## Chapter 14

# Proto-Bantu existential locational construction(s)

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This chapter proposes a Proto-Bantu reconstruction of existential constructions based on a convenience sample of 180 Bantu languages, which points towards "existential locationals" (ELs) as a suitable base for comparison. ELs include inverselocational predications as well as expressions of generic existence. We develop a detailed typology of ELs through a careful examination of the morphosyntactic variation which their building blocks display across Bantu. This typology clearly singles out two types of ELs with high frequencies and Bantu-wide distributions, which are reconstructable to at least node 5 in the phylogenetic tree of the Bantu family of Grollemund et al. (2015). Both display locative subject markers and "figure inversion" in relation to plain locational constructions. The difference between the main types lies in the selection of the copula: either a locative or a comitative one. North-Western and Central-Western Bantu languages show few reflexes of the suggested reconstructions. Instead, they often have non-inverted ELs which are cross-linguistically uncommon or, less frequently, ELs involving expletive inversion. The non-dedicated EL can be considered a retention of the original structure or a (contact-induced) innovation. Our preference goes to the second hypothesis assuming that a severe reduction of (locative) noun classes and ensuing (locative) agreement triggered a more rigid word order and consequently non-inverted ELs or inverted expletive ELs exempt of locative marking.

## 1 Introduction

#### 1.1 On existential locationals and related notions in Bantu languages

Existential sentences or in short existentials have been defined as "specialized or non-canonical constructions which express a proposition about the existence or



Maud Devos & Rasmus Bernander. 2022. Proto-Bantu existential locational construction(s). In Koen Bostoen, Gilles-Maurice de Schryver, Rozenn Guérois & Sara Pacchiarotti (eds.), *On reconstructing Proto-Bantu grammar*, 581–666. Berlin: Language Science Press. DOI: 10.5281/zenodo.7575841 the presence of someone or something" (McNally 2011: 1830, see also Bentley et al. 2013: 1). Existence is part of the semantic space LOCATION-EXISTENCE-POSSESSION (Lyons 1967) of which the English examples in (1) are typical instances.

- (1) "Test sentences" for semantic space LOCATION-EXISTENCE-POSSESSION (Koch 2012: 545)
  - a. The boy has a book.
  - b. The book is on the table.
  - c. There is a book on the table.
  - d. There are many lions in Africa.
  - e. There are many unhappy people.

Whereas (1a) and (1b) are clear instances of respectively possession and location, there is some variation in the way the remaining three sentences are conceptualised. Although all three sentences are commonly designated as "existentials", many authors consider only (1d) and (1e) as expressions of existence (e.g. Lyons 1967; Hengeveld 1992; Koch 2012). Conversely, sentences like (1c), in which the ground is an obligatory part of the predication, are characterised as "locational". Koch (2012) distinguishes between (1b) and (1c) in information-structural terms. He considers (1b) as an instance of "thematic location", because the located figure is the theme of the predication. In (1c), however, the pragmatic roles are inverted: the located figure is the rheme and the predication is characterised as expressing "rhematic location". Creissels (2019c) rather uses the term "inverselocational" predication for (1c) as opposed to "plain locational" predication for (1b) to reflect a change in perspectivisation: in (1c) the ground rather than the figure constitutes the perspectival centre. As for existentials proper, Koch (2012) makes a distinction between "bounded existence" (1d) and "generic existence" (1e). The latter is characterised by the absence of a nominal ground, whereas the former includes a nominal ground which specifies the locative context in which the statement of existence holds (Koch 2012: 538). In expressions of bounded existence, the relation between the figure and the ground is of a habitual rather than of a temporary and accidental nature, as in (1c) (Czinglar 2002). Koch (2012) thus argues for a threefold distinction between thematic location, rhematic location and existence (including both bounded and generic subtypes). Still, on the basis of a 19-language sample with a bias towards Africa and Europe, he concludes that languages tend to reduce this conceptual diversity. Most languages display a constructional split between expressions of thematic location on the one hand and expressions of rhematic location and existence on the other hand.

A few languages have one construction type for expressions of location (whether thematic or rhematic) and another one for expressions of existence. In-between are those languages that cover the domain of location and existence by a single construction.

We originally framed our research in Creissels' (2019c) typology of inverselocational predication and were thus particularly interested in those locational predications which involve an alternative way of encoding the prototypical figureground relationship, i.e. the ground rather than the figure is the perspectival centre. However, it quickly became clear that examples including a nominal ground were not always available. We therefore decided to include expressions of generic existence and also presentational clefts (Lambrecht 1988; 2001) or other presentationals (Gast & Haas 2011) which are used to "call the attention of an addressee to the hitherto unnoticed presence of some person or thing in the speech setting" (Lambrecht 1994: 39) and constitute a common extension of inverse-locational predication (Creissels 2019a). They are typically found at the beginning of a story and are thus easily retrievable. Nyamwezi F22 is one of the few languages for which we have examples of a plain/thematic locational (2a), an inverse/rhematic locational (2b), a bounded existential (2c), a generic existential (2d) and a presentational presentative (2e).

- (2) Nyamwezi F22 (Maganga & Schadeberg 1992: 212, 200, 116, 209, 199)
  - a. plain/thematic location (cf. 1b)
     *v*-*m*-zó!gá gweén' výgo suúmvwá gý-βi *m*-kaayá
     AUG-3-pot 3.same 3.DEMII ought SM3-be.SBJV 18-9.house
     'that pot ought to be in the house'
  - b. inverse/rhematic location *aa-lɪ=mo mḿnh' vív-ŋw-iilaálé* SM1-COP=LOC18 1.person AUG-18-farm 'there is a person on the farm'
  - c. bounded existence (cf. 1d) *m-bv-holáanzi zi-lí=mó* nóómbe niingí 18-14-Holland sM10-COP=LOC18 10.cattle 10.many 'there are many cows in Holland'
  - d. generic existence (cf. 1e) zi-lí=hó ηhaangála jáá-mbík' iiβílí sM10-COP=LOC16 10.maize\_beer 10.CONN-10.type 10.two 'there are two types of kangala (maize beer)'

e. presentational presentative<sup>1</sup>
 βáa-li βá-lí=hó βáánhw' aaβo βa-ka-lim' iilaále
 sm2.REM-COP SM2-COP=LOC16 2.people 2.DEMII SM2-NARR-farm 5.farm
 'there once were some people who cultivated a farm'

Nyamwezi has a single construction for the expression of what Koch (2012: 591) tentatively refers to as "existential location", i.e. the semantic space involving expressions of inverse/rhematic location and existence. Moreover, the presentative (2e) shares the same construction.<sup>2</sup> In contrast to plain/thematic locationals this shared existential-presentational construction is characterised by a change in word order and "double" agreement on the verb. In (2b–2d) the figure follows the verb which displays double agreement: its subject marker agrees with the figure as in (2a) but it also takes a locative enclitic which agrees with the nominal ground in (2b–2c). The locative enclitic is also present in the absence of a nominal ground (2d–2e). In the latter case it can be interpreted as an exophoric agreement marker referring to an implicit ground or as a non-referential expletive marker. As will be discussed in §2.3, the distinction is not always an easy one to make.

We gathered data from 180 Bantu languages. Table 1 shows for how many languages we found three, two or only one (conceptual) type of locational/existential expression. As we only encountered five clear examples of bounded existence, we will not consider this existential subtype in our chapter. Intuitively, we expect expressions of bounded existence to pattern with expressions of inverse/rhematic location and probably also generic existence, as is the case in Nyamwezi (2b–2d). However, cross-linguistic data show that this should not be taken for granted. Somali, for example, uses *yaall* 'be' in expressions of (plain/thematic and inverse/rhematic) location, but expressions of bounded and generic existence involve *jiri* 'exist' (Koch 2012: 540, 542). Liko D201 also seems to make a distinction between locationals and existentials. Present tense "inverse locationals"/"plain locationals" select a suppletive form of the verb *ik* 'be' which is identical to the subject prefixes (de Wit 2015: 395). In generic existentials as well as expressions of bounded existence, the 'insistive' enclitic *=tv* is obligatorily added to this suppletive form. See the examples in (3).

<sup>&</sup>lt;sup>1</sup>Note that we use the term "presentative" to refer to a speech event, whereas "presentational" refers to the construction used to encode a presentative utterance (see also Gast & Haas 2011: 1). In the same vein, "location" and "existence" are conceptual notions, whereas "locational" and "existential" refer to their respective encoding constructions (or predications).

<sup>&</sup>lt;sup>2</sup>The complex verb construction serves to set the story in the remote past.

- (3) Liko D201 (André Ndagba, p.c.)
  - a. inverse location *bo-miki ba ka ndabv*2-child sM3PL:be PREP 9.house
    'there are children in the house/the children are in the house'
  - b. bounded existence *bo-kpwingi ba=tv* ka Afilika
    2-lion SM3PL:be=INS PREP Africa
    'there are lions in Africa'
  - c. generic existence ma-kpvmvka ma-pvpv a=tv
    6-thing 6-strong sM3sG:be=INS
    'there are problems'

Further research is needed to determine whether more instances of split lexicalisations or other divergences between locationals and existentials occur in Bantu languages. Some preliminary findings are presented in §1.2.

Table 1: Quantification of conceptual types of existential expressions in our sample of 180 Bantu languages

Conceptual type(s) of existential expression(s)	number of languages	%
inverse/rhematic location & generic existence & presentative	24	13%
inverse/rhematic location & generic existence (only)	22	12%
inverse/rhematic location & presentative (only)	21	12%
generic existence & presentative (only)	2	1%
inverse/rhematic location (only)	76	42%
generic existence (only)	12	7%
presentative (only)	19	11%
negatives (only)	4	2%
	180	100%

#### 1.2 Inverse location and generic existence

Languages for which we have examples of inverse/rhematic location and generic existence tend to be like Nyamwezi in that they use a single construction for both. In comparison to plain/thematic locationals this shared construction is either non-canonical (4b-4c), dedicated (2b-2d) or identical (5a-5b). Non-canonical constructions differ only in word order from the plain/thematic locational construction. In (4a) the figure functions as the subject and occurs in preverbal position. This order is inverted in inverse/rhematic locationals (4b) and existentials (4c), but the postverbal figure still functions as the subject triggering subject agreement on the copula. inverse locationals and existentials thus have a noncanonical (VS instead of SV) word order - see also Bearth (2003) and van der Wal (2015) on basic/default or canonical word order in Bantu. Bantu languages are known to have flexible word order (van der Wal 2015: 19) and subject inversion is not restricted to expressions of inverse/rhematic location or generic existence (Marten & van der Wal 2014). We therefore do not consider the Swahili G42d inverse/rhematic locational (4b) or existential (4c) as dedicated (see §2.5.1 for further elaboration on the different existential constructions in Swahili) and we use the term non-canonical instead. However, the Nyamwezi examples in (2b-2d) are dedicated to the expression of inverse location and existence because they include locative morphology absent in the plain/thematic locational (2a).<sup>3</sup> As will be discussed in §2.4 dedicated constructions are often characterised by the presence of a(n additional) locative proform. Finally, Lingala C30B in (5) is an example of what Koch (2012) refers to as a radical "generic location" language: there is no formal difference whatsoever between expressions of plain/thematic location and expressions of inverse/rhematic location (5a) or generic existence (5b).

