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## Chapter 2

## The negative existential cycle in Bantu

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Renewal of negation has received ample study in Bantu languages. Still, the relevant literature does not mention a cross-linguistically recurrent source of standard negation, i.e., the existential negator. The present paper aims to find out whether this gap in the literature is indicative of the absence of the Negative Existential Cycle (NEC) in Bantu languages. It presents a first account of the expression of negative existence in a geographically diverse sample of 93 Bantu languages. Bantu negative existential constructions are shown to display a high degree of formal variation within both dedicated and non-dedicated constructions. Although such variation is indicative of change, existential negators do not tend to induce changes at the same level as standard negation. The only clear cases of the spread of an existential negator to the domain of standard negation in this study appear to be prompted by sustained language contact.

### 1 Introduction

The Bantu language family comprises some 350–500 languages spoken across much of Central, Eastern and Southern Africa. According to Grollemund et al. (2015), these languages originate from a Proto-Bantu variety, estimated to have been spoken roughly 5000 years ago in present-day northern central Cameroon. Many Bantu languages exhibit a dominant SVO word order. They are primarily head-marking and have highly agglutinative morphology and a rich verbal complex in which inflectional and derivational affixes join to a verb stem. The Bantu languages are also characterized by a system of noun classes, which are a form of grammatical gender. By convention, these classes are numbered, with odd and even pairings commonly representing singular and plural forms. Many



Rasmus Bernander, Maud Devos & Hannah Gibson. 2022. The negative existential cycle in Bantu. In Ljuba Veselinova & Arja Hamari (eds.), *The Negative Existential Cycle*, 59–113. Berlin: Language Science Press. DOI: 10.5281/ zenodo.7353601 Bantu languages also have locative classes containing only locative nouns. The most widespread of up to twenty noun classes are locative classes referred to as 16, 17 and 18 and are marked by \**pa*-, \**kw*- and \**mw*-, respectively. These prefixes have been reconstructed for Proto-Bantu and refer to specific, general and internal location.<sup>1</sup> The locative noun classes will be central to the discussion in this paper, as they are ubiquitous in the formation of both affirmative and negative existentials in Bantu.

The Bantu languages exhibit a high degree of variation in the encoding of negation within the clause. However, some recurrent patterns can be observed. Negation most commonly involves verbal affixes, typically either a pre-initial marker (appearing before the subject prefix) or a post-initial marker (following the subject prefix). The former tends to be reserved for negation in declarative main clauses (i.e., standard negation), whereas the latter is commonly used for negation in non-standard clause types such as infinitive, subjunctive, imperative, relative and dependent clauses. Examples of pre-initial and post-initial negative strategies are given in (1a) and (1b), respectively.<sup>2</sup> As can be seen in (1c), Standard Swahili uses the standard negative marker *ha*- in negative existential clauses.

- (1) Swahili (G42)
  - a. *ha-tu-ta-som-a ki-tabu hiki* NEG-SM1PL-FUT-read-FV 7-book 7.DEM 'We will not read this book.'
  - b. u-si-end-e
     SM2SG-NEG-gO-SBJV
     'Do not go!'
  - c. *ha-ku-na ma-tata* NEG-SM17-COM 6-problem 'There are no problems.'

<sup>&</sup>lt;sup>1</sup>Other, less prevalent strategies for locative noun formation include the use of the class 23/25 locative prefix \**i*- (cf. Grégoire 1975, Maho 1999) and the locative suffix -(*i*)*ni* (Samson & Schadeberg 1994).

<sup>&</sup>lt;sup>2</sup>The classification of the Bantu languages in this paper is based on Maho (2009), which is an updated version of Guthrie's (1971) classification, in which languages are divided into geographic zones that are assigned letters. These groupings are in turn divided into smaller groups indicated by decimal digits. The final digit represents a specific language within such a group. Letters and additional digits after this digit refer to varieties of the same language. The ISO codes of the languages of the sample are given in Table 1 of the Appendix. Languages that are discussed but are not part of the sample have their ISO code in the running text.

Other recurrent negation strategies involve pre-verbal and post-verbal enclitics/particles, and periphrastic constructions employing an inherently negative auxiliary and an infinitive. Negative stacking – the combination of different negation strategies for the expression of negation – is also attested. Such variation is indicative of change. Although renewal of negation in Bantu has received ample attention (e.g. Kamba Muzenga 1981, Güldemann 1996, 1999, Devos & van der Auwera 2013, Devos & Van Olmen 2013), there has been no systematic study of the form and variation of negative existential constructions, nor of changes indicative of a negative existential cycle.This paper seeks to address this gap in the literature through an examination of negative existentials across a sample of 93 Bantu languages, (listed in Table 1 of the Appendix). The aim is to provide the first exploration of negative existentials in Bantu languages, as well as to examine the extent to which the stages of the negative existential cycle, as set out by Croft (1991) and Veselinova (2016), can be identified in the language family.<sup>3</sup>

The paper is structured as follows: In §2, we examine the renewal of negative strategies across the Bantu languages. In §3, we present an overview of affirmative existential constructions in Bantu, looking at both dedicated and non-dedicated strategies for forming existentials. In §4, we look at the distribution of the stages of the negative existential cycle across the Bantu sample. In §5, we chart the development from non-dedicated negative existentials to dedicated negative existentials. In §6, we explore additional processes of change. We first look at usage extensions beyond verbal negation (§6.1) and moving towards non-standard negation types (§6.2). We then discuss the possible involvement of existential negators in instantiations of the Jespersen Cycle (§6.3) and a specific development attested in varieties of the East African Bantu language Swahili (§6.4). §7 consists of a summary and draws a number of conclusions.

#### 2 The renewal of negation in Bantu

In this section we discuss three recurrent pathways of change in the expression of negation in Bantu languages. The first two concern the genesis and renewal of the two main Bantu negation strategies, namely, the pre-initial and the postinitial negation strategy. Güldemann (1996, 1999) identifies the origin of the former in the merger between an illocutionary particle (most commonly a negative copula) and a (dependent) finite verb form. He finds evidence for this pathway,

<sup>&</sup>lt;sup>3</sup>It should be noted that the depth of our analysis naturally depends on the descriptive status of the languages under examination.

*inter alia*, in the recurrent formal similarity between negative copulas and preinitial negative markers, as is found in Nyanja, shown in (2).

- (2) Nyanja (N31a, Stevick & Hollander 1965: 174, cited from Güldemann 1999: 568)
  - a. *si-ti-dza-pit-a* NEG-SM1PL-FUT-gO-FV 'We won't go.'
  - b. *lelo si laciwili* today NEG.COP Tuesday 'Today is not Tuesday.'

Still following Güldemann (1996, 1999), the post-initial strategy is assumed to have its origin in a periphrastic construction consisting of an inherently negative auxiliary followed by an infinitive. Evidence for this second pathway comes from the functional overlap between these constructions in different present-day languages. Both post-initial negation and periphrastic negation involving a negative auxiliary are typically used for the negation of marked clauses, that is, to negate infinitives, subjunctives, imperatives, relatives and dependent clauses. Compare the use of the post-initial strategy in example (1b) from Swahili with the use of the periphrastic strategy for prohibition in Manda shown in (3).

(3) Manda (N11, Bernander 2018: 664)
 Ø-kótúk-áyi ku-túmbúl-a ku-lóv-a sómba
 Ø-NEG-IPFV.SBJV 15-begin-INF 15-fish-INF 10.fish
 'Don't begin to fish.'

Bernander (2017, 2018) offers a language-internal instantiation of this pathway. In Manda, the cessative auxiliary *-kotok-* 'leave (off), stop'<sup>4</sup> has spread from indicating prohibition to indicating the other marked negation types identified by Güldemann (1996, 1999), with the exception of negative relatives. The Manda data also support Nurse's (2008: 191) claim that prohibitives are "a major conduit through which innovation occurs". At first, the prohibitive marker spreads to other more marked negation types, as seen in Manda. However, if Nurse's (2008: 193, fn 25) suggestion that several post-initial negative markers in northwestern Bantu languages of zones A and C are derived from the cessative auxiliary \**dèk* 'let, let go, cease, allow' (Bastin et al. 2002) holds true, then further spread to

<sup>&</sup>lt;sup>4</sup>Note that *-kotok-* becomes *-kotuk-* before the imperfective suffix, cf. (3).

standard negation may also be attested. In Nugunu, for example, the post-initial negative marker *-de-* is used for all negation types, including for negation of both marked clauses and standard clauses (Nurse 2007). Examples (4a) and (4b) show the use of *-de-* for prohibition and standard negation.<sup>5</sup>

- (4) Nugunu (A62, Nurse 2007)
  - a. *э-dэ-gźbа* sм2sG-NEG-beat
     'do not beat'
  - b. a-de-mbá-fâ
     SM1-NEG-PFV-give
     's/he hasn't given'

The third pathway of change concerns recurrent instances of double negation in Bantu languages, namely, the combination of the (inherited) pre-initial or postinitial negative marker and a post-verbal negative marker in a single negative strategy, as illustrated in (5) from Ruwund.

 Ruwund (L53, Nash 1992: 696) kè-z-in-à-p NEG.SM1-come-PRS.CONT-FV-NEG 'S/he is not coming.'

Double negative marking is suggestive of a Jespersen Cycle, a process whereby an additional negator is first used to reinforce negation, then becomes an obligatory part of negation and eventually ends up as the only exponent of negation. This final stage, with only a single negator, is illustrated with the Manda example in (6).

Manda (N11, Bernander 2017: 308)
 ni-ng'-gán-a lépa ófísa wa usaláma
 sM1sG-OM1-like-FV NEG security officer
 'I do not like the security officer.'

Devos & van der Auwera (2013) show that the Jespersen Cycles can indeed be observed in Bantu languages. This observation follows the lead of several Bantu grammarians, as well as Güldemann (1996: 256–258), Güldemann & Hagemeijer (2006: 7), Güldemann (2008: 165), Nurse (2008: 57), and Güldemann (2011: 117),

<sup>&</sup>lt;sup>5</sup>Note that *-de-* becomes *-dɔ-* after [ɔ] in Nugunu.

who compare double negation in Bantu to its most famous example in French *ne ... pas.* Devos & van der Auwera (2013) identify several sources of post-verbal negative markers and show that the post-verbal negative marker may become the only exponent of negation but that a Jespersen Cycle might also have occurred at this doubling stage, resulting in triple or even quadruple negation (for an example of the latter, see Devos et al. 2010). Triple negation in Salampasu [slx] is shown in (7).

(7) Salampasu (L51, Ngalamulume 1977, cited from Devos & van der Auwera 2013: 210)
 káá-dédéki-kú ny-tóndú ba
 NEG.SP1-cut.PFV-NEG 3-tree NEG
 'He has not cut a tree.'

### 3 Existential constructions in Bantu

As will become apparent in §4 and §5, a significant number of Bantu languages express negative existence through (standard) negation of the affirmative existential construction. This fact merits a brief presentation of the versatile tactics for forming affirmative existentials found across Bantu, before discussing their negative counterparts. The results presented in this section are based on Bernander et al. (in press), which is an investigation into the expression of affirmative existentials across Bantu. In line with Creissels (2014, 2015), existentials are conceptualized as providing an alternative way of encoding the prototypical figure-ground relationship of a plain locational. That is, in existentials, the ground rather than the figure is the perspectival center. Several different tactics for expressing existence have been found across different languages, as well as within given language varieties. Of these, an initial division can be made between those expressions of existential predication that, except for word order changes, are not different from locational clauses (§3.1) and those constructions that are dedicated to the expression of existential predication (§3.2).

#### 3.1 Non-dedicated existentials

In roughly 20% of the cross-Bantu sample, existential predication was found to be formally identical to locational existential predication (Bernander et al. in press). However, although there are no morphosyntactic differences between a plain locational construction and existential predication in these cases, it should be noted that the existentials are recurrently pragmatically marked. Typically, there is a shift to presentational word order, whereby the (logical) subject ends up in post-verbal position. This tendency is also pervasive in both dedicated existential constructions and negative existentials, and it adheres to a wider cross-linguistic tendency (see e.g. Freeze 1992, Bentley et al. 2013).<sup>6</sup> Example (8a) is an instance of an existential marker in Makhuwa which is formally under-specified in relation to the plain locational in (8b).

