reinforcer, a function which is still available in Mpoto, as evidenced by the ‘not at all’-translation in (42a). Neutral negation is instead expressed by another post-verbal particle *hee* of non-verbal origin (42b). Thus, for Mpoto it can be argued that *lepa* serves as an alternative to the standard negator carrying some pragmatic effects (cf. §3.2.2).

(42) Mpoto (N14; Botne 2019: 130)

- a. *hy-a* *hi-hund-iti* *hye* *hi-nogh-a* *lepa*
 10-CONN SM10-become_ripe-PFV DEM.10 SM10-be_tasty-FV EMPH.NEG
 ‘those that are ripe are not tasty at all’
- b. *a-ku-l-a* *hee* *ma-belu*
 SM1-INF-eat-FV NEG 6-fruit
 ‘he does not eat unripe fruit’

Similarly, standard negation in several A70 languages, like Ewondo (43) and Fang (44), involves the post-verbal negative marker *ki* (or a similar form). This marker appears to be derived from a verb with the negative lexical meaning ‘abstain from’.

(43) Ewondo (A72; Essono 2000: 449)

- bod* *bâyǎm* *kig*
bè-òt *bé-á-á-yèm* *ákìg*
 2-men SM2-NEG1-PRS-know NEG2
 ‘the men don’t know’

(44) Fang (A75; Ondo-Mébiame 1992: 534)

- měṅgádzíkí*
mà-`é-ṅgàà’-dzí-è=’kì
 SM1SG-NEG-PFV-eat-FV=NEG
 ‘I have not eaten’

3.3 Negative verbs in non-declarative clause

3.3.1 Prohibitives and negation within the imperative-hortative domain

The negative verbs in our dataset are most frequently used for the expression of prohibition and, by extension, for negation within the whole imperative-hortative domain. In fact, 62 out of the 100 languages of our sample which make use of negative verbs employ them in prohibitives (too). This adheres to the findings of Devos & Van Olmen (2013: 30-34), an extensive study of Bantu imperatives and prohibitives, which shows that in their geographically diverse sample of 100 languages, 32 languages have a periphrastic construction as the only prohibitive strategy or as one of a number of prohibitive strategies. Importantly, whereas affirmative non-declarative main clauses of the imperative-hortative domain typically make use of (both) the imperative and the subjunctive, the corresponding negative clauses typically show more variation, including the use of negative verbs.

It should be noted that Bantu subjunctives are typically not restricted to (non-declarative) main clauses but also occur in complement clauses (typically with the same modal overtones, see also Nurse & Devos 2019: 224-227) and some adverbial clauses. If a language uses a negative verb as a negative counterpart of the subjunctive in main clauses, it will typically use the same negative verb in negative complement and adverbial clauses whose affirmative counterparts resort to the subjunctive (§3.5.1). Periphrastic prohibitives in our sample most typically involve intrinsic negative verbs like *kana* ‘should not’ (a reflex of *káàn, Table 1) in Yansi (B85) and *reka* ‘stop’ (a reflex of *dèk, Table 1) in Nyungwe (N43).

- (45) Yansi (B85; Rottland 1970: 81)

kán-ε-fúúl

should_not.IMP-NEG-ask

‘don’t ask!’

- (46) Nyungwe (N43; Courtois 1899: 82)

rek-a ku-rew-a bza ku-nam-a

stop-IMP INF-say-FV 8.CONN INF-lie-FV

‘don’t tell lies!’

Extrinsic negative verbs accompanied by negative morphology (Type 2a) are also sometimes attested. They tend to be related to volitive lexical verbs or movement verbs. Myene (B11) has both, as seen in (47a-b). Kikae (G43c) uses a borrowed volitive verb in prohibitives (48) and Yao (P21) uses a ‘go’-verb (49).

- (47) Myene (B11; de Gauthier 1912: 234)

a. *a-rònd-e dyena=ni*

NEG-want-IMP see=PLA

‘don’t see (pl)!’

b. *a-vil-e kènda=ni*

NEG-come_from-IMP go=PLA

‘don’t go (pl)!’

- (48) Kikae (G43c; Racine-Issa 2002: 115)
- ²¹

hebu u-chek-e

NEG2SG.want SM2SG-laugh-SBJV

‘don’t laugh!’

- (49) Yao (P21; Sanderson 1922: 109)
- ²²

m-ka-j-a ’-kaw-a

SM2PL-NEG-go-FV (INF)-be_late-FV

‘don’t be long!’

Finally, we also find extrinsic negative verbs exempt of negative morphology in Bantu prohibitive constructions. These always involve a(n) (erstwhile) lexical verb meaning ‘know’ and probably first had an “admonitive” use (Birjulin & Xrakovskij 2001) before becoming conventionalized as a prohibitive marker. The example in (50) is from Kamba (E55).

- (50) Kamba (E55; Farnsworth 1957: 36)

manya kwĩk-a ũu

know.IMP INF.do-FV DEM

‘do not do so!’

21. Following Sacleux (1939: 199), *hebu* is a form of the defective verb *ebu* with a probable origin in the Arabic root *habba* ‘love, want’.

22. The *ku-* of the infinitive is often omitted before *g* or *k*. This is represented here through the apostrophe.

3.3.2 Retrospective vs. prospective prohibitives

When a language makes use of more than one negative verb for the expression of prohibition, it may well be the case that the relationship between these verbs reflects the functionally motivated division between “prospective” vs. “retrospective” prohibition (cf. van der Auwera 2010: 89). Unfortunately, the consulted grammars seldom elaborate on such specific semantic overtones. One clear instance of the retrospective/prospective prohibitive distinction, however, comes from Ngoreme (JE401), which employs two prohibitive auxiliaries: the intrinsic negative verb *tiya* (from *tíg Table 1), with an original cessative meaning ‘stop, leave off, avoid’, as well as the extrinsic negative verb (Type 2a) *Vtifa* with the source meaning ‘come’ (from *jij ‘come’). Given its cessative source semantics, *tiya* covers the retrospective prohibitive functional niche, whereas the (negated) ventive source semantics of *Vtifa* induce a prospective prohibitive reading, as seen in (51a-b).

(51) Ngoreme (JE401; Laine *et al.* Forthcoming)

- a. *o-tíy-ε* *ku-γór-a*
 SM2SG-stop-SBJV INF-buy-FV
 ‘don’t buy!’ {the addressee is in the shop and s/he has already started buying items}
- b. *u-tá-útf-a* *ku-γór-a*
 SM2SG-NEG-come-FV INF-buy-FV
 ‘don’t buy!’ {the addressee has not started the act of buying but is still on his/her way to the shop}

Myene, which was already shown to use more than one auxiliary verb for the expression of prohibition (51), may be argued to also make a distinction between retrospective and prospective prohibitives. In addition to the ventive extrinsic negative verbs *pila* ‘come from’ and *bya* ‘come’ (52a), it can also use the cessative intrinsic negative verb *riga* ‘leave’ (from *tíg, Table 1), as seen in (52b). The cessative overtones of the latter are still indicated in the translation. However, it is unclear whether the ventive verbs are reserved for prospective prohibition.

(52) Myene (B11; de Gauthier 1912: 233, 235)

- a. *a-wj̃-e* *dyena*
 NEG-come-IMP see
 ‘don’t see’
- b. *rig-e* *dyena=ni*
 leave-IMP see=PLA
 ‘don’t see!’/‘stop seeing!’

3.3.3 Negative interrogative clauses

Some of the languages of our sample negate interrogatives through the use of a negative verb different from the standard negator. Examples come from Ndengeleko (P11), Mbala (H41) and Mbukushu (K333). In Ndengeleko, the intrinsic negative verb *kan* ‘refuse’ (< *káàn, Table 1) can be used for negative interrogatives (52).²³

23. We cannot explain why the content question word is glossed as ‘what’ rather than as ‘why’ (as in the translation) and why it occurs in what looks like a non-canonical position between the negative verb and the infinitive predicate verb.