- (4) Swahili G42d (Marten 2013: 61 for (4c), Bernander et al. Forthcoming(a) for (4a) and (4b))
  - a. *ki-tabu ki-po meza=ni* 7-book sM7-COP 9.table=LOC 'the book is on the table'
  - b. *meza=ni* ki-po ki-tabu 9.table=LOC SM7-COP 7-book 'there is a book on the table'

<sup>&</sup>lt;sup>3</sup>Note that the selection of  $\beta i$  'be', rather than li 'be', in the plain/thematic locational should be ascribed to the fact that li is a defective verb which cannot be used in the subjunctive mood (see also §2.2).

- c. wa-po pia wa-chunguzi binafsi sм2-сор also 2-investigator private 'there are also private investigators'
- (5) Lingala C30B (Michael Meeuwis, p.c.)
  - a. búku e-zal-í na mésá book sm.3sg.INAM-COP-PRS on 9.table
    'the book is on the table/there is a book on the table'
  - b. *bi-lamba pé e-zal-í*8-clothes also SM.3SG.INAM-COP-PRS
    'are there also clothes?'

In sum, even if additional data are certainly needed, Bantu languages can be said to show a tendency for joint constructionalisation of inverse/rhematic location and generic existence. We will refer to these shared constructions as "existential locationals" (ELs) (cf. Koch 2012: 591) but will continue to make a distinction between (rhematic/) "inverse locationals" (ILs) and "generic existentials" (GEs) where needed.

Still, some languages diverge between ILs and GEs in terms of agreement pattern and/or predicate. In Beo C45A, for example, GEs are characterised by expletive subject marking. The copula accompanied by the comitative marker *na* takes an invariable third person singular (class 1) subject marker (6a–6b). An additional locative proform figures in ILs. Following Gérard (1924: 69), it is triggered by the presence of a nominal ground.<sup>4</sup>

- (6) Beo C45A (Gérard 1924: 69)
  - a. generic existence

*a-na ba-to ba-nyenye* SM1<sub>EXPL</sub>-COM 2-person 2-mean *'il y a des gens méchants'* ['there are mean people']

- b. generic existence
  - a-li na kumu

sм1<sub>ехрг</sub>.рsт-сор сом 1a.chief

*`il y avait un chef*' ['there was a chief']

<sup>&</sup>lt;sup>4</sup>Note that it is not clear from the data what the morphosyntactic status of the locative proform is.

c. inverse location

 *a-li huna faranka gi-bale ka lekete* SM1<sub>EXPL</sub>.PST-COP LOC.COM 10.franc 10-two in pocket
 *'il y avait deux francs dans la poche'* ['there were two francs in the pocket']

In Ndengeleko P11, verb agreement is governed by the postverbal figure in GEs (7a) and by the nominal ground in ILs (7b). Moreover, the postverbal figure is introduced by a comitative marker in ILs (7b) but not so in GEs (7a).

(7) Ndengeleko P11 (Ström 2013: 253, 283)

a. generic existence ga-b-ii ma-bago ma-bili SM6-COP-PFV 6-axe 6-two 'there are two axes'

b. inverse location
 *ku-b-ií* ni múu-ndu ku-yééto
 sм17-сор-рғу сом 1-person 17-9.toilet
 'there's someone in the toilet'

The available data suggests that the absence of the nominal ground in some expressions of GE correlates with a reduction in locative morphology. This implies that languages for which we only have GEs could end up being characterised as showing agreement with the figure whereas the actual situation might well be more diversified. Related to this, it should be noted that many languages have more than one EL and thus that the absence of data might at times lead to classifications which, upon more thorough research, will turn out to be too rigid (see also §2.5.1).

#### 1.3 On presentationals and negative existentials

Our sample includes a fair number of presentational clefts and other presentationals (cf. Table 1) which we most typically encountered at the beginning of a narrative and whose main function is to introduce new entities into a discourse (Lambrecht 2001). They are a common usage extension of ILs and this is reflected by languages like Nyamwezi where the two constructions (2b and 2e) pattern alike. However, when taking a closer look at the languages for which we have presentationals as well as ILs, we find that divergences regarding the agreement pattern and/or the predicate occur rather frequently, i.e. in almost half of the cases.

Shangaji P312 narratives habitually begin with the formulaic expression *khaz-aari toówo* 'it wasn't like this'. The narrator then introduces the story's main character(s) or event (8a). This presentational is similar in structure to the ELs in (8b–8c): the entity new to the discourse (8a) and the figure (8b–8c) both occur in postverbal position and both trigger subject agreement on the verb. However, Shangaji ELs obligatorily include a locative enclitic which agrees with the nominal ground in ILs (8b) and with an exophoric ground in GEs (8c). They thus show double agreement. There is also an information-structural difference between presentationals and ELs. In presentationals, the postverbal subject receives contrastive focus marked by initial high tone insertion (8a, cf. *máúulu & úswáaiíbu*),<sup>5</sup> which is not the case in ELs (8b–8c).

- (8) Shangaji P312 (Maud Devos, field notes)
  - a. kha-zaa-ri toówo yaa-ri má-úulu na n-khííra NEG-SM10.PST-COP thus SM6.PST-COP 6-leg and 3-tail waa-r' ú-swáaiíbu wa ńgúukhu na xaága SM14.PST-COP 14-friendship 14.CONN 1a.chicken and 1a.eagle
    'It wasn't like this, there were legs and a tail, there was a friendship between a chicken and an eagle.'
  - b. zaa-rií=vo khuúnttí z-iínkéénye z' aá-tthu sm10.Pst-cop=loc16 10.group 10-many 10.conn 2-person va-páráaza 16-9.terrace
    'there were many groups of people in front of the house'
  - c. *waa-rí=wó uúcá mwiínkeénye* SM14.PST-COP=LOC17 14.rice 14.many 'there was a lot of rice'

In Malila M24, both presentationals and ELs include a locative proform. However, their morphosyntactic status differs. In the presentational, the postverbal discourse-new entity triggers subject agreement on the verb, which takes an additional locative enclitic (9a). In the EL, the preverbal ground is subject-marked on the verb and there is no agreement with the postverbal figure (9b) – see Bloom Ström (2020) for a similar pattern in Xhosa S41.

<sup>&</sup>lt;sup>5</sup>See Devos (2017) for more on focus marking in Shangaji.

- (9) Malila M24 (Eaton 2015: 5, 14)
  - a. *á-lii=po u-mu-ntu umo* SM1.PST-COP=LOC16 AUG-1-person 1.one 'there was a certain person'
  - b. *muula mwá-li i-tata* 18.DEM\_DIST SM18.PST-COP AUG-9.bush 'in there was bush'

Presentationals and ELs also sometimes differ as to the choice of verb. Although presentationals often take *be* type or *have* type verbs just like ELs (cf.  $\S2.2$ ), they sometimes use a one-place predicate with a more specific meaning, like 'go' in (10), 'do' in (11) or 'be at, exist' in (12).

- (10) Lega D25 (Meeussen 1962: 76) kwênd-ílé mu-ntu gu-mozi sm17.go-PFV 1-person 1-one
   'there once went/was a man'
- (11) Digo E73 (Nicolle 2013: 26) hipho kare kpwa-hend-a mu-tu na m-che-we long ago sM17.PST-do-FV 1-person and 1-wife-POSS1 'long ago, there was a person and his wife'
- (12) Makwe P231 (Devos 2008: 449)
   *á-ní-pwaáw-a mwáali wá-ku-ít-á wá-lúúme* sM1-PST.PFV.DJ-exist-FV 1.girl 1.CONN-15-refuse-FV 2-man
   'there once was a girl who refused men'

The Makwe verb *pwawa* 'be at, exist' used in (12) also occurs in expressions including an explicit ground (13a). However, the verbs *wa* 'be' or *li* 'be' are preferred in ELs (13b).

- (13) Makwe P231 (Devos 2008: 374)
  - a. *n-kaátií=mu mu-pwaw-a cíí-nu* 18-inside=18.DEMI SM18-exist-IPFV.CJ 7-thing 'is there anything inside?'
  - b. *pa-méeza pa-w-ele kí-táabu ~ pa-li kí-táabu* 16-6.table sm16-cop-pfv.cj 7-book ~ sm16-cop.pfv 7-book 'on the table there is a book'

Our data shows that although presentationals and ELs frequently pattern alike, the former often show a reduction in locative morphology or a demotion thereof from locative subject marker (9b) to locative enclitic (9a), and sometimes a different verb. This implies that languages for which we only have presentative expressions cannot be included in our typology, especially if they display agreement with the figure and absence of locative morphology.

Finally, our sample includes four languages for which we only have negative locational existentials. As shown by Bernander et al. (Forthcoming[b]), Bantu negative ELs may consist simply of standard negation applied to the corresponding affirmative construction, as in (14).

 (14) Shangaji P312 (Maud Devos, field notes) *kha-zaa-ri=wo* pwílímwiithi o-muú-ti NEG-SM10.PST-COP=LOC17 10.mosquito 17-3-town 'there were no mosquitos in town'

However, they often involve specialised morphosyntax. Nyamwezi is a case in point. It makes use of the adjective  $d\varpi h\varpi(\acute{\omega})$  'empty'. As can be seen in (15), the adjective agrees with the nominal ground and there is no agreement with the following figure. As dedicated negative existentials tend to be formally very divergent vis-à-vis their affirmative counterparts we therefore only consider nondedicated negative constructions for the purposes of this chapter.

(15) Nyamwezi F22 (Maganga & Schadeberg 1992: 226–227) kv-weeleelo kv-dvhv βν-soóndo
17-5a.world 17-empty 14-goodness
'there is no (real) goodness in the world'

In sum, our research focuses on rhematic locationals or, as Creissels (2019c) refers to them, inverse locational predications (ILs). Our data suggests that they show joint constructionalisation with generic existentials for which we use the joint term existential locationals (ELs). Bantu ELs are identical to plain/ thematic locationals (PLs) or show non-canonical word order and/or specialised morphosyntax (often a locative proform). Presentational constructions often pattern with ELs. However, they show a tendency towards agreement with the figure rather than with the (implicit) ground and they sometimes select predicates different from the *be* and *have* type verbs found in ELs. Languages for which we only have presentational constructions are not further considered in this chapter which leaves us – after the additional subtraction of four languages with only inconclusive data – with ELs from 157 languages.

In the remainder of this chapter, we first look at the building blocks of Bantu ELs and morphosyntactic variation to develop a detailed typology (§2). We then take a closer look at the different types of ELs and their distribution within the Bantu domain (§3). Before suggesting actual Proto-Bantu (PB) reconstructions for ELs (§5) we investigate the non-inverted strategies in the north-western part of the Bantu area (§4). The last section (§6), finally, presents our conclusions.

### 2 Morphosyntatic variation in existential locationals

Recent (typological) studies on existential constructions like Bentley et al. (2013) and Bentley (2017) give the template in (16) for the typical components of existential constructions. The "pivot" is the only cross-linguistically obligatory element in this template. Given our focus on ELs and more specifically ILs, we will use the terms "figure" and "ground" rather than "pivot" and "coda" respectively, as the former are essential categories of semantic events of location (Talmy 1975).

(16) Morphosyntactical template for existential constructions (Bentley et al. 2013)
 (EXPLETIVE) (PROFORM) (COPULA) PIVOT/FIGURE (CODA/GROUND)

The French example in (17) illustrates an existential construction including all typical components.

(17) French (own knowledge)

*il y a des\_livres sur\_la\_table* EXPLETIVE PROFORM COPULA FIGURE GROUND 'there are books on the table'

Let us now reconsider (2b), (7b) and (5a) to identify the relevant components in Bantu ELs. The Nyamwezi EL from (2b) has the components lined up in (18). The copula agrees with the inverted figure through the subject marker and with the (implicit) ground through a locative enclitic in the post-final slot.