- (8) Makhuwa (P31, van der Wal 2009: 109)
  - a. *aa-rí nlopwana m-motsá* sм1.psт-be 1.man 1-one 'There was a man.'
  - b. eliívúrú e-rí wa-meétsa
    9.book sм9-be 16-table
    'The book is on the table.'

Both instances of predication contain the same copula indexed with the relevant regular subject agreement. The only difference between the two expressions is the word order permutation of the existential proposition in (8a), relative to the canonical SVO order of the language, as found in (8b). Another example comes from (Standard) Swahili, where it is once again only the word order that distinguishes the existential predication of (9a) from the plain locational predication in (9b).

- (9) Swahili (G42, Marten 2013: 46)
  - a. *zi-po n-chi amba-zo hu-tegeme-a ki-limo* SM10-LOC.COP16 10-country REL-REFCD10 HAB-depend-FV 7-farming 'There are countries which depend on agriculture.'
  - b. *ki-tabu ki-po meza=ni* 7-book sm7-loc.cop16 6.table=loc 'The book is on the table.'

It should be noted that the existential predication exemplified in (9a) represents only one of two possible tactics for the formation of existentials in (Standard) Swahili, the other tactic being the comitative-existential type, which was

<sup>&</sup>lt;sup>6</sup>In fact, the only languages that do not exhibit such a permutation are spoken in the very northwestern part of the Bantu-speaking region. These languages are therefore in close contact with the "Macro-Sudan belt" (Güldemann 2008). The Macro-Sudan belt is a linguistic area characterized as being "devoid of dedicated existential predicative constructions, and with rigid constituent order in locational clauses" (Creissels 2014: 22).

exemplified in (1c) in §1 and which is further discussed in §3.2 below. This situation in Swahili reflects a wider tendency of non-dedicated existential predications to alternate with a dedicated existential construction in a single language.

#### 3.2 Dedicated existentials

80% of the languages in our current dataset use dedicated existentials. Two of Creissels' (2014, 2015) seven types of existential predication are frequently and widely attested, namely the "locative-existential" type and the "comitative-existential" type (Bernander et al. in press).

The locative-existential type is characterized by the presence of a locative element which is absent from the plain locational clause. Locative-existential constructions exhibit differing degrees of specialization and semantic bleaching of this locative element, but its locative origin is commonly transparent. Typically, the locative element stems from what was originally a locative-referential enclitic that attached to a copula verb and in certain contexts became reinterpreted as marking existential predication. Another common locative-existential type comprises constructions where the subject marker of the predicator has shifted from referring to the (logical) subject to taking agreement from a locative noun class. Both of these subcategories of locative-existentials can be illustrated by Cuwabo, which makes equal use of the two categories. Thus, in example (10a), the existential is formed with the copula verb -kala and an enclitic from the locative class 17, the subject marker of the verb agreeing with the post-verbal (logical) subject. In example (10b), however, there is no enclitic (although the copula verb is the same). Instead, the existential construction is formed with the locative class 17 as a subject marker.

- (10) Cuwabo (P34, Guérois 2015: 465, 466)
  - a. *nsáká ni-modhá o-á-kála=wo mwáná-mwíyaná* 5.time 5-one SM1-PST.IPFV.CJ-be-LOC17 1.child-1.woman 'One day, there was a girl.'
  - b. *o-ttóló=ni ókúlé o-hi-ikálá fúlóóri* 17-well=LOC DEM SM17-PFV.DJ-be 9a.flower
    'There at the well there is a flower ...'

In a small set of Bantu languages, the existential construction consists of the combination of these two subtypes, as in the example from Lusoga in (11), where the copula verb is inflected with both a subject marker and an enclitic from the locative noun class 18.

(11) Lusoga (JE16, Nabirye, p.c. 2016) mu i-díilo mu-lí-mu ebí-sampá 18 5-living.room sM18-be=LOC18 8-mat
'In the living room there are mats.'

In some languages, univerbation of a locative element and a copula or light verb has given rise to two types of locative-existential predicates. The first type involves univerbation of a copula or light verb and a locative enclitic. The Makhuwa predicate *-háavo* in (12) can reasonably be thought to derive from the light verb *-hala* 'stay, remain', to which the class 16 locative enclitic *=vo* is added. Locative post-finals are not (or no longer) productively used in Makhuwa and *-háavo* never occurs without the locative enclitic.

(12) Makhuwa (P31, van der Wal 2009: 109) y-aá-háavo e-námá e-motsá sM9-PST-be.present 9-animal 9-one
'There was an animal ...'

A second type involves univerbation of an erstwhile locative object prefix and a copula. As suggested in Bernander et al. (in press), the Mawiha predicate *-pawa* in (13) has its origin in merger of the class 16 locative object prefix *-pa-* with the copula *-wa* 'be'. The (near-) absence of locative object prefixes as obligatory locative elements in Bantu existential constructions of the locative-existential type is probably due to the limited distribution of locative object prefixes in Bantu languages more generally (Marlo 2015, Zeller forthcoming).

(13) Mawiha (P25, Harries 1940: 105) mu-pande mwake mu-ndi-pawa ŵa-nu 18-9.house 18.poss1 sm18-pFv-be.present 2-people 'There are people in his house.'

The second of the two major types of dedicated existential constructions found across the language family is the comitative-existential type. In such a construction, the figure is encoded in a way that is similar to the phrase representing the companion in comitative predication. As illustrated with the example from Digo in (14), Bantu comitative-existential constructions are typically marked with a reflex of the Proto-Bantu reconstructed conjunction/preposition \**na* 'and/with' (Bastin et al. 2002).

(14) Digo (E73, Nicolle 2013: 320) hipho kare ku-a-kala na mu-tu m-mwenga long ago sM17-PST-be with 1.person 1-man 'Long ago, there was a man.'

As pointed out by Creissels (2014), this type of existential construction is characteristic for the Bantu language family, the extension of a comitative marker to an existential being rare from a cross-linguistic perspective. Note that a locative element is present in the construction in (14) as well, in the form of a subject marker of the locative class 17. This is representative of almost all comitativeexistential constructions across Bantu. It should also be stressed that, although the "basic" meaning of *na* is comitative 'with', it is a polysemic element and, in those languages where it has developed an existential reading, it typically also functions as a "possessive copula" (Marten 2013, Gibson et al. 2018), thus resembling the much more widespread cross-linguistic strategy of forming existentials from possessive predicates (Creissels 2013).

# 4 Negative existentials and the NEC in the language sample

After a brief description of the expression of negation and affirmative existence in Bantu languages, we now turn to the main topic of the paper: the expression of negative existentials. Our account of the Bantu findings is framed based on the model of the Negative Existential Cycle (NEC), following Croft (1991) and Veselinova (2013b, 2014, 2016). According to this model, standard negation markers can develop out of negative existential markers through three stable stages, referred to as A, B and C. Three additional transitory stages, referred to as A~B, B~C and C~A, are also involved. Each of these variationist stages simultaneously represent synchronic types. Consequently, every language of our sample has been examined and classified according to whether it belongs to one of the three "stable" types/stages of the NEC or whether it represents a "transitory" type/stage. The observation made by Veselinova (2014, 2016) that several overlapping types/ stages may co-occur in a single language has also been taken into account. In the following discussion we further attempt to make diachronic inferences based on the synchronic relationship between language internal and language external variation and the pathway(s) of change posited in this model.

The variation regarding the expression of negative existentials across Bantu is summarized in Figure 1. The Figure is based on Veselinova (2016: 146), in turn

adapted from Croft (1991: 6), where the boxes with solid lines represent stable types/stages and the boxes indicated by dashed lines represent the transitional types/stages. (A more fine-grained and language-specific account of the formation of negative existential predication can be found in Table 1 in the Appendix). Note that the total number of languages in Figure 1 is 100, thus exceeding the total sample of 93 languages in this study. This reflects the fact that 7 languages can each be classified as belonging to two types/stages, the overlapping types/ stages being A & B (2 languages), A & B(?) (2 languages), B & B(?) (1 language), A~B & B~C (2 languages). <sup>7</sup> A detailed account of the various figures shown in Figure 1 is provided in the discussion below.

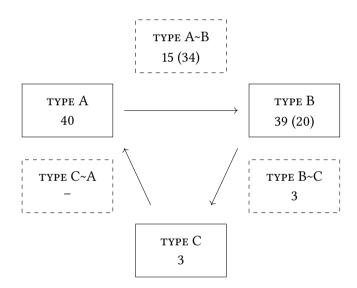


Figure 1: Stages of the NEC across the Bantu sample

As can be seen in Figure 1, the majority of existential negators across Bantu pertain to the "earlier" stages of the cycle, thus conforming to cross-linguistic generalizations regarding rate of frequency (Croft 1991, Veselinova 2016). This tendency is arguably even stronger if it is taken into account that the three C

 $<sup>^{7}</sup>$ It should also be noted that the numbers in Figure 1 do not take into account variation within a single type: several languages in our sample have more than one dedicated existential strategy. When they belong to the same type/stage, typically type B, this is only counted once with the B / B(?) case being the only exception, this in order to keep the parallel liberal/conservative numbers coherent.

types and one of the B~C types of this figure are plausibly the result of contactinduced change involving one and the same source language, namely, Swahili. A word of caution is warranted here, however, regarding the presentation of the data regarding the relationship between negative existentials of the stable Type B and those of Type A~B. In many cases, our sources have only provided examples with negative existential constructions in the present tense. This has made it difficult to determine with certainty whether a language really makes use of a negative existential of Type B or  $A \sim B$ .<sup>8</sup> We therefore decided to use two numbers. The first number (without parentheses)<sup>9</sup> represents the liberal count, which takes the absence of a description of other means of negative existential predication as an indication of a special Type B status of the negative existential marker in question. The second number (in parentheses)<sup>10</sup> represents the alternative, more conservative count, where the absence of examples of usage outside of the present temporal domain is taken to indicate that the negative existential is of Type A~B. The following two sections each discuss one half of the cycle. In §5, we focus on Type A and B and the transition processes between these types. In §6, we address the rarer, additional types and hence further developed stages within the cycle found in Bantu, including those induced by contact with Swahili. In §6, we also raise the question of meaning extensions of negative existentials in Bantu that are not necessarily connected to the NEC.

# 5 From non-dedicated to dedicated negative existentials in Bantu

In this section, we discuss instantiations of the first half of the NEC, that is, A, B and A~B. As seen in Figure 1 above, these three types/stages constitute the vast majority of instantiations of the NEC in Bantu, in accordance with the observed general cross-linguistic tendency (Veselinova 2016, Croft 1991). §5.1 discusses constructions that apply standard negation to affirmative existential constructions —that is, negative existentials of Type A. §5.2 continues with an account of dedicated negative existentials, either as part of a Type A~B or a Type B situation, and their evolution.

<sup>&</sup>lt;sup>8</sup>Of course, such a problem could also hold for other contextual restrictions that are not revealed in the data.

<sup>&</sup>lt;sup>9</sup>The first number counts both languages classified as B and B(?) in our table.

<sup>&</sup>lt;sup>10</sup>The second number counts only languages only languages classified as B in our table.

#### 5.1 Negative existentials using standard negation

As can be seen in Figure 1, the majority of negative existentials across Bantu are formed in a compositional fashion by applying standard negation strategies to the affirmative existential construction —that is, Type A negative existentials in Croft's (1991) typology. Interestingly, although the majority of Bantu languages adhere to the compositional formation of negative existentials, there is still a lot of variation in the expression of Type A negative existentials. This reflects the formal variation within the expression of both standard negation (§2) and affirmative existence (§3) in Bantu.

All instantiations of the negative existential of Type A across Bantu involve standard negation strategies. However, languages vary (both internally and externally) as to whether standard negation is applied to a non-dedicated or, as in the great majority (roughly three quarters) of the cases, to a dedicated affirmative existential. In the latter case, languages vary in terms of which specific type of dedicated affirmative existential is involved, thus prompting more fine-grained distinctions within the single category of Type A negative existentials.