- (53) Ndengeleko (P11; Ström 2013: 278)

u-kán-i kili ku-m-bákiy-a, ka-ní-túmbw-a ku-lím-a
 SM2SG-refuse-PFV what INF-OM1SG-tell-FV IT-SM1SG-being-FV INF-cultivate-FV
 ‘why didn’t you tell me before I started cultivating?’

The Ndengeleko prohibitive marker *kene* most probably derives from the same source verb but seems to have undergone further formal grammaticalization.

In Mbala and Mbukushu, the intrinsic negative verbs attested in interrogatives are also used in non-main clause contexts. However, they are not used for prohibitives, or at least not as the preferred strategy (cf. Mbala where the negative verb in question can be used for plural prohibitives; Makila 1981: 80). This could suggest that the use of the negative verb strategy rather than standard negation in Mbala and Mbukushu negative interrogative clauses with inherently focused content question words (see Lambrecht 1994: 282-286) is pragmatically motivated. Just as in Hunganna (for which see §3.2.2), negative verbs are employed when the predicate is extra-focal. This is particularly clear in Mbala, where the intrinsic negative verb *gonda* ‘be absent, miss’ is obligatorily used in negative interrogatives with an inherently focused question word (54a), whereas the standard pre-verbal negative particle *lo* is used in negative yes/no questions (54b) (Makila 1981: 92-98).

- (54) Mbala (H41; Makila 1981: 93)

- a. *ná u-na-gond-a-gwagul-a mú nzu*
 who SM2SG-PRS-miss-FV-speak-FV 18 9.house
 ‘who does not speak in the house?’
- b. *mwâna lô e-na-dy-a lósu*
 1.child NEG SM1-PRS-eat-FV 11.rice
 ‘doesn’t the child eat rice?’

In Mbukushu, the intrinsic negative verb *dhira* ‘refrain from doing’ — otherwise used in relative clauses and other non-main clause contexts — is obligatorily used in negative interrogative contexts, as in (55).

- (55) Mbukushu (K333; Fisch 1998: 131)

kupi gha-na-dhir-i ku-rok-a?
 where SM5-PST-refrain_from-PST INF-rain-FV
 ‘where did it not rain?’

3.4 Negative verbs in non-verbal predicative clauses

Non-verbal predication constitutes a cross-linguistically salient clause domain which tends to exhibit negative patterns diverging from other clause types (Eriksen 2011; Miestamo 2017). This is also the case for Bantu, where these diverging patterns furthermore may include the use of negative verbs. However, compared to non-declaratives, there are fewer instances of negative verbs used for negation of non-verbal predication found in our sample: Only 9 out of 100 languages revert to negative verbs for the negation of non-verbal predicative clauses.

The study of non-verbal predication is hampered by an inflation of terminology and various types of sub-categorizations and delimitations in the typological literature. It is in addition, somewhat overlooked in traditional Bantu-comparative studies. Nonetheless, for Bantu studies in general and for our current purposes, we feel that it is useful to first make a broad (and admittedly somewhat simplified) bipartite semantic division between a) identificational (‘this is X’), ascriptive predicates (‘X is Y’)

and similar expressions on the one hand and b) locational ('X is at/in Y'), possessive ('X has Y') and existential ('there is an X (at/in Y)') expressions on the other hand (cf. Lyons 1967; Koch 1999; 2012 and further references therein). Non-verbal predicates may be construed with or without a copula, which may or may not be (derived from) a verb. Importantly, although a verb may be involved in the clausal construction, a non-verbal constituent serves as the predicate nucleus of the sentence (cf. Hengeveld 1992).

It is also necessary to briefly introduce two strategies recurrently used for negation in this clausal domain, but which, based on our definitional criteria set up in §2.4, are excluded from our scope.

Firstly, it would seem that for the negation of the first subcategory of non-verbal predicates (i.e. identificational etc.) Bantu languages tend to resort to a type of non-variable, and thus arguably non-verbal, negative particle, commonly a reflex of *ti in East Bantu, as in Nkore-Kiga in (56a). When used with verbal predicates, this marker may subsequently develop into a canonical pre-initial negative marker, as in (56b) (cf. Güldemann 1996; 1999).

(56) Nkore-Kiga (JE14; Taylor 1985; cited in Güldemann 1996: 288)

- a. *ti-kyo ki-rabyo*
 NEG-7.REF 7-flower
 'it isn't a flower'
- b. *ti-ba-giire Mbarara*
 NEG-SM2-go.PFV Mbarara
 'they didn't go to Mbarara'

Secondly, for both subcategories of non-verbal predicate negation, many languages resort to mechanic standard negation of semantically empty copulas. Within our second subcategory of non-verbal predication, this strategy seems to be particularly prevalent in locational predication, as in (57). However, mechanic standard negation does also occur with possessives, particularly in those formed along the common Bantu-pattern of a copula + comitative preposition (i.e. 'be with' > 'have') (Creissels Forthcoming). Naturally, this also affects existential constructions that are derived from these locational or possessive constructions (Devos & Bernander 2022; Bernander *et al.* Forthcoming).

(57) Swahili (G42)

- a. *ki-tabu ki-po meza=ni*
 7-book SM7-LOC.COP 9.table=LOC
 'the book is on the table'
- b. *ki-tabu ha-ki-po meza=ni*
 7-book NEG-SM7-LOC.COP 9.table=LOC
 'the book isn't on the table'

3.4.1 Negation of identificational and ascriptive predicates using negative verbs

After filtering out invariable negative particles and negated copulas, there remain very few alternative negation strategies for identificational and ascriptive predicates. We have only 2 examples in our sample with what we believe are negative verbs functioning as a negator. Both are found in zone B. The first is Kota *ndéka* (as discussed already in §2.2), which is treated as a noun by Piron (1990) but probably stems from *dèk (Table 1).

- (58) Kota (B25; Piron 1990: 130)
ma-bété ndéka bwabwa
 6-mountain NEG high.RED
 ‘the mountains are not very high’

The second example comes from Myene, which usually resorts to the use of a negative copula. However, according to de Gauthier (1912), negative identificational predicatives may also be expressed with *arànga*, which equals the imperative negative form of the verb *rànga* ‘count, think’. Thus, the phrases in (59) would literally mean ‘do not count me’ and ‘do not count you’, respectively.

- (59) Myene (B11; de Gauthier 1912: 108)
- a. *a-ràng-a myè*
 NEG-count-IMP me
 ‘it’s not me’
 - b. *a-ràng-a wè*
 NEG-count-IMP you
 ‘it’s not you’

3.4.2 Negation of the locational possessive-existential grid using negative verbs

The semantic domain of locational possessive-existential is an overlooked category within Bantu studies traditionally, not least the investigation of its negation. Still, negation within this domain frequently appears to display idiosyncratic and asymmetric patterns rather than relying on standard negation strategies (cf. Bernander *et al.* 2022b). Most importantly for this study, some Bantu languages resort to a negative verb in such idiosyncratic constructions. Although a rare trait in the forming of locationals, the use of negative verbs is a significant source for the formation of both negative possessive and existential constructions. Languages then often employ the same negative verb for negative possessives and negative existentials, the difference being marked by the indexation of the verb (a fact further illustrated below).

NEGATIVE LOCATIONALS

Negative locationals often merely involve standard negation of an affirmative locational (as seen in (57) from Swahili). However, one language in our sample, Lunyole, appears to use the common negative verb *bula* ‘lack’ (< *bód, Table 1) to express a negative locational proposition (Wicks 2006).

- (60) Lunyole (JE35; Wicks 2006: 70-71)
Mwima a-bula-mo mu nyumba
 Mwima SM3-lack-LOC LOC18 9.house
 ‘Mwima is not in the house’

NEGATIVE POSSESSIVES

The predominant strategy for affirmative possessive predication in Bantu involves the comitative, either through an extension of its original prepositional use or as reanalyzed ‘have’-verb (Creissels Forthcoming). Correspondingly, many Bantu languages form a negative possessive through intrinsic negative verbs with the antonymic meaning ‘be without’ or ‘lack’. The most common is a reflex of *bód ‘lack; be lacking; be lost’ (Table 1). The use of *vula* in Soli exemplifies this.²⁴ (The translation

24. Van Eeden (1936: 2, 37) presents what might appear as another instance of a negative verb, namely *liya* also with the proposed meaning ‘be without, lack’. At closer examination, however, it seems clear to us that *liya* is not a verb stem but

of (61a) seems to suggest that the proposition expresses an ascriptive rather than a possessive relationship, but we assume that it can be paraphrased into something like ‘you do not have cleverness’).