 (18) Nyamwezi F22 (cf. (2b) above) aa-li=mo mmnh' vv-nw-iilaálé
 SM<sub>FIG</sub>-COPULA-PFIN<sub>GROUND</sub> FIGURE GROUND
 'there is a person on the farm'

The components of the Ndengeleko EL from (7b) are given in (19). The copula agrees with the ground. The figure is introduced by a comitative marker and followed by the ground.

(19) Ndengeleko P11 (cf. (7b) above)
 ku-bíí ni múundu kuyééto
 SM<sub>GROUND</sub>-COPULA COM FIGURE GROUND
 'there's someone in the toilet'

The Lingala EL from (5a), finally, shows a non-inverted word order. The copula agrees with the preverbal figure. Bantu languages with this type of EL often have heavily reduced agreement systems.

(20) Lingala C30B (cf. (5a) above)
búku e-zalí na\_mésá
FIGURE SM<sub>FIGURE</sub>-COPULA GROUND
'the book is on the table / there is a book on the table'

The figure is the central element of the templates and cannot be omitted. The nominal ground can be absent and we also found examples of copula dropping, in which a nominal ground is always present. Nominal grounds are characteristically expressed by locative nouns which in Bantu languages are generally derived through the addition of a locative nominal prefix of class 16 \*pa-, 17 \*kvor 18  $m\sigma$ - (Meeussen 1967; Grégoire 1975). Other less widespread strategies for locative noun formation include the addition of the class 23/25 locative prefix \**I*-(cf. Grégoire 1975; Maho 1999: 204–206) and the locative suffix -(i)ni (Schadeberg & Samsom 1994). Locative nouns are considered part of the noun class system and they can induce locative agreement within the noun phrase, and locative concords on the verb. However, in some Bantu languages locatives cannot induce locative agreement or concord and are therefore analysed as prepositional phrases rather than locative nouns (Grégoire 1975; Marten 2010; Zeller Forthcoming). This is most notably the case for the southern Bantu Nguni S40 and Sotho-Tswana S30 languages, but see §3.2.1 for additional cases in forest Bantu languages. Moreover, many north-western Bantu languages are devoid of productive locative marking and instead make use of prepositions unrelated to the reconstructed locative prefixes (Grégoire 1975; Guérois 2016; Zeller Forthcoming). Important variables in Bantu ELs are word order ( $\S2.1$ ), the verbal element  $(\S2.2)$  and the agreement pattern  $(\S2.3)$ . The latter not only concerns the verbinitial subject marker, which can agree with the figure, with the ground or can be used expletively, but also secondary locative agreement markers which most frequently occupy the post-final verb slot (§2.4). We discuss them successively in the following sections which build up towards our typology of Bantu existential locationals (§2.5).

#### 2.1 Word order and information structure

Bantu languages are said to display flexible word order associated with information structure (Bearth 2003; van der Wal 2015). The preverbal domain tends to be interpreted as non-focal if not topical, whereas the immediately-after-verb position receives a non-topical if not focal interpretation (cf. van der Wal 2015 and references therein).<sup>6</sup> It thus does not come as a surprise that ELs show a change of word order with respect to PLs: The figure which is topical in PLs but not-topical in ELs moves from preverbal to postverbal position. The great majority of languages in our sample indeed show "figure inversion" with respect to PLs. However, non-inverted constructions are attested as well. They appear to be of two types. First, there are Liko- or Lingala-like cases, which show complete syntactic identity between ELs and PLs and thus ambiguous readings, as in (3a) and (5a), respectively. Koch (2012), who refers to these languages as "radical generic location" languages, suggests that the syntactic identity correlates with a rather fixed word order, which does not allow word order to reflect differences in information structure. However, it would also reflect joint constructionalisation of expressions of location and existence in these languages. Second, there are languages that do not adhere to the typical information-structural configuration sketched above in that they allow for non-topical or even focal constituents to occur in preverbal position. In Mbuun B87, for example, focused objects are moved to preverbal position and subjects are focused in situ but require movement of the object to sentence-initial position (Bostoen & Mundeke 2012). In ELs, this leads to the configuration in (21).

(21) Mbuun B87 (Bwantsa-Kafungu & Meeussen 1970–71) mw-e-saas mw-aa bá-nt àá-yé 18-7-shed 18-DEMI 2-people SM2.PRS-COP 'dans/sous ce hangar il ya des gens' ['in/under this shed there are people']

Western Serengeti languages show a similar configuration as they allow detopicalised constituents to occur in preverbal position (Nicolle 2015; Aunio et al. 2019; Bernander & Laine 2020). Although figure-inversion is possible in ELs in these languages (22a), the non-inverted word order is also attested (22b).

<sup>&</sup>lt;sup>6</sup>Note that this also holds for Nen A44, well-known for its non-canonical OV word order, as "heavy" objects (objects carrying exclusive focus) tend to occur postverbally (Mous 2005).

- (22) Ikoma JE45 (Bernander & Laine 2020: 74, 78)
  - a. n-tfe-epi=ho tfa-njmbe haase e=mo-téFOC-SM10-PRS.COP=LOC16 10-cow under CONN9=3-tree 'there are cows under the tree'
  - b. a-ká aβa-yéni m-ba-api=hó
     23/25-home 2-guest FOC-SM2-PRS.COP=LOC16
     'there are visitors at home'

Lingala-type languages and Mbuun-type languages are hard to distinguish in the absence of data on language-specific information-structural characteristics. One way to distinguish between them could be the position of the ground which appears to move to sentence-initial position in the Mbuun-type languages illustrated in (21) and (22b). However, for now both types are classified as "no inversion" languages in our typology.

We now turn to the more regular pattern involving figure inversion. Figure inversion is part of a large range of related inversion constructions in Bantu languages referred to as subject inversion constructions (Demuth & Harford 1999; Marten & van der Wal 2014). For reasons explained further in §2.3, we prefer not to use the term "subject inversion" but rather use the term "figure inversion" because the inverted argument has the semantic role of figure whereas its syntactic function shows variation (logical subject, grammatical subject) and is subject to debate in Bantu theoretical linguistics (cf. Morimoto 2006; Diercks 2011; Salzmann 2011; van der Wal 2015). Figure inversion in ELs shares two constant characteristics with what Marten & van der Wal (2014: 3) refer to as core subject inversion constructions: (i) the logical subject (i.e. the figure for our purposes) follows the verb and cannot be omitted; and (ii) it is non-topical. The other two constant characteristics are less obvious in Bantu ELs, i.e. object marking appears to be marginally possible (cf. §2.4) and close bonding between the verb and the inverted figure does not appear to be necessary. The figure in ELs typically is non-topical; the information flow goes from the ground to the figure rather than the other way around. However, this does not imply that the figure is obligatorily indefinite or that it carries narrow or presentational focus. In many languages of the world, there is a restriction on definite figures in existential constructions (McNally 2011; Bentley et al. 2013), even if it is also generally acknowledged that indefiniteness is not an obligatory feature of the figure (Koch 2012; Creissels 2019c). Bloom Ström (2020) shows that although figures in Xhosa S41 existentials are typically indefinite, they are not obligatorily so (23).

 (23) Xhosa S41 (Bloom Ström 2020: 234)
 ku-kho u-nyana wa-m apha sm17-be\_present 1a-son 1-1sG.Poss here
 'there is my son here'

The main function of existentials is commonly said to be the introduction of a new referent into the discourse (Hengeveld 1992; McNally 2011; Koch 2012). However, as far as our data allow for generalisations on this topic, this does not seem to be reflected by narrow focus on the figure. Rather, the figure is typically underspecified for focus. As for the conjoint/disjoint alternation (cf. van der Wal & Hyman 2017), in Cuwabo P34, for example, there is a clear preference for the disjoint in ELs (Guérois 2015: 523), which implies a non-focal reading of the figure or a thetic/sentence focus reading, as in (24). Data from Makwe show that the verb *pwawa* 'be at, exist' allows for a choice between conjoint and disjoint. The conjoint form implies narrow (exclusive) focus (13a), which is odd (25a) in expressions of bounded existence as they imply a habitual relation between the ground (here: the sky) and the figure (here: stars). The disjoint form is thus preferred (25b), except if one wants to emphasise that the presence of the figure is in some way exceptional. So, ELs allow for both the conjoint and disjoint, but the conjoint signalling exclusive focus on the figure (cf. van der Wal 2011) is the marked option.

- (24) Cuwabo P34 (Guérois 2015: 516) *o-ttólo=ni ókúle o-hi-kála fúlóóri*17-well=loc 17.DEMIII SM17-PFV.DJ-COP 9a.flower
  'at that well there is a flower'
- (25) Makwe P231 (Devos 2008: 386)
  - a. ? *léelo ku-pwaw-ije jínóondwa ku-cáanya* today sM17-exist-PFV.CJ 10.star 17-high Int.: 'today there are stars in the sky'
  - b. léelo ku-ni-pwáaw-a jínóondwa ku-cáanya today sm17-exist-pFv.DJ 10.star 17-high 'today there are stars in the sky'

A similar situation holds for the so-called "augment" (cf. de Blois 1970). van der Wal & Namyalo (2016: 19) argue that the presence of an augment in Ganda JE15 results in a thetic interpretation of the EL (26a), whereas absence of the augment signals exclusive focus on the figure (26b–26c).

- (26) Ganda JE15 (van der Wal & Namyalo 2016: 19 for (26b–26c), Nanteza 2018: 30 for (26a))
  - a. *e Kampala e-ri=yo a-ma-tooke* 19 Kampala 19-COP=LOC19 AUG-6-banana 'at Kampala there are bananas'
  - b. *mu-katále mw-áá-báddé-mú báána b-okká* 18-market sm18-pst-cop.prF-loc18 2.children 2-only 'in the market were only children'
  - c. *mu-katále mw-áá-báddé-mú baantú, si mbwa* 18-market sm18-pst-cop.prF-loc18 2.people NEG.COP 10.dogs 'in the market were people, not dogs'

In sum, except for its inverted position, the figure does not appear to be obligatorily specified for narrow focus identifiable by Bantu specific focus strategies such as the selection of a conjoint tense and the absence of an augment (cf. also the absence of a focal initial high tone in the Shangaji EL (8b–8c), which rather are the marked options in (25) and (26), respectively. We therefore adhere to Creissels' (2019c: 10) analysis who, following Partee & Borschev (2004; 2007) and Borschev & Partee (2002), argues that "the difference between plain locational predication and inverse-locational predication is only indirectly related to information structure, and basically reflects the 'perspectivization' of the figureground relationships". In ILs (and by extension ELs) the relationship is from the ground to the figure, whereas it is from the figure to the ground in PLs.

#### 2.2 The verbal element

The verbal elements occurring in Bantu ELs are essentially of two types; they are related to the verbal element attested in: (i) plain locative predications (PLs); or (ii) possessive predications. In the following we discuss each type in turn before pointing out some interesting cases of merger between the two types and some rare instances of lexical specialisation in ELs.