An example of a Bantu language where standard negation is applied to a nondedicated existential construction is Swahili. In (15), the standard pre-initial negative marker is attached to a type of existential predication that is described as underspecified in relation to plain locational predication in §3.1 (cf. the Swahili examples in (9)).

 (15) Swahili (G42, Kanijo, p.c. 2018) ha-yu-po nguluwe mw-enye ma-bawa NEG-SM1-LOC.COP16 9.pig 1-having 6-wings 'There is no pig with wings.'

There are also languages in which standard negation applies to the dedicated existential constructions discussed in §3.2. Thus, Ikizu and Kisi are examples of standard negation combined with dedicated locative-existential constructions. In the Ikizu case, the affirmative existential involves an obligatory locative enclitic (16), whereas the existential in Kisi is characterized by a locative subject marker, as in (17). Note that standard negation in Kisi employs a post-verbal negative particle.

(16) Ikizu (JE402, Luke 1:61, Gray 2013: 54) Ndora mʉ-bahiiri banyu ta-ree-ho wi riina riyo! look 18-2.blood.relative 2.POSS2PL NEG-be-LOC16 1.of 5.name 5.DEM2
'Look, among your blood relatives there is no-one of that name!' (17) Kisi (G67, Ngonyani 2011: 157) *n-dofi* a-bhvlile ku-yele he bhu-sipa ma-gono agho
1-fisherman sM1-say.PFV 17-be.PFV NEG 14-sardine 6-day 6.DEM2
'The fisherman said there were no sardines in those days.'

Similarly, standard negation may apply to affirmative existential constructions of the comitative type. Swahili is a case in point. In addition to the non-dedicated existential construction illustrated in (15), Swahili makes use of a dedicated comitative-existential. The corresponding negative construction simply adds the standard pre-initial negative marker *ha*-. Recall that these constructions typically also involve locative marking, in this case the class 16 locative subject marker *pa*-.

 (18) Swahili (G42, King'ei & Ndalu 1989: 25) ha-pa-na m-tu a-si-ye-fanya ma-kosa NEG-SM16-COM 1-person 1-NEG-REL1-make 6-mistake 'There is no person who does not make mistakes.'

Some languages that are categorized as belonging to Stage A because they employ standard negation strategies in negative existential constructions, display minor irregularities. Since the irregularities are typically attested in present tense contexts they could be suggestive of the emergence of a dedicated negative existential. Makwe is a case in point. One of the negative existential strategies found in Makwe involves standard negation in combination with a locative–existential predicate (*-pali*) derived from the univerbation of a class 16 object prefix *pa*- and the copula *-li* 'be', as seen in (19a). The corresponding affirmative construction also makes use of a locative–existential predicate (*-pwawa*), which, however, is most probably the result of the merger of a class 16 object prefix *pa*- with the verb *-wa* 'be' (rather than *-li*), as seen in (19b). The locative–existential predicate *-pali* is a negative polarity item as it cannot be used in affirmative contexts. It only occurs in negative present tense contexts. Other temporal contexts make use of *-pwawa* in combination with standard negation (19c).

- (19) Makwe (P231, fieldnotes, Devos 2008: 375)
  - a. *a-ya-paáli ma-tatiízo* NEG-SM6-exist 6-problem 'There are no problems.'
  - b. u-ni-pwáawa mw-íimbo sM3-PFV-exist 3-song
     'There is a song.'

c. *a-ku-na-pwaw-íije na sukáali* NEG-SM17-PST-exist-PFV with 9.sugar 'There was no sugar available.'

Another example comes from Shangaji, which has a dedicated locative-existential strategy marked by an obligatory locative enclitic, as seen in (20a). This can be negated through standard negation, which involves the pre-initial negative marker *kha*-, as in (20b). However, the copula verb *-wa*, present in the affirmative construction, is reduced to zero in the negative construction, thus turning the locative enclitic into a locative copula.<sup>11</sup>

- (20) Shangaji (P312, Devos, fieldnotes)
  - a. *leélo zi-waá-pho pwilímwíithi*today sp10-be-loc16 10.mosquito
    'Today there are (a lot of) mosquitos.'
  - b. *leélo kha-zí-wó tthonddóowa o-túulu* today NEG-SP10-LOC17 10.star 17-above 'Today there are no stars in the sky.'

#### 5.2 The rise of dedicated negative existential strategies

53 of the languages – more than half of our sample – can be considered to belong to Type B or Type A~B of the NEC, thus having a dedicated negative existential strategy which does not merely involve the application of standard negation to an affirmative existential construction. In this section, we first explore the etymology of dedicated negative existential markers across the Bantu family. We then address the transition between stage A and B —that is, the emergence of dedicated negative existentials in Bantu.

#### 5.2.1 Dedicated negative existential constructions

Dedicated negative existential constructions in Bantu are often marked by inherently negative lexemes in combination with locative marking. There are two main lexical sources involved in such dedicated negative existential constructions: verbs and adjectives/adverbs. Both categories can be etymologically linked

<sup>&</sup>lt;sup>11</sup>Note that the affirmative existential construction makes use of a series of locative demonstrative enclitics (*-pho, -kho* and *-mo*), whereas the negative existential construction uses a series of locative relative enclitics (*-vo, -wo* and *-mo*).

to a negative source meaning thus conforming to a common cross-linguistic pattern (Veselinova 2013b). Two geographically more restricted patterns have also been identified. The first concerns non-verbal predication whereby the noun referring to the figure is followed by a negative particle dedicated to the expression of negative existence (and other non-verbal predication types). The second involves locative subject marking in combination with a verbal enclitic with an as yet unclear etymology. This section takes a closer look at all four more or less recurrent sources, starting with the least unexpected one.

Bantu languages commonly recruit inherently negative verbs as negators (see Givón 1973; 2001: 382–383). This is typically the case in prohibitive propositions and, by extension, other types of more marked verbal negation (see e.g. Bernander 2018, Devos & Van Olmen 2013, Güldemann 1999, Nurse 2008: 191–193, and also the brief discussion in §2 of this paper). Our investigation shows that lexical verbs of similar denotations are often also recruited as negative existential markers in Bantu, always in combination with locative marking. This can be seen in the examples below from Ruwund 21 and Kagulu 22.

- (21) Ruwund (L53, Nash 1992: 839) *p-ììkil* côm
  sм16-not.be 7.thing
  'There is nothing there.'
- (22) Kagulu (G12, Petzell 2008: 167) *kw-ichak-a wa-nhu* sm17-be.without-Fv 2-people 'There are no people.'

Arguably, similar processes of semantic bleaching apply to those verbs recruited as negative existentials as to those becoming negative auxiliaries in marked negation types. An important difference is the fact that negative verbs that become negative existentials are always inflected with locative subject markers. Thus, locative marking is a persistent feature in both affirmative and negative existential constructions across Bantu. This adheres to the close contiguity in meaning between location and existence, given the basic conceptualization that an entity occupying a space also exists (Lakoff 1987: 407; see also Gaeta 2013, Koch 2012) and, by contraposition, that an entity not occupying a space does not exist.

The most typical original meaning of a negative existential verb is 'be without, lack', as in the example from Kagulu in (22) above. Other examples include *-vola* 'lack' and *-bholá* 'lack' in Kinga (G65) and Bende (F12) respectively (from Proto-Bantu \**-bod-* 'lack; be lacking; be lost' (Bastin et al. 2002)), *-gaya* 'lack' in Bena

(G63) and Hehe (G62), and *-hela* 'lack' in Pogolo (G51) and Ndamba (G52). It is worth noting that the meanings 'be without, lack' express the polar denotation of the affirmative comitative-existential strategy, discussed in §3. This suggests that this conceptualization of existentials, typical for Bantu languages, applies to the formation of negative existentials even beyond those of Type A.<sup>12</sup> Arguably, it also supports the suggestion of Veselinova (2013b) that negative existentials represent a separate functional domain from affirmative existentials, making statements about the absense of something rather than negating an existence, and thus do not have to be secondary formations to affirmative existentials. More generally, this fact can be seen as reflecting the conceptual interaction and semantic contiguity not only between location and existence, but also between possession and existence both synchronically and diachronically (see e.g. Koch 1999, 2012, Heine 1997, see also Veselinova 2013b).

That being said, there are also lexical sources that do not denote negative possession, but which still arguably have an inherently negative meaning. In several cases the source is a lexical verb simply meaning 'not be', in accordance with a more general cross-linguistic tendency (see Veselinova 2013a, 2016). One such example is the negative existential *titi* in Duala (A24), which according to Ittmann (1939, 1976) stems from an archaic verb *titá* 'not be, not exist' inflected for the perfect. Another example is *-iìkil* in Ruwund, as seen in (21) above. Lusoga (JE16), Bena (G63) and Vwanji (G66) appear to make use of a reflex of the reconstructed verb \**-gìd-* 'abstain from, avoid, refuse'. A final example of a negative existential derived from a negative verbal source in Bantu is *-fwa* 'die', which is used in both Kisanga (L35) and Kaonde, as illustrated in (23).

 (23) Kaonde (L41, Foster 1960: 30)
 késha tu-kékala na ma-tába lélo ka-fwá-ko tomorrow sm1PL-be COM NCP6-corn today NEG-die-LOC17
 'Tomorrow we shall have corn, today there is none.'

In total, 22 languages – almost a quarter of our sample – employ inherently negative verbs in the formation of negative existential constructions, whether this is as the sole marker or in conjunction with other strategies.

Another frequent and widespread source of negative existentials in our sample of Bantu languages is not a verb but rather an adjectival or adverbial form meaning 'empty' (and/or with similar meanings). Of the 15 attestants, the most

<sup>&</sup>lt;sup>12</sup>Interesting in this regard is Gogo (G11) which appears to form negative existentials by applying standard negation to a comitative-existential construction, whereas it employs affirmative constructions of the locative-existential type.

typical case involves reflexes of the Proto-Bantu stem \*- $t \acute{v} p \acute{v}$  'only, empty, in vain' (Bastin et al. 2002, Angenot-Bastin 1977) in combination with a locative class marker. Examples (24) and (25) from Kwangali and Ndengeleko exemplify this pattern. Note that there is a mismatch in class agreement between the  $-t \acute{v} p \acute{v}$  form and the locative nominal argument in (25). This lack of automatic agreement suggests that the referential locative reading has been lost, which points to a further decategorialization of the construction as a whole.

- (24) Kwangali (K33, Dammann 1957: 108) mo-ru-pasa m(u)-tupu mema 18-11-bowl 18-empty 6.water
  'In the bowl there is no water.'
- (25) Ndengeleko (P11, Ström 2013: 284) *n-tύpύ oomba ku-lw-íi*18-empty 9/10.fish 17-11-river
  'There is no fish in the river.'

Nine languages of our sample have a negative existential involving \*- $t \acute{v} p \acute{v}$  with a locative prefix. The other seven languages not discussed above are summarized in (26).

(26) Languages with a negative existential derived from \*-topo

0	0	0
F.12	Bende	hátuhú ~ kútuhú
F.22	Nyamwezi	hadvhv ~ ndvhv
G.35	Luguru	muduhu
L.33	Luba	patupu ~ kutupu ~ mutupu
L.35	Kisanga	patupu ~ kutupu ~ mutu(pu)
P.13	Matumbi	patopo ~ kutopo ~ ntopo
P.14	Ngindo	haduhu

Some other words with roughly the same meaning have also been recruited into negative existential constructions. This can be seen in the form *-bule*, which is found in Swahili (G42) and which is thought to derive from the Arabic word *bure* [r, 3] 'bestow of free will', and, by extension 'in vain' (Johnson 1939: 42; TUKI 2014: 48). A similar form, presumably borrowed into the language from Swahili, can also be seen in Kami, a highly endangered language spoken in Tanzania which has been in sustained contact with Swahili.

 (27) Kami (G36, Petzell & Aunio 2016) Sweden ha-bule tangawizi Sweden 16-NEG.EX 9/10.ginger
 'There is no ginger in Sweden.' Another example is the form *-waka* 'only, in vain, naked' recruited as a negative existential marker in Ngoni (N.12) and also in Manda, as exemplified in (28).