(61) Soli (M62; Van Eeden 1936: 36)

- a. *u-vul-a* *ma-no*
 SM2SG-lack-FV 6-cleverness
 ‘you are not clever’, i.e. ‘you do not have cleverness’
- b. *va-vul-a* *va-kaši*
 SM2-lack-FV 2-wives
 ‘they have no wives’

In Mbukushu, the verb *pira* ‘do without, lack’ acts as a specialized negative marker occurring in complementary distribution with standard negation. It is obligatorily used for negative possessive predication in non-main and non-declaratives clauses as in (62a), whereas it is used interchangeably with the standard negator *mbadi* in main clauses (62b).

(62) Mbukushu (K333; Fisch 1998: 133)

- a. *pa* *kar-ire* *mu-rume* *oyu* *gha* ***pir-ire*** *thivata* *thodifeste*
 LOC16 be-PFV 1-man REL1 SM1 lack-PFV dress festive
 ‘there was a man that did not have any festive dress’
- b. *mvu* *ne* *mbadi* *ko* *huki*
 9.hippopotamus COP NEG LOC17 9.fur
 ~ *mvu* *gha* ***pira*** *huki*
 9.hippopotamus SM1 lack 9.fur
 ‘a hippopotamus has no fur’

In some Bantu languages, the verbal status of the negative verb used for negation of possessive predication fluctuates according to their functional status as negative possessives or rather as non-clausal abessive markers (cf. §3.7). This is the case with *dzila* in Bena, discussed in §2.4.2. Another element with similar ambiguous traits in Bena is *gaya*. Morrison (2011: 292-293) notes several verbal characteristics that *gaya* lacks: It does not inflect for tense or aspect (except in periphrastic constructions), and there is no infinitival form of the verb. What is more, *gaya* can be used with either the nominal class prefixes or the verbal prefixes used for subject indexation (63).

(63) Bena (G63; Morrison 2011: 292)

- a. *ndi-li* *mu-gáya* *mu-háádza*
 SM1SG-COP 1-lack 1-sibling
 ‘I have no sibling’
- b. *ndi-li* *ndi-gáya* *mu-háádza*
 SM1SG-COP SM1SG-lack 1-sibling
 ‘I have no sibling’

We have not been able to come up with a straightforward etymology for *gaya*. That *gaya* is a verb originally, however, can be deduced from comparative data. In Bondei (G24), for example, *gaya* is listed

rather consists of the combination of the copula *li* and a postfinal suffix, a common form used for negation within this domain in languages of this area (see Bernander *et al.* 2022b; Forthcoming).

as a verb with the infinitival prefix *ku-* and the meaning ‘suffer, vex, provoke, be confounded’ (Woodward 1882: passim).²⁵ Similarly, Lodhi (2002) shows that the cognate *gaya* ‘not exist’ in Nyamwezi (F22) may undergo verbal derivation (with intriguing concomitant changes in meaning), such as the passive, as in *gay-iw-a* ‘not to have, lack’, and the causative, as in *gay-ish-a* ‘undo, cause not to exist’.

Similarly, in Nilamba (F31), it would appear that negative possessives with the negative verb *gila* ‘not to have’ (< *gid, Table 1) are largely restricted to a nominalized construction, reminiscent of the situation in Bena (see (19) in §2.4.2).

- (64) Nilamba (F31; Johnson 1923-1926: 186)

ku-ti-li *ni m-gila n-sau*
 SM17-NEG-COP I 1-lack 9-property
 ‘there is none, I am without property’

NEGATIVE EXISTENTIALS

In Bernander *et al.* (2022b; Bernander *et al.* Forthcoming; Devos & Bernander 2022 on affirmative existentials), we investigate the expression of negative existence in Bantu. We also situate negative existential constructions in relation to the Negative Existential Cycle (NEC), the typologically recurrent diachronic process where standard negation markers develop out of negative existential markers, which then may re-occur in new formations of negative existentials (cf. Croft 1991; Veselinova 2014). The study showed that negative existentials typically do not expand towards the domain of standard negation in the Bantu language family (beyond contact languages). However, it was made abundantly clear that the development of a dedicated negative existential marker — i.e. a marker of negative existence not merely being the composition of affirmative existential + standard negation — is a recurrent trait in Bantu and that negative verbs are prone to develop into such markers. In our sample for this study, we found 4 languages using negative verbs (either exclusively or together with other strategies) for expressing negative existence. The negative verbs are typically inflected with a locative marker, reflecting the broader interrelationship between existential constructions and location on the basic notion that an entity (not) occupying a space also does (not) exist (Lakoff 1987: 407; see also Gaeta 2013; Koch 2012; Bernander *et al.* 2022b; Forthcoming). A case in point is Kaonde, with the extrinsic negative verb (Type 2a) *fwa* ‘die’ taking the standard negative morpheme *ka-*, and a locative suffix.²⁶

- (65) Kaonde (L41; Foster 1960: 30)

késsha *tu-kékala* *na* *ma-tába* *lélo* *ka-fwá-ko*
 tomorrow SM1PL-FUT.be COM 6-corn today NEG-die-LOC17
 ‘tomorrow we shall have corn, today there is none’

However, in most cases we know of (and all the cases in our sample) the negative verbs recruited are intrinsic negative verbs meaning ‘lack, be without’, i.e. the semantic antithesis to the comitative (‘be with’) construction, typically used in negative possessive clauses (as discussed in the previous section) and then also employed in negative existentials. An example of this strategy is found in (66). Notice that this construction also contains a locative marker, in this case a locative subject prefix.

25. The early date of this source would arguably also lend further support to the conclusion that *gaya* began its life as a (lexical) verb.

26. We assume, in line with the grammaticalization pattern sketched in fn 12, that the subject prefix has been eroded in this construction.

- (66) Bena (G63; Priebusch 1935: 98)

pa-gaya i-nasi i-jingi
 SM16-lack 9-road 9-other
 ‘there is no other road’

3.5 Negative verbs in non-main clauses

Miestamo (2017) and Miestamo *et al.* (2022) point out that cross-linguistic studies on negation of non-main clauses are still largely absent. What is more, with the exception of relative clauses, non-main clauses are seldom coherently discussed in Bantu grammars and their negation patterns even less so. Nonetheless, some general characteristics of Bantu non-main clause negation can be discerned, where the use of negative verbs can furthermore be shown to play a significant role. In our mapping of negative verbs in non-main clauses, we make a broad distinction between three basic subtypes of such clauses: complement clauses, relative clauses and adverbial clauses. 35 of the 100 languages of our sample make use of one or more negative verbs to express negation of one or more dependent clause types. It should be noted that this number does not include negative complement clauses as they typically resort to the same negative verbs as found in non-declarative main clauses, and more specifically prohibitives (see §3.3.1 above and §3.5.1 below). However, this clausal overlap is not always explicitly mentioned in grammars.

There is certainly a strong conceptual and functional interrelationship between different non-main clause types. For example, in many Eastern Bantu languages, locational — and by extension temporal and conditional clauses — are often mere relative clauses with clause markers inflected with locative noun class morphology (cf. Nurse 2008: 289). An example of a relative-adverbial overlap involving a negative verb comes from Mozambique Ngoni, where *kana* ‘refuse’ (< *káàn ‘deny’, Table 1) occurs both in negative conditional clauses, as in (67a), and in negative relative constructions, as in (67b).