The verb figuring in Bantu ELs is often identical to the one found in PLs, as illustrated in (2a) vs. (2b–2d), (4a) vs. (4b) and (5) above. We refer to this verbal element as a locative copula based on its function in PLs where it combines with a locative nonverbal predicate to form a verbal predicate (Dryer 2007). Different types of locative copula are attested in our sample: (i) defective 'be' verbs which, depending on language-specific characteristics, display more or less restricted verbal inflection; (ii) full-fledged 'be' verbs which do not show such a restriction;

and (iii) verbs with more specific meanings like 'sit' or 'be at, exist'. Reflexes of the defective verb \*di 'be' are particularly common in Bantu ELs, as exemplified in (2), (8), (9), and (13). Swahili uses the defective verbs *po* (4), *ko* and *mo*, which are derived from locative enclitics, probably through the deletion of a preceding copula. Full-fledged 'be' verbs which do not show restricted verbal inflection are also attested in ELs where they often are in a more or less complementary distribution with a defective verb. In Shangaji, *ri* 'be' (< \*di) has a relatively wide usage range covering all present and past perfective verb forms (8b–8c). Other tense/aspect forms use the full-fledged verb *iya* 'be' (27).

(27) Shangaji P312 (Maud Devos, field notes) raangu zawiiy-ánk-á=vo suphúuru
9.past sM10.PST.COP-PLUR-FV=LOC16 10.mat
'in the past there used to be mats'

In Makwe defective *li* 'be' is much more restricted in use. It only occurs in present tense contexts, where it is in free variation with the regular verb *wa* 'be' (13b). Elsewhere only *wa* can be used. Finally, ELs with 'be at, exist' or 'be, live, sit' verbs are attested in some languages, such as Makwe (13a), which also uses *pwawa* 'exist' in PLs (28), but prefers *wa* 'be' in both ELs and PLs.

(28) Makwe P231 (Devos 2008: 375) kolóosho ji-pwaw-á kwáaci? ji-pwaw-áa=pa 10.cashew sM10-exist-PRS.IPFV where 10-exist-PRS.IPFV=16.DEMI 'where are the cashew nuts? they are here'

Cuwabo displays a different distribution: PLs typically make use of the defective verb li (29a) which is also attested in negative ELs (29b). Affirmative ELs (29c), however, consistently use *kala* 'live, be, remain', which can also be used in PLs (29d) and can thus be considered a locative copula as defined in this chapter. Still, Cuwabo shows clear signs of a split lexicalisation between PLs and negative ELs (li) on the one hand, and affirmative ELs on the other hand (*kala*).

- (29) Cuwabo P34 (Guérois 2015: 169, 397, 295, 371)
  - a. *o-lí o-mabásâ=ni* SM1-COP 17-6.work=LOC 'he is in his house'
  - b. *va-célá=ní=va* ka-va-á-lí maanjé 16-well=LOC=16.DEF NEG-SM16-PST-COP 6.water.PL 'at the well, there was no water'

- c. *mu-náá-vég-e o-íko o-hi-kála anyákôko* SM2PL-FUT-play-PROH 17-river SM17-PFV.DJ-COP 2.crocodile 'do not play at the river, there are crocodiles'
- d. *bābááni o-ni-kál-êc-a va-tákûlu* 1a.my\_father 2-IPFV.CJ-COP-DUR-FV 16-9a.home 'my father spends the day at home'

Apart from locative copulas, Bantu ELs also often make use of a verb identical to the one found in possessive constructions. The latter typically make use of a defective or fully-fledged 'be' verb in combination with a comitative marker introducing the possessee, i.e. the so-called "conjunctional" or "with-possessives" (Stassen 2013). The subject takes the role of possessor, as in (30a) from Gyeli A801 and (31a) from Cuwabo. In present tense contexts, a process reminiscent of what Stassen (2013) refers to as "HAVE-drift" often takes place: the 'be' verb is omitted and the comitative marker is inflected for person (30b). In some languages the comitative marker can also take restricted TAM marking (31b).<sup>7</sup> The result is not a transitive HAVE-possessive (or transpossessive) construction as the possessee does not behave like an object and cannot be object-marked on the comitative. Another process reminiscent of HAVE-drift is the merger between the 'be' verb and comitative marker. In Cuwabo, for example, *káâna* 'have' probably originates in *kála na* 'be with' (Guérois 2015: 445).

- (30) Gyeli A801 (Grimm 2015: 357)<sup>8</sup>
  - a. mέ bέ nà nkwànò
     1sg.prs cop.r com 3.honey
     'I have honey'
  - b. mé nà nkwànò 1sg.prs com 3.honey 'I have honey'

<sup>&</sup>lt;sup>7</sup>In Cuwabo, inflected *na* and *káâna* are more regularly used to express 'have' than *li* in combination with *na*. The latter has the locative or stative meaning 'be with' (Guérois 2015: 444).

<sup>&</sup>lt;sup>8</sup>It should be noted that we adapted the original glossing to our working definition of copulas thereby oversimplifying the Gyeli data. Gyeli has both verbal copulas like  $b\dot{\epsilon}$  in (30a) to which a realis marking H tone may attach, and non-verbal copula like the ones in (103). For more on Gyeli copula types, see Grimm (2015: 346–378).

- (31) Cuwabo P34 (Guérois 2015: 444, 345, 396)
  - a. míyó ddi-lí na ááná á-ili
    1SG.PRO SM1SG-СОР СОМ 2.child 2-two
    'I am with two children'
  - b. *ka-ddi-á-ná makalra* NEG-SM1SG-PST-COM 6.charcoal.pl 'I had no charcoal'
  - c. ba-a-kaána áyíma a-raarú ánáyánā seq-sм2-сом 2.child 2-three 2.child.woman 'they had three daughters'

We refer to (merged) combinations of 'be' and a comitative marker and to inflected comitatives as "comitative copulas". ELs making use of a comitative copula were already seen in (6a–6c) and (7b). HAVE-possessives with a transitive 'have' verb are also used in Bantu possessive constructions, but they are rarer and often co-exist with a comitative copula, as is the case for Gyeli (32). In Rangi F33, both the comitative copula (33a) and the HAVE-possessive (33b) can be used in ELs (33a–33b).

- (32) Gyeli A801 (Grimm 2015: 360) mè bùdé b-wánò bà-báà
  1sg have.R 2-child 2-two
  'I have two children'
- (33) Rangi F33 (Stegen 2011: 345, 373)
  - a. *kura weerwii kwa-tiite Moosi Nkuusa* there outside sm17.pst-have 1.sir Nkusa 'there outside was Old Nkusa'
  - b. kaáyii ku-ri na isáare
    9.home sм17-сор сом 5.matter
    'at home there is a matter'

Although locative copula and comitative copula or have-verbs are mostly easy to distinguish, there are some interesting cases of polysemy where the same verbal element is used to express both possession and location. Bastin (2020: 49) mentions (*i*)*na*, a merger of \**di* 'be' and \**nà* 'with', which in some zone H languages has acquired the meaning 'be'. In these languages, there is no (longer) real

polysemy as the synchronic expression of possession requires the use of a comitative marker.<sup>9</sup> However, in Totela K41 *ina* is polysemous between 'be' and 'have' (34a–34b). To disambiguate the two senses a comitative marker can be added in possessive constructions, but its presence is not obligatory (34c). Consequently, the EL with *ina* is relatable to both the PL and the possessive construction in Totela (34d). In addition to locative and comitative copula, we therefore distinguish a small but interesting category of locative/possessive copulas.

- (34) Totela K41 (Crane 2011: 246, 107, 308)
  - a. *èná* !ánzè êñándà sм1.сор 16.outside 16.9.house 'he is outside the house'
  - b. *ndin' o-muzilili* sm1sg.com Aug-3.fresh\_milk 'I have fresh milk'
  - c. ndina nêñòmbè sм1sG.COP сом.9.cow
    'I have a cow/I am with a cow'
  - d. sùnú èchífùmò kà-kwìná ò-múkùlù today 7.morning PREHOD.IPFV-SM17.COP/COM AUG-1.elder 'this morning there was an elder'

Bantu ELs thus typically make use of locative copula, comitative copula and less frequently of have-verbs and polysemous locative/possessive copula. Lexical specialisation is only rarely attested in (affirmative) ELs. A possible example is found in Eton A71, where ELs make use of a locative copula or of the verb 'do'

<sup>&</sup>lt;sup>9</sup>We do find interesting variation in possessive constructions suggesting that the shift from 'have' to 'be' is not completed yet in all zone H languages concerned. Dereau (1955: 30–31) gives for Central Kongo H16b a type of intransitive possessive construction which Stassen (2013) refers to as the 'genitive possessive' and which is generally rare in Bantu languages: *mwáana u-na yáame* (1.child sM1-COM COM.POSS1SG) 'the child is with me/I have a child'. As Bastin (2020: 49) points out, *na* can be interpreted as 'be' here as it is followed by *ye* to express 'be with/have'. Zombo H16hK has a very similar possessive construction (Araújo 2013: 178), but with a subject marker agreeing with the possessor, which suggests that the 'have' meaning lingers on: *a-ntú nzó é-nà záu* (2-person 10.house sM2-COP/COM 10.POSS2) '*as pessoas têm casas*' ['the people have houses < the people, houses they have theirs']. Very similar examples are found in Tsootso H16hZ (Baka 1992: 87) (80a). (See https://www.bantufirst.ugent.be/research/west-coastal-bantu-interactive-map for more information about the referential classification of Tsootso employed here.)

extended with a valence-decreasing suffix. As Van de Velde (2008: 126) notes, this might be a semantic calque from French *se produire* 'happen'.

(35) Eton A71 (Van de Velde 2008: 126) tìndìŋ à-H-kòm-bàn-H á n-ŋóŋ multiple\_crash 1-PST-do-VDS-NF LOC 3-street
'there has been a multiple crash in the street'

In sum, we identify in our sample two major types of verbal elements: locative copula and comitative copula, and three minor types: have-verbs, polysemous locative/possessive copula and specialised EL verbs. We now take a closer look at the agreement patterns attested in ELs.

#### 2.3 Agreement patterns

Bantu inversion constructions have inspired an ongoing discussion about the status of the so-called subject (agreement) marker (Bresnan & Kanerva 1989; Demuth 1990; Bearth 2003; Morimoto 2006; Diercks 2011; Salzmann 2011; Khumalo 2012; van der Wal 2015). Let us reconsider the Malila EL in (9b). The verbal agreement marker agrees with the preverbal ground and not with the figure which in formal semantics would be referred to as the logical subject. This agreement pattern can be interpreted in two ways (Morimoto 2006: 164), either: (i) the agreement marker is a subject marker implying that the preverbal ground is the subject and that inversion is a grammatical-relation changing operation; or (ii) the agreement marker is a topic marker licensing the preverbal ground and no change in grammatical relation takes place (cf. also Bearth 2003: 141). This theoretical debate goes beyond the scope of this chapter. In this section we aim to describe the variation in agreement patterns and especially whether agreement is with the ground, the figure, both (double agreement) or none (expletive constructions). For ease of reference, we stick to the predominant Bantu tradition of referring to the verb-initial agreement marker as the subject marker.

Bantu ELs show three "single" and three "double" agreement patterns. As for the "single" ones, the subject marker agrees with the ground in most languages with figure inversion. It takes a locative subject marker which varies depending on the locative class of the ground (36a–36c). We refer to this agreement pattern as "locative inversion" (based on the terminology in Marten & van der Wal 2014). (36) South Binja D26 (Meeussen & Sebasoni 1965)

a.	así	á-ı	kyáta
	16.ground	l sм16-сор	7.mat
	ʻpar terre	est [il y a]	<i>une natte</i> ' ['on the ground there is a mat']
b.	kʊ ndábʊ	kớ-i	booba
	17 9.hous	е ѕм17-со	P 8.thing
	ʻsur la ma	ison il y a	des choses' ['on the house there are things']
c.	mv ndábe	s mớ-i	booba
	18 9.hou	se sм18-со	OP 8.thing
	ʻdans la m	naison il y	<i>a des choses</i> ' ['in the house there are things']

In other languages with figure inversion in ELs, such as Manda N11 in (37), the subject marker agrees with the postverbal figure. We label this agreement pattern "agreeing inversion" (cf. Marten & van der Wal 2014).