(28) Manda (N11, Bernander 2017: 335) sénde pa-wáka?
9/10.money 16-empty
'Is there no money (left)?'

In ten languages, spoken in parts of Gabon, Congo and the Democratic Republic of the Congo (DRC), negative existence is expressed by non-verbal predication – that is, the figure is simply followed by a negative particle. Duma is a case in point. The copula *li*, which is present in the affirmative existential construction in (29a) is not attested in the negative existential construction in (29b); whereas standard negation involves both pre-initial *ka*- and clause-final  $v\varepsilon$  (29c), only the latter is used for the expression of negative existence.

- (29) Duma (B51)
  - a. affirmative existential (Adam 1954: 148) mungubili mu li i tswa ngundu
    1.pig SM1 COP LOC garden
    'There is a pig in the garden.'
  - b. negative existential (Adam 1954: 148)  $ba\tilde{a}ti$  bo  $v\varepsilon$ 2.porter PERS.2 NEG 'There are no porters.'
  - c. standard negation (Mickala-Manfoumbi 1988: 144)
    besú ka-li-bóma mútu νε
    PERS.1PL NEG-SM1PL-kill 1.person NEG
    'We do not kill the man.'

Languages in this area typically have a discontinuous or double standard negation strategy, which combines a pre-verbal, pre-initial or post-initial negative marker with a second post-verbal (either immediately following the verb or in clause-final position) negative marker (Devos & van der Auwera 2013). In some languages, the negative marker used for the expression of negative existence is identical to the standard post-verbal negative marker, as seen in the Duma example (29) and also in (30) from Nduumo (cf. also §5.2.2).

- (30) Nduumo (B63, Adam 1954: 141, 148)
  - a. standard negation
    bisi ka li dji buyu ng'i
    PERS.1PL NEG SM1PL eat honey NEG
    'We have not eaten the honey.'
  - b. negative existential *abiti* ng'i porter NEG 'There are no porters.'

However, in a few languages the existential negator formally differs from the post-verbal standard negator, as shown by the examples in (31) from the closely related language Mbete.

- (31) Mbete (B61, Adam 1954: 141, 148)
  - a. standard negation
    bisi le ha dja bvugi ng'i
    PERS.1PL SM1PL NEG eat honey NEG
    'We have not eaten the honey.'
  - b. negative existential *abiti* kali porter NEG 'There are no porters.'

It should be noted that the Nduumo standard post-verbal negative marker in (30) can be replaced by the negative marker *onyang'a*, as in, *abiti onyang'a* 'there are no porters'. The semantics and the range of use of Mbete form *kali* and the Nduumo form *onyang'a* are not entirely clear. Biton & Adam (1969: 114, 171) give the translation equivalents 'no' and 'none, nil', respectively, suggesting an origin in a negative answer particle in Mbete and a negative indefinite pronoun in Nduumo. However, meanings reminiscent of \*-*túpú* 'only, empty, in vain' are attested as well. As can be seen in 32, both elements can be used to express 'empty'.

- (32) a. Mbete (B61, Biton & Adam 1969: 649) *djyala kali*'empty handed'
  b. Nduumo (B63, Biton & Adam 1969: 649)
  - *bvyala onyang'a* 'empty handed'

Whether the existential negator is identical or not to the post-verbal standard negator, we consider this particular type of negative existential construction to be specialized, specifically, of type A~B (if only used in the present tense) or of type B (and plausibly even type B~C or C if the existential negator indeed spreads to standard negation). In §6.3 we discuss the possible enrollment of these existential negators in the expression of standard negation through a Jespersen Cycle. §6.1 addresses the possible usage extension of these existential negators to other types of non-verbal predication and vice versa.

Finally, there is a small set of only 4 languages spoken in a contiguous area in Malawi and Zambia where negative existence is expressed by adding an enclitic to affirmative existential predication of the locative existential type. The enclitics are *-je* in Tumbuka (N21), *-be* in Chewa/Nyanja (N31), *-ye/-ve* in Nsenga (N41) and *-be* in Nyungwe (N43). The etymology of these arguably cognate forms is as yet unclear to us. In at least the Chewa/Nyanja case, cf. 33, the enclitic displays a curious polysemy between expressing negative existence/possession when combined with the copula *-li/-ri*, and expressing the phasal meaning 'still' when combined with a verb or even a noun (Hetherwick 1916: 116, Watkins 1937: 97, 99, Price 1953: 209, Stevick & Hollander 1965: 116, 205, 279, Paas 2004: 20–21, Mchombo 2004: 60, 68, Kiso 2012: 150, 153, 161).

- (33) Chewa/Nyanja (N31, Stevick & Hollander 1965: 117, 205, 279)
  - a. negative possession *ndi-li-be* ma-lalanje sM1sG-be-NEG/POSS 6-orange 'I don't have any oranges.'
  - b. negative existential *kuno* ku-li-be ma-lalanje ambili 17.DEM1 17-COP-NEG/EX 6-oranges 6.many 'There aren't many oranges around here.'
  - c. persistive *a-ku-gon-a-be*

sM1-PRS-sleep-PER 'He's still sleeping.'

Stevick & Hollander (1965: 279) express some doubts about the tonal identity between negative existential *-be* and persistive *-be*. This, together with the fact that 'still' does not appear to be a common source of negative existence or vice versa (Heine et al. 1993 and Heine & Kuteva 2002, for example, do not mention a

conceptual shift in either direction), might suggest that homonymy rather than polysemy is at play here. However, the semantic connection between 'still' and 'empty', which, as has been shown above, is a common source of negative existentials in Bantu, is confirmed by data from Tumbuka (N21). Tumbuka has an element *waka*, cognate with Manda and Ngoni *-waka*, which is used adverbially to express 'empty(ly), in vain' and in combination with the copula *-ri* to express 'still', as illustrated in (34).

- (34) Tumbuka (N21, Young 1932: 120-121)
  - a. 'empty, in vain'
    - i. *w-iz-a waka*sM1-come-PFV empty
      'S/he has come empty-handed / for no particular purpose.'
    - ii. w-a-gon-a waka
      sM1-PST-sleep-FI empty
      'S/he slept without food / without the evening meal.'
  - b. persistive *zuwa li-ri waka* 5.sun sм5-сор still 'The sun is still shining / There is still daylight.'

This might suggest that the lexical source of *-be* is similarly an element expressing 'empty' and that this element has developed multiple grammatical functions.

As a final note, it should be mentioned that we are even less sure about the etymology of other instances of Bantu negative existentials in our sample. Further research might thus add new sources of negative existentials or give additional evidence for the suggested etymologies.

# 5.2.2 Variation between standardly negated and dedicated negative existentials

In accordance with cross-linguistic tendencies (Veselinova 2016), there are several examples of Bantu languages in the transition stage A~B where a negative existential may be expressed both through applying standard negation strategies (to either a non-dedicated or a dedicated affirmative existential) or, alternatively, a dedicated negative existential marker. As is typical in these cases, the usage of the specialized existential is confined to the present, standard negation being employed in other temporal contexts (Veselinova 2013b, 2016). Luba is a case in point. In the present tense, Luba can make use of a dedicated negative existential strategy involving *-tupu*, a reflex of *\*-t\acute{v}p\acute{v}*, discussed in the previous section. In all other temporal contexts, standard negation is applied to the affirmative existential of the locative-existential type, as can be seen in (35).

- (35) Luba (L33, Beckett 1951: 126)
  - a. *le ku-di lu-pete? ku-tupu-lo* INTER 17-COP 11-knife? 17-empty-11 'Is there a knife? There is not.'
  - b. *ke-kwa-di-po mwepo nansha mu-tyetye* NEG-17.PST-COP-NEG 3.salt even 3-little 'There was not even a little salt.'

Ombo constitutes a similar case. In the present tense, the dedicated inherently negative verb  $-\hat{a}fa$  'not be' is recruited for the expression of negative existence (36a), whereas other temporal contexts resort to standard negation applied to an affirmative existential of the comitative-existential type, as seen in (36b).

- (36) Ombo (C76, Meeussen 1952: 30)
  - a. *k-áfa lʊ-kula* sм17-not.be 11-knife 'There is no knife.'
  - b. *ku-tá-íká la-nsímba* sм17-neg-be.psт сом-10.lion 'There were no lions.'

For 15 of our languages, the sources claim that such a situation holds. However, given the fact that not many sources provide an extensive account of the expression of negative existence, let alone the variation within, it is likely that this number should actually be higher. Furthermore, dedicated negative existentials might have emerged after the publication of the sources, seeing that negative existentials typically are subject to renewal (Veselinova 2016) and the verbal systems of Bantu languages in particular are characterized by rapid innovation and change (Nurse 2008: 25). An indication of such a situation, with what appears to be an emerging dedicated negative existential, comes from Kinga, a language which can be described as belonging to variationist Type/Stage A~B. In Kinga, a negative existential proposition may be produced by employing standard negation strategies, as in (37a). Alternatively, a dedicated negative existential marker may be used, derived from the inherently negative verb *-vula* 'lack' and inflected with a locative subject marker, as in (37b).

(37) Kinga (G67, Eaton, p.c. 2017)

- a. *ni-pa-li i-soda* (~/*nɪpali ɪsoda*) NEG-SM16-COP 9-soda 'There's no soda.'
- b. *kʊ-vʊl-a soda* sм17-lack-ғv 9.soda 'There is no soda.'

However, there is no account at all of the negative existential use of -vula in the grammar on Kinga by Wolff (1905). What is more, according to Helen Eaton (p.c.), -vula with a negative existential only turns up five times in the New Testament, whereas the version with standard negation is far more frequent. Similarly, the neighboring and closely related language Bena is claimed to employ standard negation with the affirmative existential construction (Morrison 2011: 378). However, going through an annotated collection of Bena narratives (Eaton 2015a), we found not only one, but two negative existential markers transparently derived from inherently negative verbs plus locative marking. In fact, there is a set of languages spread across the Bantu-speaking area that appears to make use of several dedicated negative existentials. Other examples of languages with several dedicated negative existentials are the Mozambican variety of Ngoni, Bende in Tanzania, Luba in DRC and Lusoga in Uganda (cf. Table 1 of the Appendix). Unfortunately, the sources seldom elaborate on the functional differences between these various markers. In the case of Bena, however, there might be dialectal or other lectal differences at play, Bena being characterized by relatively extensive language-internal variation (cf. Morrison 2011: 30-35; Morrison 2015; Mitterhofer 2013).

#### 6 Further processes of change

The focus of this section is the later language types and stages of the NEC as reflected in the Bantu sample. Specifically, we look at types/stages where the negative existential marker has expanded into the domain of standard (verbal) negation. As can be deduced from Figure 1 in §4, this does not seem to be very common in the Bantu languages. There is a possibility that some of the illocutionary particles hypothesized by Güldemann (1999) to have developed into standard negation markers, as described in §2, ultimately stem from negative existential markers. However, we have failed to find any indications of such a scenario in

our data. In fact, it seems that in those cases where the negative existential marker has acquired an extended function as a standard (verbal) negator in Bantu, there are typically specific sociolinguistic factors such of language contact at play. Such a case is addressed in §6.4. First, however, we discuss usage extensions of the negative existential marker outside of verbal negation (§6.1). Then we turn to usage extensions involving marked negation types (§6.2) and finally a possible case of intertwining between the negative existential cycle and the Jespersen Cycle is discussed (§6.3).

#### 6.1 Extensions of negative existentials outside of verbal negation

One usage extension concerns the cross-linguistically well-attested development of negative answer particles ('no') and negative indefinites ('nothing'/'nobody') out of negative existential forms (see Schwegler 1988, Croft 1991, Veselinova 2013b, 2014, 2016). Instantiations of such a change from internal negator to external negator are found at least in Ombo (C76), Nyamwezi (F22), Ngoni (N12), Matumbi (P13) and Yao (P21).

In Yao, *ngapagwa* 'nothing, no one, never' is derived from a negative existential form involving standard negation applied to an existential predicator *-pagwa*, which is itself derived from a merger between the locative object prefix *-pa*- and the light verb *-gwa* 'fall, occur' (Sanderson 1922: 72, Whiteley 1966: 174). Compare the examples in (38).