- (67) Mozambique Ngoni (N10x; Kröger 2011)

- a. *m-aka-kan-iti ku-xom-a, m-aka-vi’ na-ku-hi-many-a*
 SM2PL-PST-refuse-PRF INF-learn-FV SM2PL-PST-be.PFV NEG-INF-OM7-know-FV
 ‘if you hadn’t studied, you would not have known’
- b. *li-himba [li-li-kan-ita’ ku-n-neka], li-xokole’*
 5-lion REL5-SM5-NEG(< refuse)-IPFV INF-OM3-let_go SM5-start
ku-ng’utukil-a
 INF-OM3.pursue-FV
 ‘the lion who did not let go of him, started to pursue him’

Similarly, as will become clear in the discussions about the respective subtypes, languages exhibit formal overlap in the coding of (negative) non-main clauses and other (negative) clause types.

3.5.1 Negative complement clauses

Negation of complement clauses involving negative verbs is always associated with the negation strategies of other clause types. Except for negative infinitive complement clauses, which will be separately discussed in §3.6, negative verbs are used to negate complement clauses inflected in the subjunctive and other dependent verb forms. When the matrix verb subject is not co-referential with the participant of the complement clause, it is common that the subjunctive — otherwise associated with non-declarative clauses and some types of adverbial clauses — is used for forming complement clauses in Bantu. Correspondingly, when a negative verb serves as the negative equivalent of the subjunctive in main clauses, it also appears in these non-main clause contexts. Examples of complement clauses expressed with

subjunctive (intrinsic) negative verbs come from Nzadi, which uses *say* ‘refrain’ (68),²⁷ and Gikuyu, which uses *tiga* ‘cease, refrain (from), stop; leave (at, in)’ (< *tíg, Table 1) (69).

- (68) Nzadi (B865; Crane *et al.* 2011: 183)

bɔ a lín mĩ e sáy !ó-kaa lɔŋ
 they PRS want I SBJV NEG (< refrain) INF-be teacher
 ‘they want me not to be a teacher’

- (69) Gikuyu (E51; Barlow 1960: 30)

mw-ír-e a-tig-e gũ-thiĩ
 OM1-tell-SBJV SM1-NEG(<stop)-SBJV INF-go
 ‘tell him not to go’

3.5.2 Negative relative clauses

13 of the 100 languages of our sample make use of a negative verb for the negation of relative clauses, as we have already seen in the use of *kana* ‘refuse’ in Mozambique Ngoni in (67b). As previously indicated (cf. §3.2.2), Hunganna (H42) is also one of these languages, using the negative verb *khoona* ‘fail, lack, miss’, as in (70). Arguably, it was the use of *khoona* in negative relative clauses which was extended towards the marking of negative clefts and finally towards the marking of non-predicate focus in negative main clauses.

- (70) Hunganna (H42; Takizala 1974: 127)

ki-t ki u-khoon-in Kipes ku-suum ki-kel ki-beeng
 7-chair REL SM1-NEG(< fail)-PST Kipes INF-buy SM7-was 7-red
 ‘the chair that Kipes didn’t (/failed to) buy was red’

Some languages resort to more than one negative verb for relative negation. In Nzadi, the verbs *tún* ‘refuse’ and *say* ‘refrain’ seem to be used interchangeably for the negation of relative clauses, i.e. without notable functional differences.

- (71) Nzadi (B865; Crane *et al.* 2011: 194)

mw-ààn na o tũn o-dz-á fufú é ndé
 1-child DET PST NEG (< refuse) INF-eat-FV fufu CONN his
 ‘the child who didn’t eat his fufu’

In other languages, however, there is a functional delimitation within the realm of relative clause constructions. In Lubukusu, the negative verb *lexa* ‘leave’ (< *dèk, Table 1) is used for the negation of future relative clauses only.

- (72) Lubukusu (JE31c; Austen 1974: 195)

ó-xà-lèx-è xù-xòl-a
 REL/OM1-FUT-leave-FV INF-work-FV
 ‘who will not be working’

27. This may be compared with the structurally different negative relative (§3.5.2) or negative infinitive, e.g. *!ó-say o-bva* [INF-refrain INF-fall] ‘not to fall’ (Crane *et al.* 2011: 182).

Interestingly, this very narrow functional niche appears to constitute the only instance where a negative verb is used in Lubukusu.

3.5.3 Negative adverbial clauses

The negative adverbial clausal domain covers a broad semantic field. By way of illustration, we mention that Thompson *et al.* (2007), in their typological overview, list over 12 different subtypes of adverbial clauses. It should not come as a surprise then that the descriptions from where we have gathered our data rarely account for adverbial clauses in a comprehensive manner, if at all. This is even more so the case for their negative equivalents. Negative adverbial clause constructions may furthermore differ from their affirmative counterparts not only formally, but also in terms of symmetry. One negative construction, for example, may cover several subtypes of affirmative constructions. In view of these limitations, we have decided to focus on three types of adverbial clauses in this section, i.e. negative conditional, negative purpose and anti-circumstantial clauses. These negative adverbial clause types are chosen as they are recurrently expressed with negative verbs in Bantu and/or as they are somehow significant from a typological perspective.

NEGATIVE CONDITIONAL CLAUSES

A common subcategory of adverbial clauses often discussed in Bantu grammars, and which often appears to be negated through the use of negative verbs, concerns conditional clauses. Examples include *kanga* ‘lack’ (possibly < *káng ‘frighten; threaten’) in Enya and *vula* (< *bód, Table 1) in Soli (74). Example (67) in §3.5 from Mozambique Ngoni is another case in point.

- (73) Enya (D14; Spa 1973: 117)
bá-káng-á *o-timbol-a*
 SM2-NEG(<lack)-FV INF-turn-FV
 ‘if they don’t turn’
- (74) Soli (M62; Van Eeden 1936: 33)
na-a-la-ka-vul-a *ku-von-a*
 COND-SM1-DIST.PST-POT-NEG(<lack)-FV INF-see-FV
 ‘if he had not seen’

Ngonyani (2017) reports a complex type of concessive conditional construction in the prothesis clause in Ndendeule. As seen in (75), it involves two contrasting propositions, one expressed through an affirmative verb in the subjunctive and its polar counterpart through the negative verb *kotoka* ‘stop’ (< *kòt-ok) also inflected in the subjunctive and operating on the semantic main verb in the infinitive form.

- (75) Ndendeule (N101; Ngonyani 2017: 183)
a-bhuk-e *a-kotok-e* *ku-bhuk-a*
 SM1-leave-SBJV SM1-NEG(<stop)-SBJV INF-leave-FV
twe *ti-telek-a* *yì*
 we SM1PL-cook-FV NEG
 ‘whether she/he leaves or doesn’t leave, we will not cook’

NEGATIVE PURPOSE CLAUSES

Another salient negative adverbial construction making use of negative verbs in Bantu is aversive or negative purposive clauses (or ‘lest’-clauses).

Devos (2008b; see also Ashton 1947) discusses the dedicated negative purposive auxiliary construction in Swahili, expressed with an extrinsic negative verb consisting of *ja* ‘come’ (< *jij) and the post-initial negative prefix *si-*. The second predicate verb occurs in the infinitive, as in (76), or in the “subsecutive” verb form with a verbal prefix *ka-*, as in (77).

- (76) Standard Swahili (G42d; Devos 2008b: 18)

u-si-m-sahau *yule* *kuku* *katika*
 SM2SG-NEG-OM1-forget DEM1 9.chicken in
oven *a-si-j-e* *ku-ungu-a*
 9.oven SM1-NEG-come-SBJV INF-burn-FV
 ‘do not forget that chicken in the oven so that it does not burn’

- (77) Standard Swahili (G42d; Ashton 1947: 273)

ni-kumbush-e *ni-si-j-e* *ni-ka-sahau*
 OM1SG-remember.CAUS-SBJV SM1SG-NEG-come-SBJV SM1SG-SUBS-forget
 ‘remind me lest I forget’

Devos (2008b) shows that this negative verb auxiliary construction has expanded from negative purpose clauses towards complement clauses of matrix clauses expressing ‘fear’ (78) and even further — through insubordination (cf. Evans 2007) — towards main clause uses (79). However, in spite of the presence of a negative verb, and the otherwise parallel development pattern with English ‘lest’ and other similar markers attested cross-linguistically (cf. Lichtenberk 1995), the reading conveyed in the latter independent clauses is not (/no longer) a negative one but rather an epistemic modal one.