(37) Manda N11 (Bernander 2017: 250) pa-lóngólo y-áki, a-y-í' mú-ndu mónga 16-front 9-POSS3SG SM1-COP-PRF 1-person 1.one 'in front of it, there is a person'

Agreement with the figure is the predominant pattern in languages without figure inversion (5), although languages displaying this pattern often have reduced agreement systems.

In still other languages with ELs marked by figure inversion, the subject marker does not show agreement with the ground or with the figure but is a non-referential expletive marker. We distinguish three types of expletive markers: locative, non-locative and zero expletives. The latter concern the absence of a verb-initial agreement marker (76b). Locative expletives refer to invariable subject markers of a locative origin which do not display agreement with the ground. The Swahili example in (38) shows a mismatch between the locative class 16 of the ground and the locative class 17 of the subject marker pointing towards a non-referential expletive use of the latter.

(38) Swahili G42d (Marten 2013: 51) hapa ku-na kazi moja n-zuri sana ... DEM16 SM17-COM 9.work 9.one 9-good very 'here there is a very nice job ...' However, mismatches in locative class agreement are not always a tell-tale sign of the expletive use of locative subject markers. Rwanda JD61, for instance, shows merger in locative class agreement: locative verb-initial agreement is always in class 16.

(39) Rwanda JD61 (Zeller & Ngoboka 2018: 27) mu ká-báande haa-shíze
18 12-valley sM16.PST.DJ-finish.PFV '(the area) in the valley is finished'

In (39) the preverbal locative is clearly selected by the predicate and is therefore a thematic subject rather than an adjunct. An expletive interpretation of the class 16 subject marker is not possible in this context (Zeller & Ngoboka 2018: 27). The mismatch between class 18 of the preverbal locative and the invariable class 16 subject marker in (39) is thus not sufficient evidence for the expletive use of the latter. A similar case is found in Rundi JD62 (for which see Devos et al. 2017: 58). Unfortunately, we often do not have enough data to distinguish between a referential and an expletive use of locative subject markers. For now, we decided to categorise all inverted ELs with a subject marker of a (clear) locative origin as cases of "locative inversion". Non-locative expletives are more easily detectable. They are invariable and do not agree with the ground or the figure (40). The agreement patterns marked by non-locative or zero expletives are referred to as "expletive inversion".

(40) Mboshi C25 (Prat 1917: 58) *o* pu e-di la a-tsusu
17(?) village SM<sub>EXPL</sub>-COP COM 2-chicken
'are there chickens in the village?'

All cases of "double" agreement involve the presence of an additional locative proform agreeing with the (implicit) ground. The most frequent pattern concerns ELs with figure inversion whereby the subject marker agrees with the postverbal figure and another secondary agreement marker agrees with the ground. In the Nyamwezi example in (2b) the subject marker agrees with the postverbal figure, whereas a locative enclitic attached to the verb agrees with the ground. We also came across an example of double agreement in a non-inverted EL in Mwera P22 in (41), where the subject marker agrees with the preverbal figure and the pre-initial locative marker agrees with the postverbal ground. (41) Mwera P22 (Harries 1950: 115) mōto mu-gu-li n-nyumba
3.fire 18-SM3-COP 18-9.house
'there is fire in the house'

A less frequent pattern involves "redundant" double agreement, i.e. both the subject marker and a secondary agreement marker agree with the ground (42). In some cases, the subject marker has a locative origin which appears to be used expletively (43). A final pattern involves the combination of a non-locative expletive subject marker and a secondary locative marker agreeing with the ground (44).

- (42) Soga JE16 (Nabirye 2016: 240) *e-mmanga eyo e-li-yo aka-fo*23-below 23.DEMII SM23-COP-LOC23 12-place
  'below there, there is a small place'
- (43) Nkore JE13 (Grégoire 1975: 77) *o-munju egyo ha-ri-mu a-ba-ntu*AUG-3.house 3.DEMIII SM16-COP-LOC18 AUG-2-person
  '*dans cette maison il y a des gens*' ['in that house there are people']
- (44) Haya JE22 (Grégoire 1975: 77)
  o-musanduku egi a-li-mu e-bintu bike
  AUG-18.9.box 9.DEMI SM<sub>EXPL</sub>-COP-LOC18 AUG-8.thing 8.few
  'dans cette boîte, il y a peu de choses' ['in this box are not many things']

In sum, we distinguish three main agreement patterns in Bantu ELs: locative inversion, agreeing inversion and expletive inversion. Each of them has a subtype including a secondary locative proform.

#### 2.4 Locative proforms: EL markers and lexicalisation

Locative proforms are an important element of Bantu ELs. Moreover, they sometimes constitute the basic difference between PLs and ELs, as in (2a) vs. (2b–2d).<sup>10</sup> The locative proform can thus function as a dedicated EL marker. However, this is not always the case as a locative proform is sometimes attested in the PL as

<sup>&</sup>lt;sup>10</sup>Recall that we argued, in line with Koch (2012) and Creissels (2019c), that a change in word order is not a sufficient characteristic to consider an expression of EL as a dedicated EL construction (cf. §1).

well as in the EL. In Nyakyusa M31, a locative enclitic agreeing with the ground appears to be obligatory in ELs (45a), but is optional in PLs (45b–45c). A similar pattern is attested in Western Serengeti languages (Bernander & Laine 2020).

- (45) Nyakyusa M31 (Persohn 2017: 299, 315, 307)
  - a. linga fy-a-li=po I-fi-ndv paa-meesa if/when SM8-PST-COP=LOC16 AUG-8-food 16-table 'if there had been food on the table'
  - b. *a-li=mo n-nyumba* SM1-COP=LOC18 18-9.house 'he's in the house'
  - c. *v-mw-ana a-lı mu-m-piki* AUG-1-child SM1-COP 18-3-tree 'the child is in the tree'

As shown in §2.3, locative proforms mark agreement with the ground or are used expletively and most frequently occur in the subject marker and/or the postfinal enclitic slot of the verb. In a few languages, such as Mwera in (41), they occupy the pre-initial proclitic slot. As indicated in §2.1, Marten & van der Wal (2014) claim that object marking is not possible in core subject inversion constructions. However, Yao P21 data from the 1920s, shown in (46), suggests that a locative proform can (or once could) occupy the object marker slot in ELs with figure inversion.

- (46) Yao P21 (Sanderson 1922: 150)
  - a. *wa-pa-li wa-ndu wa-jinji* sм2-ом16-сор 2-person 2-many 'there were many people'
  - b. *si-mu-li ng'ombe* SM10-OM18-COP 10.cow 'there is cattle (in there)'

More recent Yao data from Whiteley (1966) do not show inclusion of one of three locative prefixes. Rather, the class 16 locative prefix is used irrespective of the locative class of the (implicit) ground (47a). The class 16 locative marker *pa*-and the defective verb *li* thus appear to have merged with subsequent lexicalisation giving rise to a lexical verb of existence. This *palí* verb is not preferred in ELs, which rather select the comitative copula, cf. (47b) and also Taji (2017: 77, 100).

- (47) Yao P21 (Whiteley 1966: 173)
  - a. *a-palí vá-ndu mú-mseu* sM2-exist 2-person 18-9.road 'there are people in the road'
  - b. *mwa-ná vá-ndu mú-mseu* sm18.prs-com 2-person 18-9.road 'there are people in the road'

Similar forms, historically probably likewise including a class 16 locative marker and a 'be' verb, are encountered in several Makonde P23 varieties, e.g. *pawa* in Chinnima Makonde (Kraal 2005: 384) and *pagwa* in Plateau Makonde (Leach 2010: 368), as well as in Mwera P22, i.e. *pawa* and *pali* (Harries 1950: 115),<sup>11</sup> Mabiha P25, i.e. *pawa* (Harries 1940: 138), and Makwe P231, i.e. *pwawa* as in (12) and (13). In these languages too, lexicalisation has given rise to a lexical verb of 'existence' which is not the preferred choice in ELs. Locative proforms occupying the postfinal slot also sometimes lexicalise into verbs of 'existence' rather than grammaticalise into specialised EL verbs. Rundi has a verb *riho* 'exist' resulting from the merger of *ri* 'be' and the class 16 locative enclitic, which is most frequently used in presentational clefts. Rundi ELs use either the form without the locative enclitic or including an enclitic agreeing with the ground (Devos et al. 2017: 77). In Xhosa, merger of the locative proform *kho* and the comitative marker *na* (cf. Bloom Ström 2020: 220) has given rise to a specialised EL verb (23) with a usage extension towards presentational expressions.

In sum, locative proforms are recurrent in Bantu ELs and sometimes function as dedicated EL markers. They most frequently occur in the subject marker or post-final slot. Locative proforms often participate in the lexicalisation of 'existence' verbs which tend to not be the preferred choice in ELs.

#### 2.5 A typology of locative existential constructions

After discussing the variable features of Bantu ELs, we now combine them into two sets of features in Table 2. Vertically, variation as to type of verb in ELs is plotted (cf. §2.2): 1) locative copula, 2) comitative copula, 3) have-verbs, 4) locative/possessive copula, and 5) specialised EL verbs. The horizontal axis represents the four types pertaining to variable word order and agreement pattern, as outlined in §2.1 and §2.3: A) locative inversion, B) expletive inversion, C) agreeing

<sup>&</sup>lt;sup>11</sup>Mwera manifests a curious variation between the position of locative prefixes of classes 17 and 18 and that of class 16. While the former occur pre-initially (41), the latter occupies the object prefix slot (Harries 1950: 115).

inversion, and D) no (figure) inversion. Each of these four columns is further divided into two to indicate whether there is a secondary locative proform in addition to the primary agreement pattern. We label these subdivisions "single" (i) and "double" (ii) agreement patterns. Languages for which the EL in question is dedicated, i.e. differing from the PL in more than word order alone, are bolded in Table 2.

#### 2.5.1 Intralingual variation

Languages for which we have diversified data often show the availability of more than one way of expressing existential location. Unfortunately, it is often not clear whether the different expressions are in free variation or not. Marten (2013), who gives a detailed account of the two ELs attested in Swahili G42d concludes that they differ in syntactic structure and usage range. The non-dedicated strategy with a locative copula and agreeing inversion in (4b), i.e. 1.C.ii in Table 2, has a less rigid word order (non-inverted constructions are possible) and wider usage range than the strategy with the comitative copula and locative inversion (38), i.e. 2.A.i in Table 2. In Manda N11, the strategy with agreeing inversion in (37), i.e. 1.C.i in Table 2, occurs more frequently than the one with locative inversion (48), i.e. 1.A.i in Table 2.

 (48) Manda N11 (Rasmus Bernander, field notes) *apa* pa-y-i fiindu PROX.DEM16 SM16-be-PRF 8.thing 'here there are things'

Shangaji P312 shows a similar difference in frequency between the strategy with agreeing inversion, as in (8b–8c), (14) and (27), i.e. **1.C.ii** in Table 2, and the one with locative inversion, as in (49), i.e. **2.A.ii** in Table 2. The presence of the latter strategy in Shangaji could be due to Swahili influence. Moreover, there appears to be an information-structural difference between the examples with agreeing inversion (8b–8c), (14) and (27) and locative inversion (49): the latter put focus (indicating surprise) on the figure.

(49) Shangaji P312 (Maud Devos, field notes)
 o-na júguú=wó leélo
 sM17-COM 1a.game=LOC17 today
 'there's a game today!'