- (38) Yao (P21, Sanderson 1922: 72)
  - a. *m-ku-saka* chichi? ngapagwa SM2PL-PRS-want what nothing 'What do you want? Nothing.'
  - b. nyama nga-ni-si-pagwa
     9.game NEG-PST-SM9-exist
     'There was no game.'

Another example of this usage extension can be seen in Matumbi, where the negative answer particle *kutupo* 'no', exemplified in (39a), is clearly related to the negative existential form, which can be seen in (39b).

(39) Matumbi (P13, Krumm 1912: 46, Odden 1996: 304)

a. kutupo, ba-bi Kibata
 no sм2-be Kibata
 'No, they are in Kibata.'

b. uláa ndopó
9.rain 18.vain
'There is no rain.'

Similarly, in Ombo, the negative existential form  $k \acute{a} f a$  'there is not', consisting of a class 17 subject prefix ku- and the inherently negative verb  $-\acute{a} f a$  'not be', can be used as a negative answer particle expressing 'no' (Meeussen 1952: 30).

Another type of usage extension relates to the fact that negative existentials, negative plain locational clauses and negative possessives are often marked in similar ways in Bantu languages. As touched upon in §5.2.1, there is a conceptual closeness, and consequently a semantic contiguity, between such expressions that can be observed more generally across languages. In Bantu, this conceptual closeness is reflected in both affirmative and negative existential constructions. Dedicated affirmative constructions are typically of the locative or the comitative/possessive type. Moreover, locative marking is a salient feature in both types of existential construction. This is also true for dedicated negative existential constructions, which furthermore often involve lexical items with the meaning 'lack, be without'. Heine (1997) and Heine & Kuteva (2002: 241-242) postulate a unidirectional pathway leading from possessive predicates to existential constructions. However, it is interesting to note that there are also examples of the reverse pathway in our data, -that is, from negative existential to negative possessive. That this is indeed the case can be deduced from the transparent locative marking and lexical meanings involved in the possessive constructions in question. Tanzanian Ngoni can be used to illustrate this. Just like its neighbor and closest relative Manda (discussed in §5.2.1, example (28)) Ngoni expresses negative existentials through a construction consisting of a locative prefix attached to a lexeme waka originally meaning 'empty, naked, only'. However, as can be seen in (40), in Ngoni it is also possible to express negative possessive propositions with the negative existential, merely by the addition of a subject possessor.

(40) Ngoni (N12, Ebner 1939: 32) ne' kwawaka chi-pula PERS.1SG NEG.EX 7-knife
'I don't have a knife.'

Koch (2012) discusses similar affirmative constructions in Mandarin, a topicprominent language (as are the Bantu languages). He suggests that the possessive reading stems from the introduction of a second, thematic participant, introduced as a topic. Thus, example (40) could be paraphrased as 'as for me, there is no knife'. The introduced topic has then been reinterpreted (and conventionalized) as a possessor, the existential pivot as the possessee and consequently the whole existential construction as a construction expressing possession. Although further and more thorough investigation is needed, this explanation seems to hold for negative existentials becoming negative possessives in Bantu languages.

This being said, when a language uses one and the same (dedicated) strategy for the negation of possessive, plain locational and existential clauses and the etymology of the particular strategy is unclear, it is hard to determine the origin of this strategy. Tetela presents such a case. As can be seen in (41), the invariable *keéma* (different from standard negation, which involves a pre-initial or a post-initial negative marker) is used for the negation of plain locational (41a), possessive (41b) and existential clauses (41c).

- (41) Tetela (C71, Labaere 1970: 100, 102)
  - a. *owánji keéma-kś*1.chief NEG-LOC17
    'The chief is not there.'
  - b. dimí keéma langéló léngo PERS.1SG NEG with\_village there
     'I do not have a dwelling there.'
  - c. keéma olemp εl
     NEG work today
     'There is no work today.'

The etymology of *keéma* is unclear. It is described as a particle, expressing 'no, not, nothing, there is nothing (to say, to ask)' (Hagendorens 1957: 155) but as explained above, such meanings could also have derived from its use as a negative existential marker. Languages like Nduumo, Mbete and Duma similarly use one and the same (dedicated) strategy for the negation of locational, possessive and existential clauses. This is illustrated in (42) for Mbete. Again, the etymology of the dedicated negator *kali* cannot be ascertained (cf. also the discussion in §5.2.1).

- (42) Mbete (B61, Adam 1954: 141, 148)
  - a. *bisi ho tca cwaha kali* PERS.1PL LOC16 bush NEG 'We are not in the bush.'
  - b. me bila kali pers.1sg food neg
    'I do not have food.'

c. ekwo kali
cassava NEG
'There is no cassava.'

# 6.2 From negative existential to other marked negation types: The case of Ruwund

In Ruwund, negative existence can be expressed by applying standard negation, consisting of the discontinuous negative marker *ka-...-p*, to the affirmative existential construction. This is illustrated in (43).

(43) Ruwund (L53, Nash 1992: 839)
kì-kw-aa-d-àà-p mi-long
NEG-SM17-PST-be-FV-NEG 4-problem
'There weren't any problems.'

In present tense contexts, a dedicated construction involving the forms *pììkil* (cf. (21)) and *kwììkil* built from the negative verb *-iikil* and a locative subject prefix can be used. This is shown in 44.

(44) Ruwund (L53, Nash 1992: 839) kw-ììkil mi-long sм17-be.not 4-problem
'There are no problems.'

These forms have spread to other marked negation types, being also used to express prohibitives (45a) and other negative deontic meanings (45b), as well as occurring in tag questions (45c) and in a special construction expressing a particular type of metalinguistic negation (conveying strong affirmation) (45d). Recall that the locative subject marking – of class 17 in the two previous examples and of class 16 in the examples in (45a,c) – suggests that the usage expansion indeed started out from the negative existential forms.

- (45) Ruwund (L53, Nash 1992: 842)
  - a. *p-ììkil wa-mu-lej* sм16-be.not/ргон 2sg.nar-ом1-tell 'Don't tell her/him.'
  - b. kw-iìkil ku-làb ku shikòl sm17-be.not 15-be.late 17 school 'Better not be late for school.'

- c. *p*-ìì*kil* wà-cì-landin sM16-be.not/TAG sM1.PST-OM7-buy.PFV 'S/he did not buy it, did s/he?'
- d. a-màn-a mar kw-ììkil mu-tàpu sM2-saw-PST 6.difficulty sM17-be.not 3-way/META
  'They suffered terribly.' (lit.: 'They saw difficulty there isn't a way.')

#### 6.3 Possible enrollment of existential negators in a Jespersen Cycle

A number of closely related Bantu languages spoken in parts of Gabon, Congo and DRC express negative existence through non-verbal predication whereby the figure for which non-existence is predicated is followed by a negative particle (see also §5.2.1). These languages typically make use of a discontinuous negative marker consisting of an inherited (verbal) negator and a second post-verbal negator for the expression of standard negation. Regarding the relation between the existential negator and the second standard negator, a curious variation is observed. First, there are languages where the existential and the post-verbal standard negator are identical, cf. (30) from Nduumo. Additional examples come from Iyaa (46) and Engungwel (47).

- (46) Iyaa (B73c, Mouandza 2001: 439, 436)
  - a. standard negation *ndé* a *á*-y*ěne* p*é* ku mu-síti
    PERS1 NEG SM1-gO.PFV NEG 17 3-forest
    'He has not gone to the forest.'
  - b. negative existential
    bààtà pé
    2.person NEG
    'There are no people.'
- (47) Engungwel (B72a, Rurangwa 1982: 162; Raharimanantsoa, p.c. 2017)

a. standard negation

 $m\epsilon$ ka $\eta gy\epsilon$ olá $w\epsilon$ PERS.1SGNEGSM1SG.know15.cookNEG'I do not know how to cook.'

b. negative existential onsό ã-ngyel ngingi wε/pyε<sup>13</sup>
 in 6-soup 1.fly NEG
 'There is no fly in the soup.'

Next, there are languages in which negative existence and standard negation involve formally different (post-verbal) negative markers, cf. (31) from Mbete. Tiene in (48) and Beembe in (49) show this pattern as well.

- (48) Tiene (B81, Ellington 1977: 138, 137)
  - a. standard negation
     *ka-lé-môn-e* nuká ko
     NEG-SM1PL-see-PFV animal NEG
     'We didn't see the animal.'
  - b. negative existential
     eyaame wε
     thing NEG
     'Nothing is the matter / There is nothing.'
- (49) Beembe (H11, Nsayi 1984: 155, 162)
  - a. standard negation *mè n-síí-tín-à mù-káándá kò*PERS.1SG SM1SG-NEG-write.PRF 3-letter NEG
    'I have not written a letter.'
  - b. negative existential mà-bèénbè mŏ pè
     6-pigeon PERS.6 NEG
     'There are no pigeons.'

The form of the (dedicated) existential negators is very similar to the form of the standard/existential negators in (46) and (47) above. Could this be indicative of a spread from existential negation to standard negation through enrollment into a Jespersen Cycle? The fact that there are also languages, like Dzing in (50) below, that do not display (regular) discontinuous standard negation but still express negative existence through the combination of a figure and a negative particle suggest that this is indeed what has happened.

 $<sup>^{\</sup>rm 13}{\rm We}$  are not sure whether this variation is also attested in standard negation.

- (50) Dzing (B86, Mertens 1938: 333, 377)
  - a. standard negation
     mε bifwanisu kεε-jala
     PERS1SG 8.picture NEG.SM1SG-sell
     'I do not sell pictures.'
  - b. existential negation muuŋ mu bisaa ati
    3.salt LOC18 8.food NEG
    'There is no salt on the food.'

What is more, Mertens (1938: 378) indicates that double negation involving the post-verbal negative marker *ati* does occur, be it very sparingly, to 'renforcer une négation' [strengthen negation] in Dzing. This could be interpreted as the beginning of a Jespersen Cycle and the recruitment of an existential negator to strengthen standard negation. Croft (1991) suggests a similar path for the Australian language Mara and the Wintuan language Wintu. van der Auwera et al. (2022 [this volume]) explicitly attribute the use of the existential negator in standard negation in these two languages to a Jespersen trajectory. Still, a note of caution is needed. Bantu post-verbal negators are known to be prone to borrowing (Nurse 2008: 180). Formally similar post-verbal standard negative markers, as in the closely related languages in (46) and (47), could therefore be ascribed to language contact rather than to a language-internal usage extension of an existential negator. Both scenarios could involve an intermediary step whereby the existential negator developed negative indefinite meanings such as 'no, nothing, none' (cf. §6.1) before being recruited in a Jespersen Cycle with or without borrowing. However, we know too little about the etymology of these post-verbal negative elements to be certain of this.

#### 6.4 hapana 'there is not, no' in Swahili and beyond

This section discusses the case of *hapana*, one of only few examples from Bantu where an original negative existential has entered the domain of standard (verbal) negation. However, such an extension in use has taken place in pidgins and creoles and under specific sociolinguistic circumstances of high levels of sustained language contact. Similar to what has been described for the development of Russian *net* in Sino-Russian pidgin (Veselinova 2013b, 2016), it seems that the extension in use of *hapana* comes from its earlier development in Standard Swahili into a proposition-external negator. That is, the form *hapana* is used in Standard

Swahili as a negative existential of the comitative type, meaning, 'there is not with' (cf. (18) above), but also as a negative answer word as illustrated in (51).

(51) Swahili (G42)
 U-na-kwenda Bagamoyo? Hapana.
 SM.2sG-PRS-go Bagamoyo no
 'Are you going to Bagamoyo? No.'

The word *hapana* has thus developed from a negative existential to also expressing proposition-external negation, which, in turn, has facilitated its reconceptualization into a proposition-internal (standard) negator. Veselinova (2013b, 2016) suggests that this development is specifically prominent in contact varieties where language competence is relatively low and the word 'no', being frequent (and salient), is easily reinterpreted as a main negator. Our investigation lends further support to this hypothesis.