- (78) Standard Swahili (G42d; Ashton 1947: 273)

a-li-ogop-a *a-si-j-e* *a-ka-shind-w-a*
 SM1-PST-fear-FV SM1-NEG-come-FV SM1-SUBS-conquer-PASS-FV
 ‘he was afraid lest he should be conquered’

- (79) Standard Swahili (G42d; Devos 2008b: 18)

i-si-j-e *ku-w-a* *ni* *yeye*
 SM9-NEG-come-SBJV INF-be-FV COP him
 ‘it might be him’

The extrinsic negative verb ‘come’ also marks negative purposive clauses in Swazi (S43; Ziervogel 1952) and in several JE40-varieties, as evident in (80) from Nata.

- (80) Nata (JE45; Mekacha 1993: 121)

a-chenji *i-tach-a* *go-ku-nyak-i*
 9-change SM9-NEG.come-FV INF-OM2SG-bother-CAUS
 ‘so that the change will not bother you’

Arguably, these findings from Swahili and Nata (and other Bantu languages) challenge the claims in previous typological work (cf. Schmidtk-Bode 2009: 129-145) that a) specialized ‘lest’-constructions do not exist in African languages and b) that they are never derived from (goal-oriented) motion verbs (in opposition to the typical pattern of their affirmative counterpart).

This type of construction involving the negated extrinsic negative verb ‘come’ occurs in 3 languages of our sample, i.e. Standard Swahili, Swazi and Nata, and thus with a specific concentration in

East Bantu. Another construction involving the extrinsic negative ‘know’ in the absence of negative morphology (Type 2b) occurs in Ndali, as seen in (13) in §2.3.

Intrinsic negative verbs are also recurrently used to express negative purpose clauses. Reflexes of *dèk are indeed found with this function, e.g. with *leka* ‘leave’ in Nyamwezi, as in (81). As seen in (82), Luganda instead uses the negative verb *rema* ‘be too much’ (< *dèm, Table 1).

- (81) Nyamwezi (F22; Jonsson 1954: 123)

inja-ga i-sasi kufumamo mu m-dusi
 remove-IMP 5-bullet from LOC18 3-rifle
ba-nhu ba-lek-e ku-pig-w-a
 2-people SM2-leave-SBJV INF-shoot-PASS-FV
 ‘remove the bullet from the rifle so that people are not shot!’

- (82) Luganda (JE15; Ashton *et al.* 1954: 220)

kwata eki-tabo kyo ki-rem-e oku-gw-a
 take.IMP 7-book DEM7 SM7-be_too_much-SBJV INF-fall-FV
 ‘take hold of your book that it may not fall down!’

In the genealogically and geographically proximate languages Luvale and Lunda, negative purpose clauses are expressed with constructions that are intriguing in many aspects. In Luvale, the intrinsic²⁸ negative verb *cína* ‘flee’ occurs in the infinitive verb form. According to Horton (1949: 61), the subsequent predicate verb “usually” occurs inflected in the indicative,²⁹ more precisely in the future tense, as examples like (83) seem to suggest.

- (83) Luvale (K14; Horton 1949: 161)

a-swamine ku-cin-a na-va-mu-wan-a
 SM1-hide.PFV INF-flee-FV FUT-SM2-OM1-find-FV
 ‘he hid lest they should find him’

In Lunda, the cognate *china* ‘flee, avoid’ (White 1957: 15)³⁰ is also used in the infinitive to express negative purposes, albeit here it further concurs with either one of the “auxiliaries” *anda/enda/inza*.³¹ Both the auxiliary verb and the predicate verb are inflected in the future tense (see also the Luvale predicate verb in ex. 84). Since the temporal referential anchor is set in the past, the selection of the future tense marker can be seen as coding the non-commencing of the event.

- (84) Lunda (L52; Kawasha 2003: 432)

w-a-swám-ini ku-chín-a a-k-and-a ka-mu-wan-a
 SM1-PST-hide-PST INF-fear-FV SM1-FUT-AUX-FV FUT-OM1-find-FV
 ‘he hid himself lest he will be found’

28. We treat this verb as intrinsic in accordance with the cognate in Lunda, where another translation equivalent is ‘avoid’ (as seen below), i.e. one of Givón’s (1973) negative-implicative verbs presented in §2.2.

29. The predicate verb may also occur in the subjunctive or the infinitive. Horton suggests that the infinitival strategy is probably due to European influence.

30. Note that Kawasha (2003) glosses the verb as ‘fear’, as seen in (84).

31. These auxiliary verbs are of unclear origin. An educated guess would be ‘begin’, ‘go’ and ‘come’, but this requires further corroboration. Also confer the similarities with the ‘not yet’-verb *kanda* in (26), further discussed in fn 12 in §3.2.1.

Both these constructions are illustrative of a development whereby an originally negative verb seems to have undergone a categorical re-interpretation to what can be characterized as a subjunctive coordinator (or subordinator for short). See §3.7 for other instances of such a development.

ANTI-CIRCUMSTANTIAL CLAUSES

The final category of non-main clausal negation involving negative verbs concerns “anti-circumstantial” clauses, a category which has gained interest in the recent typological literature (cf. Mauri & Sansò 2019). This clause type is closely related to abessives (further discussed in §3.7) and negative possessives (see §3.4.2). In anti-circumstantials, however, the absentee is not a nominal referent, but the state of affairs as expressed in a full clause — the dependent clause — in connection to the state of affairs of the main clause. The negative verb *songo* in Venda (also discussed in §3.2.1) is used with this function.

- (85) Venda (S21; Poulos 1990: 269)

vha-sidzana vho-nwala mu-lingo vha-songo guda tshi-thu
 2-girls SM2-write 3-examination SM2-without learn 7-thing
 ‘the girls wrote the examination without having studied’

In Tumbuka, both *zira* ‘abstain’ (< *gid, Table 1), as in (86), and (w)*ura* ‘lack’ (< *bód, Table 1) may be used in constructions with an anti-circumstantial function. As indicated by the question mark in the glosses, it is, however, not entirely clear how the remaining morphology of these constructions should be analyzed (a Class 1 nominal prefix seems unlikely, given ex. 86 and 87).

- (86) Tumbuka (N21; Young 1932: 138)

wa-ka-penj-a wa-m-zir-a ku-chi-sang-a
 SM1-PST-search-FV SM1-?-abstain-FV INF-OM7-find-FV
 ‘he searched without finding it’

In adherence to what was mentioned above about the conceptual overlap with other clause (sub-) types, there are additional examples from Tumbuka where the same verbs in the same constructions are used as negative possessives (87) or abessives (88). In the latter example with a deverbal noun acting as the negated accompaniment, the close similarities between anti-circumstantial and abessive constructions are obvious.

- (87) Tumbuka (N21; Kishindo & Lipenga 2005: 55)

n-chewe iyi ya-m-bur-a ma-kutu
 9-dog DEM9 SM9-?-lack-FV 6-ears
 ‘this dog has no ears’

- (88) Tumbuka (N21; Young 1932: 138-139)

mu-ntu wa-m-bur-a ku-manyikw-a
 1-man SM1-?-lack-FV INF-be_known-FV
 ‘a man without being known’

3.6 Negation of infinitives

There are two main reasons for having a dedicated section on negative infinitives or deverbal nouns. Firstly, infinitives in Bantu are recurrently negated via periphrastic constructions with negative verbs as negators. At least 22 out of the 100 languages of our sample use a negative verb for this function.

The second reason is their hybrid character: Bantu infinitives typically have both verbal and nominal features (cf. Schadeberg & Bostoen 2019), which spill over in their syntactic use. The infinitive has the potential to be used both in non-finite complement and in other dependent clauses, as well as in non-clausal noun phrases. The negative infinitive strategy thus involves both non-main clause negation (cf. §3.5) and non-clausal negation (cf. §3.7), and as such nicely links the preceding section with the following one.