Information structure and language contact are also put forward as possible factors behind the remarkable plurality of strategies in the Western Serengeti languages (Bernander & Laine 2020). Ishenyi JE45 has up to four different strategies inventoried in Table 2: 1.C.ii (50a), **1.A.ii** (50b), **2.A.i** (50c) and 1.D.ii (50d). The strategy with the comitative copula could be due to Swahili influence, and Western Serengeti languages permit detopicalised constituents in preverbal position which explains the availability of both inverted and non-inverted constructions.

- (50) Ishenyi JE45 (Bernander & Laine 2020: 76, 61, 78)
  - a. *ŋ-ko-réŋge=hó e-yi-táβo mu-méétfa* FOC-SM17-PST.COP=LOC16 AUG-7-book 18-table 'there is a book on the table'
  - b.  $nu=h\delta$  tfere tfin-teepi  $tfen-k\delta ro$  na=tfen-suu huFOC=LOC16 SM10-PRS.COP 10-animals 10-big COM=10-small 'there are big and small animals'
  - c. haa-re βoosé mw-i-mótoka haa-na in-tf jka 16-DEM<sub>DIST</sub> under 18-5-car sm16-com 9-snake 'there under the car there is a snake'
  - d. umw-éja o-ra-βa=hó
    3-opportunity sM3-sIT-COP=LOC16
    'if there is time'

The most frequently attested interlingual variation in ELs is the choice between a locative (51a) and comitative (51b) copula (1 and 2 in Table 2), which co-occur in some languages, such as Ombo C76.

- (51) Ombo C76 (Meeussen 1952: 31)
  - a. kú-lındí antu ĭkí sM17-COP.IPFV 2.person 2.many *`il y a beaucoup de gens*' ['there are many people']
    b. ká-ík-í la=nguứ sM17.PST-COP.PFV COM=2.hippo *`il y avait beaucoup de hippopotames*' ['there were many hippos']

Next, some languages have a strategy involving locative inversion as well as a strategy involving agreeing inversion (A & C in Table 2). In some languages, such as Malila in (9) and Xhosa (Bloom Ström 2020), this correlates to a difference in

	A. locative inversion				C. AGR INVERS		D. no inversion	
	i. single	ii. double	i. single	ii. double	i. single	ii. double	i. single	ii. double
1. LOCATIVE COPULA	A22, A72a, A74a B31, B52, B73d C76 D25, D26, D28, D43, D55 E51, E55 F12, F31, F33 G52, G62, G63, G67 H16b, H16c, H16b, H16c, H16hK, H21, H31, H41 JD42, JD53, JD61, JD62, JD63 K14, K21, K33, K402 L23, L31a, L32, L33, L52, L53 M15, M24, M301, M41, M42, M54, M301, M41, M42, M54, M62, M64 N11, N15, N21, N31a, N31b, N41, N43 P22, P23, P231, P25, P34 R11	F23 JD61, JD62, JE13, JE15, JE16, JE32b, JE402, JE45 (Ishenyi	B11b, B81 C32, C35b, C502, C53, C73	JE22, JE24	B87 D25, D311, D32 G63, G67 JE431 K332, K41 N11, N121, N13 P31	JE42 F22 G11, G40C, G42d, G63 JE24, JE25, JE251, JE401, JE402, JE431, JE45 (Ishenyi) K332 L41 M31 N31a P312, P312, P312, P34	A43a, A43b, A44, A45, A53, A622, A71, A801, A842, A91 B87 C104, C14, C30B, C411, C55, C61, C71, C75 D201, D311, D32 JE45 K332	A62B C71, C81 D332 F34 H16hK JE401 JE45 (Isheny: P22

Table 2: A typology of Bantu existential locational constructions

	A. locative inversion		B. expletiv inversion	Е	C. AGREEING INVERSION		D. no inversion	
i. sir	ngle	ii. double	i. single	ii. double	i. single	ii. double	i. single	ii. double
C1 C7 E5 E6 E7 G1 G2 G3 G4 H1 H2 JE (Is K2 L1 M <sup>1</sup> P1 P2 R2 R3 S1 S2 S3 S4	<ul> <li>73d</li> <li>101,</li> <li>76</li> <li>51,</li> <li>522C,</li> <li>73</li> <li>3</li> <li>12, G22,</li> <li>23, G32,</li> <li>35, G38,</li> <li>42d,</li> <li>53, G65</li> <li>16hK,</li> <li>31, H41</li> <li>402,</li> <li>45</li> <li>henyi)</li> <li>21, K33</li> <li>3</li> <li>13</li> <li>12, N44</li> <li>1, P13,</li> <li>4, P21,</li> <li>331</li> <li>21, R22,</li> </ul>	P312	A91 B25, B72a C15, C25, C301, C61J	C45A		F22?	A45 F34	

	A. LOCATIVE INVERSION		B. expletive inversion		C. agreeing inversion		D. no inversion	
	i. single	ii. double	i. single	ii. double	i. single	ii. double	i. single	ii. double
3. HAVE- VERBS	E622C E65, E74 F33	,						
4. locative/ posses- sive copula	H32 K41 R41						B865	H16hZ
5. SPECIAL- ISED EL VERBS	P21 S41, S42		H21	H21	P21		A71	

usage, i.e. existential location vs. presentative. In other languages, such as Ishenyi in (50a, 50c) vs. (50b), both are attested in ELs.

The last recurrent pattern concerns the variation between the presence and the absence of double agreement (i & ii) in the same language. In Rundi JD62, the locative copula can take both a locative subject marker and a locative enclitic as in (52a) (1.A.ii) or only a locative subject marker as in (52b) (1.A.i).

(52) Rundi JD62 (Devos et al. 2017: 72; Manoah-Joël Misago, p.c.)

- a. mu bu-úuki ha-ri=mwó i-súkáari
   18 14-honey sM16-COP=LOC18 AUG-9.sugar
   'in honey(, there) is sugar'
- b. *ha-ri i-gi-tabu ku méezá* SM16-COP AUG-7-book 17 9.book 'there is a book on the table'

In sum, more research is needed to account for the plurality of ELs in some Bantu languages. Possible motivating factors include usage range, language contact and information structure. Moreover, seeing that most of our data on ELs in Bantu languages is limited, further research might show that intralingual variation is a more general feature of Bantu ELs.

#### 2.5.2 Some typological generalisations

Before turning to a historical-comparative account, we check our Bantu EL typology against existing typologies of existential constructions, more specifically those by Koch (2012) and Creissels (2019c).

We find that Bantu languages overwhelmingly display split constructionalisation between expressions of thematic location on the one hand and expressions of rhematic location and existence on the other hand. The bolded languages in Table 2 all show this distinction. The unbolded ones show joint constructionalisation of thematic and rhematic location as well as existence. Some languages merely show a word order permutation (unbolded C type languages), whereas others do not even show this minimal difference (unbolded D type languages). Many of the latter languages belong to North-Western Bantu (NWB) or Central-Western Bantu (CWB) branches (cf. Grollemund et al. 2015). This allows for at least two hypotheses: (i) figure inversion emerged after the NWB and CWB branches had split off; or (ii) figure inversion in ELs became obsolete in NWB and CWB and was replaced by a non-dedicated, non-inverted construction which could be interpreted as an areal feature which these Bantu languages share with the so-called Macro-Sudan Belt linguistic area (Clements & Rialland 2008; Güldemann 2008). In fact, non-inverted ELs have been put forward as a shared feature of the latter linguistic area (Creissels 2019a,b). We take a closer look at non-inverted ELs in §4. There is no clear evidence for split constructionalisation between expressions of location (whether thematic or rhematic) and expressions of existence in Bantu. However, more diversified data is needed to ascertain this claim (cf. also the divergences between expressions of rhematic location and generic existence described in §1). Koch (2012: 582-583, fn. 24) mentions that Zulu shows evidence for both joint constructionalisation between rhematic location and existence through the use of the comitative copula *na* (53a–53b) and split constructionalisation between rhematic location and existence through the use of the specialised verb khona (53c) in existentials (but not in rhematic/thematic locationals). However, additional evidence shows that *khona* can be used in expressions of rhematic location displaying locative inversion (54). Notice that in generic existentials and presentationals khona shows a preference for agreeing inversion (53c) (cf. also Bloom Ström 2020 on Xhosa).

(53) Zulu S42 (Koch 2012: 570, 573)

a. *ku-ne-bhuku e-tafuleni* sм17-сом.5-book Loc-table.Loc 'there is a book on the table'

- b. *ku-na aba-ntu aba-hlupheka-yo* 17-COM 2-person 2-be\_unhappy-REL 'there are unhappy people'
- c. *ba-khona aba-ntu aba-hlupheka-yo* SM2-LOC.PRED 2-person 2-be\_uhappy-REL 'there are unhappy people'
- (54) Zulu S42 (Buell & de Dreu 2013: 462) ku-khona aba-fundi ku-lesi si-kole sм17-LOC.PRED 2-student PREP-7.DEM 7-school 'there are students at this school'

Following Creissels (2019c), we find that dedicated Bantu ELs are overwhelmingly of the types 'there-be' (1A) and '(there-)be-with' (2A). Whereas the use of an expletive subject in impersonal constructions appears to be cross-linguistically predominant (Creissels 2019b), Bantu languages allow for a referential locative subject marker which agrees with the ground. Still, locative subject markers can be used expletively and non-locative expletive subject markers are attested as well. Both the use of referential locative subject markers and the use of the comitative copula in ELs seem to be typical Bantu features (Creissels 2019c: 26, 33).

## 3 Main types and variation

In this section we take a detailed look at Table 2, which clearly highlights two major EL types in Bantu: 1.A.i and 2.A.i (cf. also Creissels 2019a). Both are frequent in our sample and show a Bantu-wide distribution covering, if not all zones, all phylogenetic groups in Grollemund et al. (2015), i.e. North-Western Bantu (NWB), Central-Western Bantu (CWB), West-Western Bantu (WWB), South-Western Bantu (SWB) and Eastern Bantu (EB). Type 1.A.i is characterised by the use of a locative subject marker and a locative copula. Type 2.A.i likewise involves locative subject marking but makes use of a comitative copula. Whereas the use of a comitative copula overwhelmingly correlates with locative subject marking and a postverbal figure, locative copulas display more variation as to agreement and word order. We first discuss the verbal elements (§3.1) making a main distinction between locative (§3.1.1) and comitative (§3.1.2) copula and relating the remaining types of verbal elements to these two main types (§3.1.3). We then take a closer look at the agreement patterns (§3.2), starting with locative subject markers (A) and related expletive subject markers (B) (§3.2.1), before turning to agreement with the inverted (C) or non-inverted (D) figure (§3.2.2).

#### 3.1 Verbal elements

One hundred and five sample languages make use of a locative copula in ELs. They are spread over the whole Bantu domain, except for zone S. This may be an accidental gap, but it ties in with the predominance of comitative copula in zone S. Fifty-nine sample languages make use of a comitative copula in ELs. These languages are also spread over the whole Bantu domain, but this time with the exception of zone D (including JD-languages, viz. zone D languages reclassified into zone J). The three other types of verbal elements (i.e. have-verbs, locative/possessive copula and specialised EL verbs) are attested in 14 languages only.

#### 3.1.1 Locative copula

In this section we concentrate on locative copulas found in ELs of the type **1.A.i** in Table 2. The variation in the choice of the locative copula in the 63 languages concerned reflects the overall variation. By reducing the number of languages to look at, we allow for a more detailed discussion. In 41 languages, listed in Table 3, ELs include a reflex of the defective verb \*di (Bastin et al. 2002).