To begin with, there is the case of Kisetla which is "a pidginized form of Swahili spoken between Europeans and Africans in those parts of Kenya where there were, or still are, large European settlements" (Vitale 1980: 51). In the Kisetla variety, *hapana* has generalized over all negative constructions. As shown already in examples (1a) and (1b) in §1, in Standard Swahili, sentential negation involves the addition of negative prefixes, taking either the form of a pre-initial marker *ha*or a post-initial marker *-si*- (appearing in non-main clause contexts). However, in contrast to the situation in Standard Swahili, in Kisetla *hapana* can appear in both main clause and non-main clause contexts as the sole marker of negation. This can be seen in (52a) and (52b).

- (52) Kisetla (G40C, Vitale 1980: 57–58)
  - a. *yeye hapana oa* pers.3sg Neg marry.FV 'He has not married.'
  - b. hapana pig-a mimi NEG hit-FV PERS.1SG
     'Don't (you) hit me!'

A similar process of change can be considered to have occurred in Bunia Swahili. Bunia Swahili is a Congolese variety of Swahili that has been heavily affected by Central Sudanic languages (Nico Nassenstein, p.c. 2017). In Bunia Swahili, it is not only the case that *hapana* has been recruited as a standard negator; it has also been further decategorialized and eroded from a free-standing word to an

inflectional prefix pa-. This fact, illustrated in (53) below, indicates that a new form–meaning pair differing from the original negative existential has emerged in Bunia Swahili.

(53) Bunia Swahili (no Guthrie code, Nassenstein, p.c. 2016) Ba-li-kwa tembey-aka na bayonette, ba-kisu ivi, SM3PL-PST1-be walk-PST2 COM 9.bayonet 2-knife like.that ba-pa-li-kwa tembey-aka na bunduki. SM3PL-NEG-PST1-be walk-PST2 COM 9.rifle
'They were walking around with bayonets, knives of that kind, they were not walking around with firearms.'

Finally, Schicho (1992) discusses the introduction of *hapana* into standard negation in yet another Swahili variety, namely Lubumbashi Swahili. In this case, however, *hapana* has been recruited as the second, 'emphatic' post-verbal exponent of discontinuous negation marking  $\acute{a}$  la stage II of the Jespersen Cycle (cf. van der Auwera 2009). This is, in turn, reminiscent of a more general pattern across Bantu where post-verbal negative particles originate from proposition-external negators (see Devos & van der Auwera 2013).

(54) Lubumbashi Swahili (G40F, Schicho 1992: 84) Ha-ba-wez-i ku-mu-pig-a hapana. NEG-SM2-can-NEG.PRS 15-OM1-hit-INF NEG
'They won't beat him.'

It would seem that it is not only in pidginized forms of Swahili that *hapana* has been reanalyzed as a (proposition-internal) verbal negator. Thus, Nurse (2007) accounts for an interesting case in Pogolo (G51). According to him, it is likely that *hapana* was borrowed as a consequence of the earlier presence of colonial sugar plantations in the Pogolo-speaking area, where Swahili served as a lingua franca. An eroded version of *hapana*, *(ha)pa-*, has fused with the verbal word in Pogolo where it functions as a (prefixal) verbal negator, as seen in (55).

(55) Pogolo (G51, Nurse 2007) hapa-tu-hemer-a NEG-SM1PL-buy-FV 'we are not buying'

The use of *hapana* as a verbal negator has not spread to all contexts in Pogolo, and past and relative clause constructions make use of the original post-verbal

negator *ndili*. In relation to the NEC, this would suggest that Pogolo is a language of Type B-C –that is, a language where a marker originating from a negative existential has expanded into marking standard negation, albeit not in all contexts. However, such a conclusion is problematic, taking into account that *hapana* was introduced in the language as a negative answer word and is not used to mark negative existential predicates in Pogolo. Although the data are slim on this matter, it would seem that negative existentials instead are marked either with the construction *pi-hera* (i.e., similar to in neighboring Ndamba, for which see §5.2.1), or with standard negation (Hendle 1907). Taken together, this means that Pogolo is to be characterized as belonging to both Type A-B and Type B-C.

#### 7 Summary and conclusions

The expression of negation in Bantu languages is known to be prone to renewal. This also applies to negative existentials, which display considerable synchronic variation.

As accounted for in this study, a high percentage of Bantu languages apply standard negation strategies to affirmative existential constructions in order to express negative existentials. Within this type, a high degree of formal variation is attested due to variation in both the formation of affirmative existentials and the expression of standard negation in Bantu languages. Within the category of dedicated negative existentials, formally different constructions are also attested. Languages sharing a similar source for a dedicated marker are often scattered across the Bantu-speaking area. This is especially true for negative existentials recruiting inherently negative verbs, the other sources showing a more regional distribution. On the other hand, there are large areas consisting of more or less a continuum of language varieties which all belong to Type/Stage A. Taken together, this suggests that the functional domain of negative existence has been subject to constant renewal and innovation within the Bantu language family.

Still, the expansion of existential negators into the domain of standard verbal negation does not appear to be a common pathway of change among the Bantu languages. According to Veselinova (2016), the most frequent way a negative existential is recruited into expressing standard negation in her sample is through its use with nominalized verb forms. However, there are hardly any indications of negative existentials being used with nominalized verb forms in Bantu. As shown by Güldemann (1996, 1999), negation of nominalized forms of lexical verbs – typically assigned to noun class 15 – is instead recurrently achieved by use of post-initial negation markers (56), or inherently negative auxiliaries (57), negation strategies reserved for more marked propositions in Bantu (cf. §1 & §2).

- (56) Shangaji (P312, Devos fieldnotes) khaácu y' oo-sí-pwéch-ey-a váháali
  9.cashew 9.conn 15-neg-cleave-stat-inf 16-place
  'a cashew nut which is not broken anywhere'
- (57) Manda (N11, Bernander 2018: 659) ku-kótók-a kú-y-a wákápi
  15-NEG-INF 15-come-INF alone 'to not be alone'

This could serve as an explanation as to why negative existentials typically do not expand towards the domain of standard negation in the Bantu language family. Nevertheless, as discussed in §5.2.1, a regionally restricted set of languages does use a non-verbal construction for the expression of negative existence –that is, the figure is simply followed by a negative particle. Interestingly, the same negative particle is used in these languages for the negation of other types of non-verbal predication too, typically involving possessive or locational clauses but in some languages also prohibitives or infinitives. In Mbete, the existential negator *kali* is said to sometimes replace the standard post-verbal negative marker *ni* in infinitival clauses, as seen in (58).

(58) Mbete (B61, Adam 1954: 141)
 me hoyia kali
 PERS.1SG 15-know-INF NEG
 'not knowing [it]'

In §6.3, it was suggested that in some of these languages, existential negators like *kali* might have become exponents of standard negation through enrollment in a Jespersen Cycle. Whether the enrollment in a Jespersen Cycle involved the development of negative indefinite meanings is hard to tell.

However, that is exactly what appears to have happened in Lubumbashi Swahili, where the use of the Standard Swahili existential negator *hapana* 'there is not' as an obligatory exponent of double negation was prompted by its use as a proposition-external negation expressing 'no'.

Otherwise, intertwining between the negative existential cycle and the Jespersen Cycle appears to occur only rarely in Bantu languages. Instead, a Jespersen Cycle can sidetrack a potential Negative Existential Cycle by directly recruiting the same negative lexemes to strengthen standard negation. Kami can serve to illustrate this. As seen in (27), repeated here as (59a), negative existentials make use of the negative lexeme *bule* preceded by a locative prefix. The same lexeme, but without the locative marking, can be used to strengthen (standard) negation, as illustrated in (59b).

- (59) Kami (G36, Petzell & Aunio 2016, Petzell, p.c. 2016)
  - a. existential negation
     Sweden ha-bule tangawizi
     Sweden 16-NEG.EX 9/10.ginger
     'There is no ginger in Sweden.'
  - b. standard negation si-m-towile bule Faisal NEG.1SC-OM1-hit.PFV NEG Faisal 'I have NOT hit Faisal.'

In the end, the only clear cases of a negative existential marker becoming the standard negative marker occur in language varieties that have been heavily influenced by contact. At least two Swahili varieties and one language heavily influenced by Swahili use (a reduced form of) the external negator *hapana* 'no' derived from a comitative existential negator in Standard Swahili for the expression of standard negation.

Other types of usage expansion are attested, however. The first concerns the formal similarity between negation strategies used for negating existential, locational and possessive clauses, as well as, in some languages, all types of nonverbal predication. However, in the absence of a clear etymology for the negative marker in question, the direction of the usage expansion cannot be ascertained. A clear case of usage extension starting from the negative existential marker is attested in Ruwund. Its dedicated negative existential composed of an inherently negative verb and crucially also a locative subject marker has spread to other marked negation types, including prohibitives.

It should be kept in mind, however, that this study presents a first exploration of negative existentials in Bantu languages. Additional descriptive data, as well as in-depth studies of language-internal and language external (micro-) variation in the expression of negative existence, might disclose the etymologies of some negative existential strategies encountered in our sample and bring to light other dedicated negative existential strategies. Further research into Bantu negative existentials might even come to show that the NEC plays a more important role in negation renewal in Bantu languages than accounted for in this paper.

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## Abbreviations

1, 2, 3	noun classes 1, 2, 3 etc.	NEG	negation
CJ	conjunct form	ОМ	object marker
CONN	connective	PER	persistive
CONT	continuous	PERS	personal pronoun
СОР	copula	PFV	perfective
DEM	demonstrative	PL	plural
DRC	Democratic Republic of	POSS	possessive
	the Congo	PRF	perfect
EX	existential	PREP	preposition
FUT	future	PROH	prohibitive
FV	final vowel	PRS	present
HAB	habitual	PST	past
IMP	imperative	REF CD	referential concord
INF	infinitive	REL	relative
INTER	interrogative	SBJV	subjunctive
IPFV	imperfective	SM	subject marker
LOC	locative	STAT	stative
META	metalinguistic	TAG	tag particle
NAR	narrative	TUKI	Taasisi ya Uchunguzi wa
NEC	Negative Existential		Kiswahili (Institute of
	Cycle		Kiswahili Research)

# Appendix A The data set for Bantu negative existentials

	#, -	The number sign <#> and the hyphen <-> differentiate free-standin
		negatives from negative affixes.
	СОР	Copula
	EXIST	(Affirmative) existential (whether dedicated or non-dedicated)
Key to the table	LOC	Locative element
	SN	Standard verbal negation, which here refers to both primary and
		secondary negative marking (as both negate verbs)
	$sn_{1/2}$	Marks the various negators of a discontinuous negation strategy (i.
		a reflex of stage II of Jespersen Cycle).

The Guthrie numbers for referential classification of the Bantu languages are taken from Maho's (2009) updated list.