When negative verbs are used for forming negative infinitives, both the main verb and the negative verb are inflected in the infinitive form.³²

The example with Makwe *leka* ‘leave’ (< *dèk, Table 1) in (89) illustrates the use of the negative infinitive strategy in dependent, viz. non-main, clause constructions.³³ Makwe also makes use of the verb *kosa* ‘lack, miss’ for the same function, as seen in (90). This verb stem can be related to a “doubtful” Proto-Sabaki etymon *kosy ‘err, make mistake’, as provided in Nurse & Hinnebusch (1993: 661), arguably then an intrinsic negative verb.

- (89) Makwe (G402; Devos 2008a: 340)

u-imb-a cáani wéepo ku-lék-á kú-wá-leék-a waa-ly-é
 SM2SG-sing-PRS.CJ 7.what you INF-leave-FV INF-OM2-leave-FV SM2-eat-SBJV
 ‘what is it that you are singing that does not let them (the birds) eat?’

- (90) Makwe (G402; Devos 2008a: 340)

mipa [...] ku-kós-á kú-lóngéj-an-á náa-we
 I INF-lack-FV INF-talk.CAUS-ASSOC-FV COM-her/him
 ‘I [...] have not been talking to him’

Example (91) from Ngoreme illustrates the nominal use of the negative infinitive with *tíy* as negator. Note in particular the agreeing adjective ‘good’ as well as the nominal augment prefix on the negative verb (where *oyu-* [INF] < *o-yu* [AUG-15/INF]).

- (91) Ngoreme (JE401; Laine *et al.* Forthcoming)

oyu-tíy-a ko-nó ama-ro ŋ=gu-tjómú
 INF-stop-FV INF-drink 6-homebrew COP=INF-good
 ‘not to drink (~ not drinking) (locally brewed) beer is good’

As the discussion in Laine *et al.* (Forthcoming) suggests, this construction type is restricted to the nominal uses of the infinitive, as it would seem that non-finite clauses cannot be negated in Ngoreme. Often, however, the consulted language descriptions present the collocation negative verb-infinitive verb by itself, like in the Nkoya-example with *bula* ‘lack’ (< *bód, Table 1) in (92), without offering any details (or sufficient linguistic context) to decide on its exact distributional traits.

32. We are aware that far from all Bantu languages mark their infinitives (or deverbal nouns) with reflexes of noun Class 15 *kò- (cf. Schadeberg & Bostoen 2019 and further references therein). However, we happen not to have examples of the negation of such alternative infinitive formations in our data.

33. The difference in vowel length between the first and the second instance of *leka* in (89) is due to automatic penultimate lengthening at the end of a phonological phrase in Makwe (Devos 2008a). The two infinitives form a single phonological phrase containing a single information peak, just as the verb form *uimba* forms a single phonological phrase with the inherently focused WH-word *cáani*.

- (92) Nkoya (L62; Yukawa 1987: 135)

ku-bûl-a *kũ-j-a*
 INF-lack-FV INF-eat-FV
 ‘not to eat’

Note also that in (82) and (83) in §3.5.3 an infinitive negative verb alone performs the negative function of ‘lest’.

3.7 Negative verbs in non-clausal negation

In 13 out of 100 languages of our sample, we encountered intrinsic negative verbs having been recruited for negative expressions beyond clausal negation. Often, these recruitments are accompanied by a loss of verbal properties indicative of a shift in word class, viz. a categorical reanalysis of the erstwhile verbal word into, e.g., an adverb(ial), preposition, coordinator, interjection and/or into different types of particles. In short, a ragbag of different minor functional categories may be expressed with what are originally negative lexical verbs.

In some instances, a negative reply/interjection ‘no’ can be traced to a verbal source. Examples include *ngamba* ‘no’ in Yao (P21), most likely derived from the combination of the standard negation prefix *nga-* and the verb *amba* ‘say’ (< *gàmb ‘say’), and *lepe* ‘fail’ (or *lepa* or *lepi*) in some N10-languages including in Manda, as in (93).

- (93) Manda (N11; Bernander 2018: 657)

lépe, ni-pát-i’ *lépe*
 no SM1SG-get-PFV NEG
 ‘no, I didn’t get (any)’

As seen in this example, where *lepe* occurs twice, this form also functions as a standard negative particle. As discussed in §3.2.4, the verb was most likely first reanalyzed as a negative interjection before it became reinterpreted as a negator.

Lambert (1958: 61-62) discusses the interjection *sebu* in the Jomvu dialect of Swahili (G42b), which conveys “a strong denial of the truth of a statement just made”. He links this expression to the Standard Swahili verb *sebu(sebu)* ‘refuse (but really wanting at the same time)’ in turn with a probable origin in the Arabic root *šaba*. We suggest another etymology, linking the interjection to a negative present of the defective verb *ebu* ‘want’ (from Arabic *habba* ‘like, want’, cf. fn 22 in §3.3.1), originally expressing ‘I do not want/I do not like it’ (Sacleux 1939: 199; Lambert 1958: 61). In either case, *sebu* would form one of few examples of a borrowed negative verb, otherwise lacking in our collection of data.

Nyaturu has also developed a negative answer word ‘no’ from a negative verb. However, it shows a different developmental pattern. Here, the negative answer word ‘no’ originates from a negative existential construction. The negative existential is in turn derived from the negative verb *tila* further inflected with a locative Class 17 subject marker (Johnson 1923-1926: 183). The development of ‘no’ from a negative existential is a common semantic development in the languages of the world, as seen in Veselinova (2016), as well as in Bantu (Bernander *et al.* 2022b). The evolution of ‘no’ from a negative verb in Nyaturu can thus be seen as a three-stage process, where two individually common developmental pathways — both cross-linguistically and in Bantu — have succeeded each other.

The abessive is the negative equivalent of a comitative/instrumental construction, in English ‘without’ as opposed to ‘with’, defined by Stolz *et al.* (2007: 66) as coding “the relation between two (or three) participants in a situation as being one of absence (= negated accompaniment)”.³⁴

34. Alternative terms for this category are “privative” and “caritive”. Caritives, as defined by the recent large-scale [project](#) on the matter carried out at the Institute for Linguistic Studies, Russian Academy of Sciences, seem to encompass both what we

Examples include the aforementioned ones from Bena (see §3.4.2). Luvalé's *zeneka* 'be without', as in (94), is another case in point.

- (94) Luvalé (K14; Horton 1949: 179)
m-bole ya-ku-zenek-a ci-mbalwila
 9-bread CONN9-INF-be_without-FV 7-yeast
 'bread without yeast'

Other minor types of non-clausal negation marking derived from verbs have been detected in our sample. They include the expression of 'except' construed with either *tiga* (< *tíg 'leave behind') or *the'ngia* 'put aside, remove, push aside', as in (95), in Gikuyu.

- (95) Gikuyu (E51; Barlow 1960: 199)
a-ndũ mok-e othe the'ngia Mũgo
 2-men SM2PL.come-SBJV 2.all remove Mũgo
 'all the men are to come except Mũgo'

Similarly, in Ha, a construction consisting of the negative verb *reka* 'leave' (< *dèk) inflected in the "perfective participial" verb form appears to have lexicalized into a marker 'except (that)', as in (96).

- (96) Ha (JD66; Harjula 2004: 141)
kí-retse imi-rúndi ná=ma-no bi-rá-n-dy-a
 SM7-leave.PFV 4-shin COM=6-toe SM8-FOC-OM1SG-eat-FV
 'except that the shins and toes are aching'

The same marker can also function as an adversative conjunctive coordinator 'but', which is also the case with *leke* 'but' from *leka* in Kami (G36; Velten 1900: 26), in turn a reflex of *dèk. Similarly, *hela* is employed as a scalar focus particle in Ndamba and Bena, roughly translatable to 'only, just', specifying exclusivity with regard to the constituent it modifies. *Hela* is also used with this function in Hehe for which Dempwolff (1911-1912: 111) provides the verbal etymon *hela* 'finish, go away, be over'. In several languages of the area, *hela* furthermore has the function of a negative possessive and existential marker (see Bernander *et al.* 2022b). The verb *fêla* 'come to an end' (cognate with Ndamba and Bena *hela*) in Tswana (S31) is used for expressing both 'but' — as well as 'however' and 'nevertheless' — and 'only' (Cole 1955: 384). Of course, for these cases we have crossed over to constructions with a positive reading, albeit with close conceptual ties to negative expressions. Consequently, we do not include these types of constructions in our typology. The same goes for the set of negative verbs co-expressing negative 'not yet' and positive successional 'before'-clauses (cf. Veselinova & Devos 2021).