As mentioned in §2.2, we refer to \*di as a locative copula because it consistently introduces locative predicates in PLs. It typically shows more or less restricted verbal inflection and is often found in a complementary distribution with a regular 'be' verb in both PLs and ELs.

In three languages, the locative copula appears to consist of the reflex of \*di and an extra element.

(55) Kpe A22 wéli (Tanda & Neba 2005: 210)
 Nzebi B52 lííd (Marchal-Nasse 1989: 532)
 Ombo C76 *lr-ndi* (Meeussen 1952: 30)

In Nzebi B52, C(V) roots are regularly extended with *-ad*, for instance *b* 'be' becoming *báád* (Marchal-Nasse 1989: 440, 533); *li* is only used in the perfect, i.e. *liidi*, comparable to *beedi*, the perfect of *báád*. In Ombo C76, the locative copula almost always takes the imperfective suffix *-ndi* (Meeussen 1952: 23–24). Only for Kpe A22, do we not have enough data to ascertain whether *wéli* includes a reflex of *\*di*.

In 63 sample languages, we identified a reflex of the full-fledged verb  $b\dot{a}$  'dwell, be, become' (Bastin et al. 2002). In six of them, listed in (56), it is the only verb attested in ELs. Admittedly, for Tsogo B31 and Holoholo D28, we only have past and negative ELs in which  $d\dot{a}$  might well be regularly replaced by  $b\dot{a}$ . However, the other four languages in (56) appear to have lost  $d\dot{a}$ . In Makonde and Mabiha,

\**dì* is either entirely absent or a trace is found in the lexicalised verb of existence *pali* (cf. §2.4). In Makwe, *li* is still used in the present tense, but even there *wa* 'be' is preferred (13b).

Tsogo B31	ba	(Marchal-Nasse 1979: 51)
Holoholo D28	ba	(Grégoire 1975: 32)
Ndamba G52	va	(Edelsten & Lijongwa 2010: 116)
Manda N11	ya	(Bernander 2017: 258-259)
Makonde P23	va	(Kraal 2005: 323)
Mabiha P25	ŵa	(Grégoire 1975: 43)
	Holoholo D28 Ndamba G52 Manda N11 Makonde P23	Holoholo D28 <i>ba</i> Ndamba G52 <i>va</i> Manda N11 <i>ya</i> Makonde P23 <i>va</i>

	1		~ 1		~	
lı		dı		d		li
			L53			
I	Shi	li	Mambwe	lı	Chewa	li
	JD53		M15		N31b	
rı	Rwanda	li	Malila	lı	Nyanja	li
	JD61		M24		N31a	
I	Rundi	ri	Ndali	li	Nsenga	li
	JD62		M301		N41	
rı	Fuliiru	ri	Nyakyusa	lı	Nyungwe	li/ri
	JD63		M31		N43	
Ι	Luvale	li	Taabwa	lı	Mwera	li
	K14		M41		P22	
li	Songye	i	Bemba	lı	Makwe	li
	L23		M42		P231	
lı	Luba-Kasai	di	Lamba	li	Umbundu	li
	L31a		M54		R11	
rı	Kanyok	dv	Soli	li		
	L32	2	M62			
li	Luba-	di	Tonga	li		
	Katanga		-			
	U					
li		di	Tonga	i		
				-		
	rı ı ı li lı rı	H16c         I         JD53         FI         Rwanda         JD61         I         Rundi         JD62         FI         Fuliiru         JD63         I         Luvale         K14         li         Songye         L23         li         Luba-Kasai         L31a         FI         Kanyok         L32         li       Luba-         Katanga         L33	H16c         I       Shi       li         JD53       li         JD53       li         JD61       li         JD61       ri         JD62       ri         JD62       li         JD63       li         Luvale       li         K14       li         L23       li         L31a       li         II       Luba-Kasai       di         L32       li         Luba-       di         Katanga       L33         L33       li         Li       Lunda       di	H16cL53IShiliMambweJD53M15M15rIRwandaliMalilaJD61M24M24IRundiriNdaliJD62M301M301rIFuliruriNyakyusaJD63M31M41lLuvaleliTaabwaK14M41M41liSongyeiBembaL23M42M54rILuba-KasaidiLambaL31aM54M62liLuba-diTongakatangaM64L33M64L33L3M64	H16cL53IShi $li$ Mambwe $li$ JD53M15 $li$ $rI$ Rwanda $li$ Malila $li$ JD61M24 $li$ IRundi $ri$ Ndali $li$ JD62M301 $li$ $rI$ Fuliru $ri$ Nyakyusa $li$ JD63 $M31$ $li$ ILuvale $li$ Taabwa $li$ $K14$ M41 $li$ $li$ Songye $i$ Bemba $li$ $L23$ M42 $li$ $li$ Luba-Kasai $di$ Lamba $li$ $L31a$ M54 $li$ $Ii$ Luba- $di$ Tonga $li$ $li$ Luba- $di$ Tonga $li$ $Ii$ Luba- $di$ Tonga $li$ $Iii$ Lunda $di$ Tonga $i$	H16cL53N21IShiliMambweliChewaJD53M15N31bIRwandaliMalilaliNyanjaJD61M24N31aIRundiriNdaliliNsengaJD62M301N41IFuliruriNyakyusaliNyungweJD63M31N43N43ILuvaleliTaabwaliMweraK14M41P22N42P231liSongyeiBembaliMakweL23M42P311R11ILuba-KasaidiLambaliLubunduL31aM54liStatemaR11ILuba-diTongaliLiL33Luba-diTongaliLiLiLuba-diTongaiLiLiLundadiTongaiLi

Kisi G67 also does not have a reflex of *\*dì*, but uses *ja* 'be', a reflex of *\*jìj* 'come' or *\*gì* 'go' rather than of *\*bá* (Bastin *et al.* 2002), just like *ja* 'be' is a reflex of *\*gì* 'go' in Nyakyusa (Persohn 2017: 303).

The five languages in (57) have a locative copula that is a reflex of (j)ikad 'dwell; be; sit; stay'.

(57) Holoholo D28 *ikana* (Schmitz 1912: 334)
Zombo H16hK *kala* (Araújo 2013: 194)
Mbundu H21 *ala* (da Silva Maia 1961: 106)
Kwangali K33 *kara* (Dammann 1957: 127)
Cuwabo P34 *kala* (Guérois 2015: 191)

In Holoholo it is used as a variant of *ba* 'be'. In Mbundu H21, it could be in complementary distribution with the invariable marker *sai* (76b), but we do not have sufficient data to be sure. In Kwangali K33, *kara* appears to be the regular locative copula but the data is again limited. As already mentioned in §2.2, Cuwabo uses *li* in PLs, but replaces it by *kala* in (affirmative) ELs. As illustrated in (58b), Lozi K21 also uses a locative copula with more specific semantics, i.e. *ina* 'be, sit, stay' (58a), (irregularly) realised as *insi* ~ *inzi* when inflected with the perfect(ive) suffix (cf. Burger 1960: 138). We do not have enough data on the language to discuss its etymology further.<sup>12</sup>

- (58) Lozi K21 (Sitali 2008: 69 for (58a)) (Marten et al. 2007: 278 for (58b), see also Salzmann 2011: 55)
  - a. *ha-ba-in-i ku bo-ndate* NEG-SM2-be/sit/stay-PRS.NEG 17 2-father 'they are not staying at my father's place'
  - b. *fa-tafule ku-ins-i li-tapi* 16-table sm17-be/sit/stay-prF 5-fish 'on the table there is a fish'

The Great Lakes Bantu language Nande JD42 uses ny(i) in ELs (59). A similar copula, i.e. Vni, is found in Western Serengeti, also part of Great Lakes Bantu. Bernander & Laine (2020: 85–86) link it to the ascriptive/identificational copula

<sup>&</sup>lt;sup>12</sup>It is tempting to suggest that *ina* derives from the merger of *\*di* and *na* (Bastin 2020: 49) and has undergone semantic change from 'have' via 'be' to 'stay, sit'. However, the language has a regular reflex of *\*di*, i.e. *li* (Sitali 2008: 69), and, as shown in §3.1.2, the copula *na* has acquired the meaning 'be', expressing 'have' only in combination with the comitative marker *ni*. ELs making use of the comitative copula *na ni* appear to be more frequent than those selecting *ina*.

ni which is widespread in Eastern Bantu (Meeussen 1967: 115; Wald 1973; Gibson et al. 2019) and known to expand its usage range at the expense of \*di (Wald 1973: 248–249).

(59) Nande JD42 (Grégoire 1975: 76) *o-mo-ba-ndw abá mu-ny ó-mwibi*AUG-18-2-person 2.DEMI 18-COP AUG-1.thief *'parmi ces hommes-là, il y a un voleur'* ['among those people, there is a thief']

Six languages have a locative copula relatable to comitative *na*. As explained in §2.2, Bastin (2020: 49) argues that *(i)na* has acquired the meaning 'be' in some zone H languages and can thus be found in ELs and PLs alike. As shown in (60), this change is also attested in zones A and K.

(60)	Ewondo A72a	nə	(Grégoire 1975: 123)
	Bulu A74a	ne	(Grégoire 1975: 123)
	Manyanga H16b	ina	(Laman 1912: 240)
	Yaka H31	ina	(Bwendelele s.d.)
	Mbala H41	ina	(Moyo-Kayita 1981: 120)
	Fwe K402	ina	(Gunnink 2018: 84)

In Eton, closely related to Ewondo and Bulu, *ne* can also be used in copular clauses, where it sometimes optionally (61) combines with the comitative marker *èèy*. This optionality of *èèy* points towards an origin as a comitative copula (61b).

(61) Eton A71 (Van de Velde 2005: 405, 202)

- a. à-nè èèy lè-bùm
  sм1-сор сом 5-belly
  'she is pregnant < she is with belly'</li>
- b. à-nè lè-bùm sм1-сор 5-belly
   'she is pregnant < she is with/has belly'</li>

In languages where the comitative copula acquired the meaning 'be' and is used as a locative copula, 'have' is expressed either through the combination of the former comitative copula and a (new) comitative (62) or through a 'have' verb typically derived from a verb meaning 'seize, grasp' (63).

- (62) Mbala H41 (Moyo-Kayita 1981: 71)
  wéna i ngangu
  SM1.COP COM 9.intelligence
  'il est intelligent' ['he is intelligent < he is with intelligence']</li>
- (63) Fwe K402 (Gunnink 2018: 108) ndì-kwèsí a-bá-mbwa sm1sg-have Aug-2-dog
  'I have dogs'

In sum, locative copulas usually are or include a reflex of \*di which originally was in complementary distribution with a full-fledged 'be' verb, most often a reflex of \*ba. In some languages, the latter eventually replaced the locative copula. In a small set of languages, the comitative copula has undergone a semantic shift towards the expression of location. The specialised EL verb *pali* in Yao is a variation on the main locative copula type as it probably originates in the merger of the class 16 object marker *pa*- and *li* as mentioned in §2.4. However, as explained there, it is not the preferred verb in Yao ELs.

# 3.1.2 Comitative copula

In this section we focus on comitative copulas found in ELs of the type 2.A.i in Table 2. This type is attested in 46 of the 58 languages using a comitative copula in ELs. As was noted in §2.2, Bantu ELs often take a possessive predicator which typically consists of a comitative copula, i.e. a locative copula followed by a comitative marker or a comitative marker inflected for subject marking. Below we first look at the full comitative copula before considering the eroded form, i.e. the form without the locative copula. We then take a look at a special comitative copula consisting of what looks like an inflected comitative marker itself followed by an invariable comitative marker.