* <i>itid</i> 'not to be, not to exist' (infl. in PRF) 'not be' 'not be' + $s_{N_2}$ A had be' 1) 'not be' + $s_{N_2}$ 2) $t_{\mathcal{E}} + s_{N_2}$ 3) ? - A had be' (not one' - 1) had be'	Name	ISO	Guthrie	Construction	Etymology	Stage	Other meanings	Source(s)
ksf A53 -yin to exist (init. in PRF) to even A72(a) sikig in the '+ sN2 A mode to B(?) and A74a 1) -sikik 1) 'not be' + sN2 A mode to B(?) and B11 b sn-Exist 2) $te + sN2$ A-B mode and B11 b sn-Exist 2) $te + sN2$ A-B mode and B11 b sn-Exist 2) $te + sN2$ A-B mode to B(?) tsv B31 sn-Exist 2) te hange to B(?) A mode and B51 $\# v$ ? - A mode and B52 sn_1-Exist sn2 - A mode to B(?) and B52 sn_1-Exist sn2 - A mode to B(?) and B51 $\# v$ ? - A mode to B(?) and B51 $\# v$ ? - A-B mode to B(?) and B51 $\# v$ ? - A-B mode to B(?) and B51 $\# v$ ? - A-B mode to B(?) and B51 $\# v$ ? - A-B mode to B(?) and B51 $\# v$ ? - A-B mode to B(?) and B51 $\# v$ ? - A-B mode to B(?) and B51 $\# v$ ? - A-B mode to B(?) and B51 $\# v$ ? - A-B mode to B(?) and B51 $\# v$ ? - A-B mode to B(?) and B51 $\# v$ ? - A-B mode to B(?) and B52 $\sin^1 \pm \sin^2 1$ and B53 $\sin^2 2$ and B54 $\sin^2 2$ and	Duala	code dua	code A24	tìti	<i>*tità</i> 'not to be, not	change to B(?)	(when noted) neg. locational	Ittmann (1939),
eto A71 SN-EXIST - A ewo A72(a) sikig 'not be' + SN <sub>2</sub> A bum A74a 1) -sékik 1) 'not be' + SN <sub>2</sub> A-B 2) $teke 2$ $te + SN_2$ A-B 2) $teke 2$ $te + SN_2$ A-B (mye) B11b SN-EXIST - A koq B25 $hidéká$ 'not one' change to B(?) tsv B31 SN-EXIST - A dma B51 $\pm v$ ? - A mdt B61 kali NEG+'be'(?) change to B(?) mdd B63 1) $ng'i$ 1) ? 1) B mdd B63 1) $ng'i$ 1) ? 2) change to B(?) el ngz B72(a) 1) $sN_1$ $\pm$ EXIST 1) - 1) A 2) $trone'$ 2) $t^2$ and b $trone'$ 2) $t^2$ $trone'$ 2)	Bafia	ksf	A53	-yin	to exist' (infl. in PRF) 'not be'	change to B(?)	neg. locational	lttmann (1976) Guarisma Pupineau (1992)
evo A72(a) sákig 'not be' + sN <sub>2</sub> A-B bum A74a 1) -sékik 1) 'not be' + sN <sub>2</sub> A-B 2) $teke 2$ ) $te + sN_2$ A-B 3) $s\dot{a}$ 3) ? (mye) B11b sN-EXIST - A koq B25 $hidék\dot{a}$ 'not one' change to B(?) tsv B31 sN-EXIST - A dma B51 $\pm v$ ? - A mdt B61 kali NEG+'be'(?) change to B(?) mdd B63 1) $ng'i$ 1) ? ndd B63 1) $ng'i$ 1) ? and B63 1) $ng'i$ 1) ? mdd B63 1) $ng'i$ 1) ? $rel ngz$ B72(a) 1) $sN_1 \pm EXIST 1) -$ 2) fonne' 2) ? none' 2) ? (none' 2) $fange to B(?)$	Eton	eto	A71	SN-EXIST	I	А		van de Velde (2008)
burn A74a 1) - <i>sékik</i> 1) 'not be' + sn <sub>2</sub> A-B 2) $teke$ 2) $te + sn_2$ A-B 2) $teke$ 2) $te + sn_2$ (mye) B11b sn-exist - A koq B25 $hideka$ 'not one' change to B(?) tsv B31 sn-exist - A dma B51 $\pm v$ ? - A dma B52 $sn_1$ -exist N2 - A indt B61 $kali$ 'nef+'be'(?) change to B(?) mdd B63 1) $ng'i$ 1) ? 1) B mdd B63 1) $ng'i$ 1) ? 2) change to B(?) $rel ngz$ B72(a) 1) $sn_1 \pm exist$ 1) - 1) A $sn_2$ 2) $nne'$ 2) 'none' 2) B	Ewondo	ewo	A72(a)	sákig	'not be' $+ sN_2$	А		Essono (1993)
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Bulu	pum	A74a	1) -sékik	1) 'not be' + $SN_2$	A~B	1) -sé neg. copula used for loc	Alexandre (1966)
(mye) B11b sN-EXIST $-$ A keq B25 $iideka$ 'not one' A tsv B31 sN-EXIST $-$ A dma B51 $\pm v$ ? $-$ A dmage to B(?) = mdt B61 $\pm v$ ? $-$ Change to B(?) mdt B61 $kali$ NEG+'be'(?) change to B(?) mdt B63 1) ng'i 1) ? $-$ A-B mdd B63 1) ng'i 1) ? (?) change to B(?) el ngz B72(a) 1) sN_1 \pm EXIST 1) - (?) 2) change to B(?)				2) <i>teke</i>	$2) t\varepsilon + SN_2$		ex., poss., qualification	
(mye) B11b sn-EXIST - A koq B25 $ideka$ 'not one' A tsv B31 sn-EXIST - A dma B51 $\pm v$ ? - A dma B51 $\pm v$ ? - A mdt B61 $kali$ 'not one' change to B(?) - A-B mdt B61 $kali$ 'not one' interesting to B(?) mdt B63 1) $ng'i$ 1)? - A-B mdd B63 1) $ng'i$ 1)? (2) $hange to B(?)$ mdd B63 1) $ng'i$ 1)? (2) $hange to B(?)$ md B63 1) $ng'i$ 1)? (3) $hange to B(?)$ rel ngz B72(a) 1) $sn_1 \pm EXIST$ 1) - 1) A sn_2 $2)$ of none' 2)? (3) hange to B(?)				nele	: (c		z) neg. mu; promotive, neg	
(mye) B11b sN-EXIST – A koq B25 $i\dot{n}\dot{d}\dot{e}\dot{k}\dot{a}$ 'not one' Ange to B(?) tsv B31 sN-EXIST – A dma B51 $\#$ $v$ ? – A dma B51 $\#$ $v$ ? – A mut B61 $kali$ NEG+'be'(?) change to B(?) mut B63 1) $ng'i$ 1)? – A-B mud B63 1) $ng'i$ 1)? (?) (?) $nB$ to B(?) el ngz B72(a) 1) $sn_1$ $\#$ EXIST 1) – 1) $A$							conditional, 'without'	
(mye) B11b sN-EXIST - A keq B25 $idek\dot{a}$ 'not one' change to B(?) tsv B31 sN-EXIST - A dma B51 $\# v$ ? - A much B52 $sN_1$ -EXIST $sN_2$ - Change to B(?) ndt B61 kali NEG+'be'(?) change to B(?) mmd B63 1) $ng'i$ 1)? 1) B nmd B63 1) $ng'i$ 1)? 2) change to B(?) el ngz B72(a) 1) $sN_1$ # EXIST 1) - 1) A $sN_2$ 2) oniana 2)? 2) 'none' 2) B							3) neg. identification,	
(mye) B11b sN-EXIST - A koq B25 $n\dot{d}\dot{e}\dot{k}\dot{a}$ 'not one' change to B(?) tsv B31 sN-EXIST - A dma B51 # $v$ ? - change to B(?) mzb B52 sN <sub>1</sub> -EXIST SN <sub>2</sub> - change to B(?) mdt B61 kali NEG+'be'(?) change to B(?) nmd B63 1) $ng'i$ 1) ? 1) B nmd B63 1) $ng'i$ 1) ? 2) change to B(?) el ngz B72(a) 1) SN <sub>1</sub> # EXIST 1) - 1) A sN <sub>2</sub> 2) ônone' 2) ?							subsecutive clause	
koq B25 $\dot{n}\dot{d}\dot{e}\dot{k}\dot{a}$ 'not one' change to B(?) tsv B31 sn-ExIsr – A dma B51 # $\nu$ ? – Change to B(?) mzb B52 sn <sub>1</sub> -EXIST sn <sub>2</sub> – change to B(?) mdt B61 kali NEG+'be'(?) change to B(?) mmd B63 1) ng'i 1) ? 1) B mmd B63 1) sn <sub>1</sub> # EXIST 1) – 1) A vel ngz B72(a) 1) sn <sub>1</sub> # EXIST 1) – 1) A $2^{0}n_{N-ME}$ 2) 'none' 2) B	Orongu	(mye)	B11b	SN-EXIST	I	А		Ambouroue (2007)
tsv B31 sn-EXIST – A dma B51 # $v$ ? – A mut B51 # $v$ ? – Change to B(?) mut B61 kali NEG+'be'(?) change to B(?) mud B63 1) ng'i 1) ? 1) B mud B63 1) ng'i 1) ? 2) change to B(?) vel ngz B72(a) 1) sn_1 # EXIST 1) – 1) A sn_2 2) onee' 2) B	Kota	koq	B25	ndéká	'not one'	change to B(?)		Piron (1990)
dma B51 # $v$ ? - change to B(?) inzb B52 $sn_1$ -EXIST $sn_2$ - A-B mdt B61 kali $NEG+$ 'be'(?) change to B(?) mmd B63 1) $ng$ 'i 1) ? 1) B mmd B63 1) $ng$ 'i 1) ? 2) change to B(?) vel ngz B72(a) 1) $sn_1$ # EXIST 1) - 1) A $sn_2$ 2) 'none' 2) B	Tsogo	tsv	B31	SN-EXIST	I	А		Marchal-Nasse (1979)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Duma	dma	B51	in #	I	change to B(?)	neg. locational;	Adam (1954)
nzb         B52 $sN_1$ -EXIST $sN_2$ -         A-B           mdt         B61         kali         NEG+'be'(?)         change to B(?)           nmd         B63         1) $ng'i$ 1) ?         1) B           nmd         B63         1) $ng'i$ 1) ?         1) B           ngz         B72(a)         1) $sN_1$ # EXIST         1) -         1) A           ngz         B72(a)         1) $sN_1$ # EXIST         1) -         1) A							possessives; NEG2 of	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$							discont. sN	
mdt         B61         kali         NEG+'be'(?)         change to B(?)           nmd         B63         1) $ng'i$ 1) ?         1) B           nmd         B63         1) $ng'i$ 1) ?         1) B           ngz         B72(a)         1) $sn_1$ # EXIST         1) -         1) A           ngz         B72(a)         1) $sn_1$ # EXIST         1) -         1) A $2)$ on $n_2$ we choose         2) 'none'         2) B         2) $n_2$ we choose	Nzebi	nzb	B52	SN <sub>1</sub> -EXIST SN <sub>2</sub>	I	A~B	NEG2 of discont. SN	Marchal-Nasse (1987)
mmd B63 1) $ng'i$ 1) ? 1) B $2) \ of name = 2) ? 2) ? 2) \ change to B(?) = 1) Sn_1 \pm EXIST 1) - 1) A ngz = B72(a) 1) Sn_1 \pm EXIST 1) - 1) A2) \ nn - ns 2) \ (none' 2) B$	Mbete	mdt	B61	kali	NEG+'be'(?)	change to B(?)	neg. locational; infinitives;	Adam (1954)
mnd B63 1) $ng'i$ 1) ? 1) B 2) $n\tilde{n}ana$ 2) ? 2) change to B(?) ngz B72(a) 1) $s_{N_1} # EXIST$ 1) – 1) A $s_{N_2}$ 2) change to B(?) 2) $n_{N_2-M_2}$ 2) 'none' 2) B							possessives; indet. attributives; 'no'	
2) $\hat{onana}$ 2)? 2) change to B(?) ngz B72(a) 1) $s_{N_1} # exist 1$ - 1) A $s_{N_2}$ 2) 'none' 2) B 2) $n_{Verver}$	Nduumo	pmu	B63	1) $ng'i$	1)?	1) B	1) NEG2 of discont. SN; neg.	Adam (1954)
ngz B72(a) 1) SN <sub>1</sub> # EXIST 1) – 1) A SN <sub>2</sub> 2) 'none' 2) B 2) $n_{12}$ - $u_{2}$				2) oñana	2) ?	2) change to B(?)	locational; possessives	
$s_{N_2}$ 2) 'none' 2) $n_{NE} - mE$	Engungwel	ngz	B72(a)	1) $SN_1 \# EXIST$	1) -	1) A	2) NEG2 of discont. SN?	Raharimanantsoa (p.c.)
2) Anne-Me				$SN_2$	2) 'none'	2) B		
				2) <i>руе~ we</i>				