However, we do include *richa* 'leave' in Digo, which is used as a scalar marker with the truly negative meaning of 'not only' (and 'let alone'), as illustrated in (97).

- (97) Digo (E73; Nicolle 2013: 202)
richa uwe hata sowe a-ch-edz-a n-nda-mw-ambir-a hivyo
 leave you but father SM1-DEP-come-FV SM1SG-FUT-OM1-tell-FV this
 'not only you, but your father, if he comes, I will tell him the same thing'

here refer to as anti-circumstantial and abessives. Of course, there is a clear functional interconnection between these two different types of construction, although it is meaningful for the structure of this paper to keep them apart. Notice furthermore that we, following Stolz *et al.* (2007), deviate from the traditional assignment of the term "abessive" to that of case affixes alone.

4. ASPECTS OF VARIATION AND CHANGE

In this section we briefly address variation and change with regard to negative verb constructions. In §4.1, we account for the syntagmatic changes that a grammaticalized negative verb may be subject to, both in terms of segmental attrition and fusion and in terms of expansion of its collocational range. In §4.2, we take a closer look at the functional extensions and polysemic patterns displayed by grammaticalized negative verbs in our set of data.

4.1 Mechanisms of (further) grammaticalization of negative verbs

Once a lexical verb is recruited to mark negation it may undergo further changes manifesting its semantic and formal status as a grammatical rather than lexical element, as will be briefly shown below.

4.1.1 Segmental attrition along the verb-to-affix chain

In their role as auxiliaries, negative verbs occur on the same grammaticalization trajectory as other auxiliary verbs, viz. the verb-to-affix chain (cf. Heine 1993; Anderson 2006; 2011). That is to say, once a negative verb construction is recruited as an exponent of negation, it is assumed to continue to undergo incremental stages of formal change moving towards phonological condensation and univerbation. Technically, negative verbs used in non-verbal and non-clausal negation could also be affected by processes of segmental (and supra-segmental) reduction. However, we have no such attestations in our data.

This type of (ongoing) erosion can affect both the negative verb itself as well as the collocate on which the negative verb operates. The progressive leftward truncation of the stem of the verb *kotoka* in Manda, as in (98), is an example of the former. The loss of the infinitive prefix of the predicate verb in negative infinitives in Bemba, as in (99), is an example of the latter.

- (98) Manda (N11; Bernander 2018: 673)

tu-kotok-e *ku-lim-a*
SM1PL-stop-SBJV INF-cultivate-FV

~

tu-koto *ku-lim-a*
SM1PL-NEG INF-cultivate-FV

~

tu-ko *ku-lima*
SM1PL-NEG INF-cultivate-FV
'we should not cultivate'

- (99) Bemba (M42; Givón 1973: 194)

uku-kaan-a *uku-boomb-a*
INF-refuse-FV INF-work-FV
'to refuse to work'

uku-kaanaa-boomb-a
INF-NEG-work-FV
'not to work'

Example (100) from Swahili, formally and functionally close to the previous Bemba example, illustrates the "final" step of fusion, the morphologicization of the construction and the transformation of the erstwhile negative verb (*toa* 'take') into a negative prefix (*to-*).

- (100) Swahili (G42; Knappert 1999: 88)
ku-to-on-a ni ku-to-amini
 INF-NEG-see-FV COP INF-NEG-believe
 ‘not to see is not to believe’

In the case of Swahili, we know from historical records that the change from verb to affix indeed took place. Knappert (1999: 88-89) for one notes that a full periphrastic form with *toa* is (still) to be found in what he refers to as “literary Swahili”. As already mentioned in §2.4.3, however, most other Bantu languages lack the elaborate historical data that allow linking negative prefixes to negative verbs.

4.1.2 Relaxation of selectional restrictions: The case of cessative verbs

Relaxation of selectional restrictions, also called “increase in type frequency” (cf. Traugott 2010) or “host-class expansion” (Himmelmann 2004), refers to the ability of a grammaticalized form to occur in a broader set of contexts and to collocate with an expanded set of complements, as compared to its lexical etymon.

As made amply clear throughout this paper, cessative verbs in general and particularly reflexes of *dèk ‘let go, cease, allow’ form the most common category of verbs being recruited as negative markers in Bantu. In their role as negators, they typically appear as auxiliary verbs, thus operating on a second verb expressing the main event semantics of the construction. From a semantic point of view, it was suggested that verbs of cessative origin may express negation with retrospective overtones of interruption of an event already in progress, ultimately reflecting the lexical source semantics.

Thus, there are quite a few examples like (101) in grammars, where ‘stop’ is mentioned alongside a negative translation. In these instances, we might suspect strong retrospective overtones with a focus on the interruption of an ongoing event.

- (101) Nyungwe (N43; Courtois 1899: 82)
rek-a ku-b-a
 stop-IMP INF-steal-FV
 ‘stop stealing!’ ~ ‘don’t steal!’

However, in Sukuma for example, we find examples like (102), where the context indicates that the negated event has not yet started (and thus cannot be terminated). The compatibility with an erstwhile cessative verb in such contexts indicates an expansion in usage range and a further generalization of the meaning of the negative verb in relation to its lexical source meaning.

- (102) Sukuma (F21; Batibo 1977: 287)
a-ki-iz-a oó-lek-a oko-ly-a
 SM1-PFV-come-FV SM1.ASSOC-stop-FV INF-eat-FV
 ‘he has come but he has not eaten’ (not ‘[...] but he has stopped eating’)

Similarly, but on a more fine-grained note, recent years have witnessed a plethora of detailed investigations on verb actionality (“Aktionsart”) and lexical-semantic classifications of verb types in Bantu (see, e.g., Crane & Persohn 2019a; 2019b and the references therein). In such works, cessative verbs are often used as “aspectualizer”, whose selectional restrictions with regard to different types of lexical verbs are employed as a diagnostic tool for distinguishing different aspectual verb classes in a language.

Cessative verbs are generally disallowed from selecting collocates that belong to a lexical verb class that we might refer to as “punctive” verbs (following Kershner 2002). Broadly speaking, punctive here refers to verbs which lack any phase in their inherent semantic make-up durative enough

to be interrupted. Consequently, they may not be selected by a cessative verb, as illustrated by the incompatibility of *leka* ‘stop’ with the punctive verbs ‘defeat’ and ‘arrive’ in Sukwa in (103).

(103) Sukwa (M202; Kershner 2002: 216)

- a. ** *tu-aa-lek-a* *paku-ba-poot-a* *aba-Chewa*
 SM1PL-PST-stop-FV LOC16.INF-OM2-defeat-FV 2-Chewa
 ‘we stopped defeating the Chewa’
- b. **(*a*)-*aa-lek-a* *paku-fik-a*
 SM1-PST-stop-FV LOC16.INF-arrive-FV
 ‘we stopped arriving’

However, whenever a reflex of **dèk* (or any other cessative verb) has expanded its range of collocate verbs to include punctive verbs, this seems to be related exactly to the fact that it has acquired a negative function along with its source meaning. Consider (104) from Nyamwezi where such a development seems to be ongoing, as *leka* may co-occur with punctive verbs like ‘fall down’. Notice, however in this case, that the meaning of *leka* is automatically negative, the lexical meaning being infelicitous.

(104) Nyamwezi (F22; Kanijo 2018: 142)

- w-aa-lék-ag’* *ooko-gw-a*
 SM1-CPL-stop-rec.fv INF-fall_down-FV
 ‘s/he didn’t fall down’ ** ‘s/he stopped falling down’

Still, other subtypes of punctive verbs (such as “transitional achievements” like ‘be(come) fat’ and some “irreversible achievement” verbs like ‘rot’) appear not to be compatible with *leka* in Nyamwezi, neither with the lexical cessative meaning nor with the grammatical negative meaning (Kanijo 2018: 140-143). These circumstances indicate that *leka* in Nyamwezi is not (yet) fully generalized and productive as a negator. This may be contrasted with data from closely related Sukuma (F21), where *leka* appears to have developed into a more general negative marker, as indicated in (102) above.

4.2 Synchronic overlap, variation and diachronic change

As discussed in §2, a similar set of negative verbs are recurrently recruited as negators in Bantu, and as already hinted at in the introduction of §3 and as then witnessed throughout this very section, the same negative verbs re-occur as negators in different clausal contexts with different functions. Such synchronic overlap arguably occurs on different levels, depending on whether it is the entire construction or just the negative verb itself that re-occurs, in turn having different historical precursors.

Firstly, we have seen ample examples of identical negative verb constructions permeating different clausal contexts (see also Supplementary material). Thus, in main clauses we have seen the common overlap in the expression of NOT YET and NEVER (and furthermore in subordinate BEFORE-clauses). We have seen negative verb constructions spanning all types of extra-focal negation, whether in an extra-focal predicate main clause construction, in interrogatives or in ancillary subordinate (non-main) constructions. We have seen co-expression in the negation of non-declarative and non-main clauses. We have seen close similarities between the expressions of negative possession and negative existence. We have also seen the overlap in the expression of possessives with abessives and, in turn, with abessives and anti-circumstantial constructions.

Only for some of these cases is it possible to postulate any gradual development and directionality of change from one functional niche to another. Examples include the insubordination of negative purposive to epistemic possibility (cf. §3.5.3) and the stepwise development of negative verbs to negative interjections and to standard negative post-verbal particles (cf. §3.2.4).

In other cases, the same source verb shows up in different types of constructions in a language, being used for different functions. In such instances, we would rather assume to be dealing with poly-grammaticalization (Craig 1991), i.e. when identical source materials in different constructions develop in different directions. In other words, different grammaticalization processes at different times have given rise to different negative markers, although they might ultimately involve the same negative verb. The separate behavior of *wura/bura* ‘lack’ depending on the constructional make-up in Tumbuka, viz. as a main clause negator in (36) in §3.2.2 and as an anti-circumstantial marker in (87) and (88) in §3.5.3, would serve as an example of this. Of course — and as amply evidenced in the Supplementary material — many languages also make use of several different negative verbs for different negative functions, with up to 4 or even 5 attestations in one single language.

Finally, there are attestations of the same verb, even in the same construction, having developed different negative functions with different distributional patterns in a contiguous set of sister languages. One example is *kotoka* in southern Tanzania (Bernander 2018; Devos Forthcoming), which function as a non-declarative negator alone in Matengo (N13) and Kisi (G67) but as both a non-declarative negator and a negator of infinitives in Ngoni (N12). In Manda (N11) and Mpoto (N14) *kotoka* may additionally function as a negator of relative clauses, in the case of the latter, or adverbial clauses, in the case of the former. Curiously, in Matuumbi (P13), *kotoka* is instead only employed as a negator of relative and adverbial (conditional) clauses. In Ndendeule (N101), the construction with *kotoka* is also used in the peculiar concessive construction presented in (75), in §3.5.3. In addition, the verb has been subject to different formal alternations and erosion as a consequence of its grammaticalization. In Mozambique Ngoni (N12x) *kotoka* is truncated to *kota* where most of the other varieties instead have a reduced variant *koto*, with Manda even allowing a further shortening to just *ko*.

Here again, we would have to assume some of the variation to be at least partially due to poly- or parallel grammaticalization. (In the surrounding languages, *kotoka* only expresses lexical meanings).

5. SUMMARY AND CONCLUSIONS

This investigation has refined our understanding of Bantu negation and our general typological understanding of how negation is expressed and how the expression and interpretation of negative constructions evolves.

The study adds further weight to the claim that Bantu languages are “verby” not only in the sense that many functions are expressed on the (predicate) verb (cf. Nurse 2008: 21), but crucially also in the sense that many functions are themselves expressed with verbs. We have showcased a rich selection of verbs, with various lexical origins and in various constructions, having developed into negators in different linguistic domains. We have developed a taxonomy distinguishing between intrinsic verbs (commonly referred to as negative-implicative or inherently negative verbs), and extrinsic verbs, that is, verbs shown to have been “contaminated” with a negative reading either explicitly through additional negative morphology or through interpretations in specific contextual circumstances. We have further showed that intrinsic verbs present by far the most common source pool for negative markers, but that extrinsic verbs play an important role in the development of negative markers in Bantu too. Interestingly, the fact that Bantu languages are verb-centered has also been manifested in the problems encountered in defining and singling out the data. The study has made clear that there are many grammatical markers that bear verbal properties and behave like verbs without originating from verbs. This tendency can be seen as a way for languages (or rather its speakers) to adapt a form so that it more readily adheres to a given paradigm of sort or perhaps, even more generally, to the overall structural typology of Bantu. Further study concentrating on these “false” verbs would certainly be interesting (see already Güldemann 2012 for a study of similar “false verbs” in mainly affirmative contexts).

The study also corroborates previous comparative-historical investigations of Bantu languages which suggest that negators are intimately linked with negative verbs (Devos Forthcoming). Crucial in this regard is Güldemann’s (1996: 261-284; 1999; see also Nurse 2008: 179-201) cross-Bantu work, which dynamicized the comparative data to propose that non-standard synthetic negation in Bantu — specifically negation of non-declarative clauses, non-main clauses and infinitives — is de-

rived from complex constructions with negative verbs. This characterization holds also in our study in the sense that negative verbs are most commonly found in these domains, with non-declarative clauses by far being the most common resort for negative verbs. Still, as shown in this study, this is far from the complete picture when it comes to the distribution of negative verbs as a surprisingly large number of negative verbs are put to use in other clause types.

A non-negligible inventory of negative verbs is attested for negation in main clause contexts. These are seldom found to function as the standard negation marker, and in the few cases where they do, they depart from other canonical syntagmatic traits of Bantu standard negation in that they occur as post-verbal negative particles. Instead, main clause negative verbs are often confined to very specific minor functional niches. Most of them can be encompassed as being connected to expressions of phasal polarity and thus stand conceptually close to notions of contrastive focus and emphasis and the reinforcing of negation. For some other main clause negative verbs, it would rather seem that insubordination has been at work. In these cases, the use of the negative verb in many ways reflects the orthogonal function, namely of backgrounding the predicate verb to put focus on some other constituent. Finally, we also note with regard to the main clause contexts that languages which already have “un-canonical” (or at times one might even be tempted to say “chaotic”) negative systems appear to be more likely to also make (wider) use of negative verbs. The actual spread of this tendency and its plausible socio-cognitive underpinning could be an interesting avenue of further investigation. Moreover, we showed that negative verbs also appear in non-verbal negation, particularly in negative possessives and negative existentials. In general, the inclusion and more detailed investigation of non-standard main clause negation, non-verbal negation and non-clausal negation and the expansion within the domain of non-main clause negation has provided a more complete picture of the use of negative verbs in Bantu.

ABBREVIATIONS

Abbreviations follow the Leipzig Glossing Rules with the following additions:

?	unclear
**	infelicitous
1, 2, 3 etc.	noun classes
ADH	adhortative
ASSOC	associative (taxis)
ASP	aspect
AUG	augment
CE	counterexpectational
CJ	conjoint
CONN	connective
CONS	consecutive
CPL	completive (aspect)
DEP	dependent status
DIST.PST	distal past
EMPH	emphatic
FAR.PST	far past
FV	final vowel
IT	itive
NARR	narrative
NEG.EX	negative existential
NPST	non-past
OM	object marker

PLA	plural addressee
PLUR	pluractional
POT	potential
REC	recent
REC.PST	recent past,
RED	reduplication
REF	referential
SM	subject marker
SUBS	subsecutive

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