Table 1: The data set for Bantu negative existentials

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Name	ISO	Guthrie	Construction	Etymology	Stage	Other meanings	Source(s)
Iyaa	iyx	B73c	pé	'none'(?)	change to B(?)	NEG2 of discont. sn; neg. locational; prohibitive	Mouandza (2001)
Teke-Tyee tyx	tyx	B73d	1) $SN_1 \# EXIST SN_2$ 2) $w\epsilon$	1) -SN <sub>2</sub> 2) 'none'	1) A 2) B		Raharimanantsoa (p.c.)
Teke-Eboo	ebo	B74B	1) $SN_1 \# EXIST SN_2$ 2) $w\varepsilon$	1) - 2) 'none'	1) A 2) change to B(?)		Raharimanantsoa (p.c.)
Tiene	Ξ	B81	1) SN-EXIST 2) <i>wε</i>	1) – 2) 'none'(?)	1) A 2) change to B(?)		Ellington (1977)
Dzing	diz	B86	ati	~	B~C	neg. possessives; neg. plain locational; attributives; infinitives; reinforce standard negation	Mertens (1938)
Mboshi	mdw	C25	NS #		A	)	Amboulou (1998)
Lingala Mtombo	lin t	C30B	EXIST # SN	- •••• ho?	A		Maniacky (p.c.)
Tetela	tll	C71	kěma	not, none'	A	neg, possessives; neg alain locational	Jacobs (1964)
Ombo	oml	C76	1) SN-EXIST 2) LOC-áfa	1) – 2) 'not be'	A~B	neg. identification; 'no'	Meeussen (1952)
Bushong	buf	C83	kwa	ż	change to B(?)		Vansina (1959)
Holoholo	hoo	D28	SN-EXIST (?)	I	change to B(?)		Coupez (1955)
3udu	pnn	D332	SN-EXIST	I	А		Asangama (1983)
Kikuyu	kik	E51	SN-EXIST	I	Α		Englebretson & Wa-Ngatho (2015),
Kamba	kam	E55	SN-EXIST	I	A		Grégoire (1975) Whiteley & Muli (1962)
Gweno	gwe	E65	SN-EXIST	I	А	I	Philippson & Nurse (2000)

Name	ISO	Guthrie	Construction	Etymology	Stage	Other meanings	Source(s)
Digo	dig	E73	SN-EXIST	1	A	I	Nicolle (2013)
Bende	dpq	F12	1) LOC-tuhú 2) LOC-(a)bhulá	1) 'only, empty, in vain' 2) 'lack'	В	۰.	Y. Abe (p.c.)
Nyamwezi	unu	F22	гос- <i>dvhv</i>	'only, empty, in vain'	В	'no, nobody, nothing'	Maganga &
							Schadeberg (1992),
	,						P. Kanijo (p.c.)
Rangi	lag	F33	SN-EXIST	I	А		Gibson (2012), Dunham (2005)
Mbugwe	mgz	F34	SN-EXIST	1	Α		Gibson & Wilhelmsen (2015)
Gogo	gog	G11	LOC-si-na	'be without' (neg comitative)	В	'no'	Cordell (1941)
Kagulu	kki	G12	100- <i>ichaka</i>	'lack, be without'	В		Petzell (2008)
Luguru	ruf	G35	roc-duhu	only, empty, in vain'	change to B(?)		G. Moses (p.c.)
Kami	kcu	G36	roc- <i>bule</i>	nothing at all, not	р Э	neg. possessive	Petzell & Aunio (2016),
				yet'(?); < Sw. bure 'for free, in vain'		4 1	Petzell (p.c.)
Kisetla	sta	G40C	SN-EXIST	I	С	SN	Vitale (1980)
(Swahili pidgin)							
Lubumbashi Swahili	SWC	G40F	SN-EXIST	1	C	postverbal emphatic negator	Schicho (1992)
Bunia Swahili	SWC	G40x	SN-EXIST	I	C	SN	Nassenstein (p.c.)
(Standard) Swahili	$^{\mathrm{swh}}$	G42	SN-EXIST	I	А	'no,	Marten (2013)
Pogolo	poj	G51	1) LOC- <i>hera</i>	1) 'in vain, for nothing'	1) A~B		Nurse (2007),
			2) hapana	2) Sw. borrowing(?)	2) B~C		Hendle (1907)
Ndamba	ipu	G52	LOC hela	ʻjust, any'	В	neg. possessive	Novotná (2005),
							Edelsten & Lijongwa (2010)
Hehe	heh	G62	LOC-gaya	'lack'	В		Velten (1899),
							L. Ngwasi (p.c.)

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Name	ISO	Guthrie	Construction	Etymology	Stage	Other meanings	Source(s)
Bena	bez	G63	1) SN-EXIST	1) -	A~B	2) neg. possessive	Morrison (2011).
			2) LOC-gaya 3) LOC-zila	2) 'lack' 3) 'refuse'			Eaton (2015a)
Pangwa	pbr	G64	SN-EXIST	1	А		Stirnimann (1983)
Kinga	zga	G65	1) SN-EXIST	1)	A~B		Wolff (1905),
Vwanji	wbi	G66	2) LOC- <i>vela</i> 1) SN-EXIST 2) LOC- <i>sili</i>	<ul> <li>2) 'be without, not be in possession of'</li> <li>1) -</li> <li>2) (&lt; *-gid- 'refuse'?)</li> </ul>	A~B	neg possessive; neg relative, <sup>'</sup> w/	Eaton (p.c.) Eaton (p.c.)
Kisi	kiz	G67	EXIST # SN	I	Α	o' (conj.)	Ngonyani (2011)
Beembe	bed	H11 II1 /	# pe	1 -	B? Å P	neg. locational	Nsayi (1984)
South-East Kongo	кол	H16n	1) SN <sub>1</sub> # EXIST # SN <sub>2</sub> 2) <i>nkatu</i>	1) – 2) 'emptiness, uselessness, zero, desolation, void, blank, vacancy, noughť	A~B		Bentley (1887)
Kinyarwanda	kin	JD61	ntaa	'be not' (*< $cop ni$	change to B(?)	"exclusive marker"	Kimenyi (1980)
Luganda	lug	JE15	SN-EXIST	+ NEG -1 <i>a-</i> ) -	A		Ashton et al. (1954)
Lusoga	gox	JE16	1) LOC-zila 2) mpagho	1) 'reject as a result of anger'; 'not have' 2) ?	change to B(?)		Nabirye (p.c.)
Jita	jit	JE25	SN-EXIST	` I	А		J. Malima (p.c.)
Ikizu	ikz	JE402	SN-EXIST	1	А		Gray (2013)
Gusii	guz	JE42	SN-EXIST	1	А		Whiteley (1956)
Ikoma-Nata I wena/I wala	ntk Ine	JE45 K14	SN-EXIST SN-LOC-evi	- , not he,	A change to B(2)		A. Laine (p.c.) Horton (1949)
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Name	ISO	Guthrie	Construction	Etymology	Stage	Other meanings	Source(s)
Kwangali	kwn	K33	1) SN-EXIST 2) LOC- <i>tubu</i>	1) - 2) 'empty'	A~B	neg. possessive	Dammann (1957)
Holu	hoo	L12b	LOC-eesi	, not be	change to B(?)	neg. locational	Daeleman (2003)
Luba	lub	L33	1) SN-EXIST	1) –	A~B	neg. locational	Beckett (1951),
			2) LOC-tu(pu)	2) 'empty'			van Avermaet & Mbuya (1954)
			3) <i>fwa</i> -roc	3) 'die'			
Sanga	sng	L35	1) $SN_1$ -EXIST # $(SN_2)$	1) –	A~B	neg. locational	Hadelin (1938),
			2) LOC-tú(pú) 3) <i>fwa</i> -LOC	2) 'empty' 3) 'die'			Coupez (1981)
Kaonde	kqn	L41	fwa-LOC	ʻdie'	В		Broughall Woods (1924), Foster (1960)
Lunda	lun	L52	LOC-0Si	¢.	В		Kawasha (2003)
Ruwund	rnd	L53	1) SN	1) –	A~B		Nash (1992)
			2) LOC- <i>iikil(inga</i> )	2) ?			
Fipa	fip	M13	SN-EXIST	1	А		Struck (1911)
Malila	mqc	M24	SN-EXIST	I	А		Eaton (2015b)
Ndali	hdh	M301	SN-EXIST	I	А		Botne (2008)
Nyakyusa	nyy	M31	SN-EXIST	I	А		Persohn (2017)
Lamba	lab	M54	SN-EXIST	I	А		Doke (1938)
Tonga	toi	M64	LOC-nyina	'be w.o.'	В		Collins (1962)
Manda	mgs	N11	1) SN	1) -	A~B	neg. poss.	Bernander (2017)
			2) LOC/CL7-waka	2) 'empty, just'			
Ngoni (Tz.)	ngo	N12	LOC-waka	'empty, just'	В	'no'(?); neg. possessive	Spiss (1904), Ngonyani
							(2003),
							Mapunda (p.c.)

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Name	ISO	Guthrie	Construction	Etymology	Stage	Other meanings	Source(s)
Ngoni (Moz.)	no code	N12x	1) naku(va) 2) njêta	1) sn-inf-'be' ?	1) B~C 2) A~B	<ol> <li>external negation of main predication with fully inflected</li> </ol>	Kröger (2011, n. d.)
						main verb; contrastive meaning; negative rhetoric question	
Matengo	mgv	N13	EXIST # SN	I	А	e J	Yoneda (2000, p.c.)
Tumbuka	tum	N21	loc-cop-je	'be ?'	В		Kiso (2012), Vail (1972)
Nyanja-	nya	N31	loc-cop-be	'be still'(?)	В		Bentley & Kulemeka (2001),
Chewa							Kiso (2012), Gregoire (1975)
Nsenga	nse	N41	LOC-COP- <i>ye/-ve</i>	'be without'	В		Ranger (1928)
Nyungwe	nyu	N43	loc-cop-be	'be ?'	change to B(?)		Grégoire (1975)
Ndengeleko	ndg	P11	ιoc- <i>tύρύ</i>	'empty'	В	neg. possessive	Ström (2013)
Matumbi	mgw	P13	ntvpó~ndvpó	Loc18-'empty'	В	,no,	Krumm (1912), Odden (1996)
Ngindo	buu	P14	10c-duhu	'empty'	change to B(?)		Gromova & Urmanchieva
							(2005)
Yao	yao	P21	SN-EXIST	I	А		Sanderson (1922),
							Whiteley (1966)
Makonde	kde	P23	SN-EXIST	I	А		Leach (2010), Kraal (2005)
Makwe	ymk	P231	SN-EXIST	I	А		Devos (2008)
Makhuwa	vmw	P31	SN-EXIST	I	А		van der Wal (2009),
							Katupha (1991)
Shangaji	nte	P312	SN-EXIST	1	А		Devos field notes)
Manyika	mxc	S13	SN-EXIST		А		Stevick & Machiwana (1960)
Xhosa	xho	S41	SN-EXIST		A~B		Ström (p.c.)
Zulu	zul	S42	SN-EXIST		А		Grout (1859)
Thswaa	tsc	S51	SN-EXIST		A		Gadelii (1998)

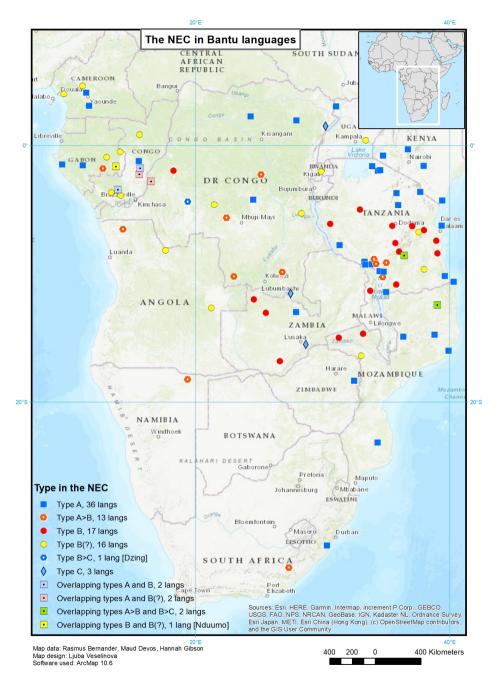


Figure 2: NEC in Bantu

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