In 15 languages, the comitative copula is a locative copula followed by a comitative marker. The locative copula is either a reflex of \*di (ten languages), \*ba(five languages), or \*(j)ikad (one language). Makwe can choose between li or wain present tense contexts.

(64)	Teke Tyee B73d	li ya	(Ruth Raharimanantsoa, p.c.)
	Babole C101	i na	(Leitch 2003)
	Ombo C76	lındı la	(Meeussen 1952; Grégoire 1975)
	Kuyu E51	rı na	(Englebretson et al. 2015)
	Vunjo-Chaga E622C	i na	(Moshi 1995)

Rangi F33	rı na	(Stegen 2011)
Kinga G65	le na	(Enock Mbiling'i, p.c.)
Kwezo L13	dı nı	(Grégoire 1975)
Fipa M13	li na	(Struck 1911)
Makwe P231	li na/wa na	(Devos 2008)
Ngoni of Tanz. N12	vi na	(Gastor Mapunda, p.c.)
Ndengeleko P11	ba ni	(Ström 2013)
Matuumbi P13	ba na	(Odden 1996)
Ngindo P14	ba na	(Gromova & Urmanchieva 2005)
Kwangali K33	kara na	(Dammann 1957)

The comitative marker is mostly a reflex of  $*n\dot{a}$  'with, also, and' (Meeussen 1967: 115; Bastin et al. 2002) (ten languages) or its variants  $*d\dot{a}$  (Ombo) or  $*j\dot{a}$  (Teke Tyee B73d) (Bastin et al. 2002). In two languages we find a comitative marker with a vowel different from a. The vocalic change can be explained in different ways. The use of ni rather than na in Ndengeleko could indicate that the current comitative marker in these languages is a reflex of the copula \*ni rather than of  $*n\dot{a}$ , as comitative ni can indeed be used as a copula, as shown in (65). In other Eastern Bantu languages, such as Shangaji in (66), the reflexes of \*ni (i.e. ti) and  $*n\dot{a}$  are also in free variation in at least some contexts.

- (65) Ndengeleko P11 (Ström 2013: 280) ywéembe ni ŋŋóoi
  PRON.1 СОМ 1.old\_person
  'he is an old person'
- (66) Shangaji P312 (Maud Devos, field notes) oolay-iw-a na=siímba oolay-iw-a ti siímba sm1.kill-PASS-PFV COM=1a.lion sm1.kill-PASS-PFV COP 1a.lion 'he was killed by a lion'

The proclitic use of the comitative marker might also be a trigger of vocalic change. In Kinga G65, *na* merges with the augment of the noun referring to the figure (67). If a specific vowel sequence is particularly frequent this could cause the vowel of the comitative marker to change.

(67) Kinga G65 (Enock Mbiling'i, p.c.) kho-le n=u-mu-nu / kho-le n=a-va-nu SM17-COP COM=AUG-1-person / SM17-COP COM=AUG-2-person 'there is a person'/ there are persons' Next, the comitative marker often has a short personal pronoun cliticised to it (Dammann 1977), which could also trigger vocalic change after intervocalic consonant loss and/or merger. In Pare G22, for example, the comitative marker has two allomorphs, i.e. *na/ne*, of which the second could be a merger of *na* and the class 1 short personal pronoun *-ye* (Mous & Mreta 2004: 225).

In 24 languages, listed in (68), the comitative marker *na* itself functions as the verbal element taking (locative) subject marking.

(68)	Benga A34	na	(Nassau 1892)
	Digo E73	na	(Nicolle 2013)
	Pare G22	na	(Mous & Mreta 2004)
	Shambaa G23	na	(Besha 1989)
	Ng'hwele G32	na	(Legère 2010)
	Luguru G35	na	(Mkude 1974)
	Vidunda G38	na	(Legère 2010)
	Swahili G42d	na	(Marten 2013)
	Bena G63	na	(Morrison 2011)
	Kizu JE402	na	(Gray 2013)
	Ishenyi JE45	na	(Bernander & Laine 2020)
	Sena N44	na	(Grégoire 1975)
	Yao P21	na	(Whiteley 1966)
	Kwanyama R21	na	(Halme 2004)
	Ndonga R22	na	(Fivaz 1984)
	Herero R30	na	(Möhlig & Kavari 2008)
	Venda S21	na	(Ziervogel et al. 1972)
	Kagulu G12	ina	(Petzell 2008)
	Shona S10	ne	(Grégoire 1975)
	Manyika S13	ne	(Stevick & Machiwana 1960)
	Nrebele S407	ne	(Grégoire 1975)
	Swati S43	ne	(Marten 2010)
	Tsonga S53	ni	(Sozinho Francisco Matsinhe, p.c.)
	Ronga S54	ni	(Dimande 2020)

In Kagulu G12, the comitative marker is preceded by the vowel *i* which could be a trace of \*di 'be' or an epenthetic vowel inserted to avoid a monosyllabic stem. In seven languages in (68), the inflected comitative marker has a deviant vowel, i.e. either *e* (four languages) or *i* (three languages), for which possible explanations have already been suggested above. Further conceivable origins for a vowel other than a are an added inflectional final vowel suffix and merger with an additional comitative marker le after intervocalic consonant loss. This brings us to the special type of comitative copula, exemplified in (69), in which an inflected form of (*i*)*na* itself is followed by a comitative marker.

(69)	Zombo H16hK	ina ye	ina ye (Araújo 2013)		
	Yaka H31	ina ye	<i>ina ye</i> (Bwendelele s.d.)		
	Mbala H41	ina i	(Moyo-Kayita 1981)		
	Lozi K21	nani	(O'Sullivan 1993)		
	Tswana S31	na le	(Cole 1955)		
	S. Sotho S33	na le	(Salzmann 2004)		
	Tsonga S53	na ni	(Sozinho Francisco Matsinhe, p.c.)		

As mentioned in §2.1 and §2.2, some inflected comitative markers with or without a trace of \**di* have acquired the sense 'be' and are used in PLs (70a). In order to be used as a possessive (70b, 71a, 72a) or an EL predicator (70c, 71b, 72b, 73a), they must be combined with an additional comitative marker. In the zone S languages in (69), the semantic shift from 'be with' to 'be' is less clear as we do not have evidence for the use of *na* in PLs (73b).

### (70) Zombo H16hK (Araújo 2013: 148, 198, 190)

- a. *a-ntu mu-nzó ena*2-person 18-9.house SM2.COP *'as pessoas estão em casa'* ['the people are at home']
- b. á-kentó ena yé a-ngúdí a-wu
  2-woman SM2.COP COM 2-mother 2-POSS *`as mulheres estão com as mâes*' [*`the women are with their mothers'*]
- c. vèná yè ndíngà záyìngí mù-Angola sM16.COP with 10.language 10.CONN.many 18-Angola 'tem muitas línguas em Angola' ['there are many languages in Angola']

## (71) Mbala H41 (Moyo-Kayita 1981: 71)

- a. wéna i ngangu
   sм1.сор сом 9.intelligence
   *`il est intelligent'* ['he is intelligent < he has/is with intelligence']</li>
- b. há-mu-dú hena i mu-lédi
  16-3-head sм16.сор сом 3-garment
  'sur la tête il y a un habit' ['on the head there is a garment']

- (72) Tswana S31 (Cole 1955: 330, 331)
  - a. *ke-na le=bana ba-le ba-bêdi* sm1sg-cop com=2.child 2-dem 2-two 'I have two children'
  - b. go-na le=ba-tho sm17-cop com=2-person
     'there are some people'

(73) S. Sotho S33 (Salzmann 2004: 26 for (73a), Schoeneborn 2009: 58 for (73b))

- a. *mo-tse-ng há-Masúpha hó-na-lé=líbetsa* 3-village-loc 17.conn-Masupha sm17-cop-com=8.firearms 'at Masupha's village there are firearms'
- b. ke jarete-ng
   PRON1SG garden-LOC
   'I am in the garden'

In sum, two types of comitative copula can be distinguished in Bantu ELs. First, there is the full form consisting of a locative copula, usually a reflex of  $*d\dot{a}$ , followed by a comitative marker, habitually a reflex of  $*n\dot{a}$ . The full form has eroded in many languages resulting in a second type consisting of the comitative marker inflected for subject. The inflected comitative marker has undergone a semantic shift from 'be with' to 'be' in some languages giving rise to a subtype of the first type of comitative copula whereby inflected *na* itself is followed by an invariable comitative marker.

### 3.1.3 Variations on the comitative copula

Variations on the comitative copula type include transitive have-verbs, specialised EL verbs relatable to the comitative copula and polysemous copula formally relatable to the comitative copula.

As noted in §2.2, Bantu languages typically make use of a comitative copula in possessive constructions. Some languages (also) have a transitive have/hold-verb in ELs, for instance the four eastern Bantu languages spoken in Kenya and Tanzania (74). In Vunjo-Chaga (75b) and Rangi (33b) (in §2.2), ELs may also select the more regular comitative copula in ELs. We do not have enough data to ascertain whether this choice is also available in Gweno E65 and Taita E74.

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(74)	Vunjo-Chaga E622C	wozre	'have, hold' (Moshi 1995: 131)
	Gweno E65	yír	'have' (Philippson & Nurse 2000: 29-30)
	Taita E74	erekogh	'get+IPFV.PASS'? (Grégoire 1975: 67)
	Rangi F33	tɛtɛ/t <del>ii</del> te	'have' (Dunham 2005; Stegen 2011: 165)

- (75) Vunjo-Chaga E622C (Salzmann 2004: 46 for (75a), Grégoire 1975: 57 for (75b))
  - a. *numbe-nyi ko Ohanyi ku-wozre singi ya ki-leghe* 9.house-loc 17.conn John sm17-have 9.nest 9.conn 7-bird 'On John's house is a bird nest'
  - b. ku-lja Tšomba kw-i na ndža 17-DEM Tshomba sм17-сор сом 9.hunger 'au Tshomba il y a la famine' ['at Tshomba there is famine']

Mbundu H21 uses invariable *sai* in possessive constructions and ELs. Possessive constructions can also make use of a comitative copula consisting of the locative copula *ala* 'be' (from \*(j)ikad) followed by comitative *ni*, whereas ELs may also select the locative copula with a locative subject concord referring to the ground.

- (76) Mbundu H21 (Chatelain 1888–99: 12)
  - a. *eye* sai jingombe PRON.2SG have 10.cattle 'tu tens gado' ['you have cattle']
  - b. sai jisanji have 10.chicken
    'há galinhas' ['there are chickens']

Xhosa and Zulu make use of the specialised EL verb khona (77).

 (77) Xhosa S41 (Bloom Ström 2020: 226)
 kú-khóna úm-phánda om-khúlu ke phaya é:ntla sm17-be\_present 3-barrel 3-big then there inside 'there is a big barrel there inside'

As argued by Bloom Ström (2020: 219–220), *khona* may be a merger between a class 17 locative marker *kho*- and the inflected comitative marker *na*, originally expressing something like 'there be with' (but see Louw & Jubase 1963: 123, du Plessis & Visser 1992: 239 for a different analysis).

In five sample languages the verbal element in ELs is polysemous between 'be' and 'be with/have'. This polysemy likely reflects an ongoing semantic shift from 'be with, have' to 'be'. Whereas in some Bantu languages this shift has been accomplished (see §3.1.1), it is ongoing in the five languages in (78), which all show some traces of the original possessive/comitative meaning.

(78)	Tsootso H16hZ	ina	'be with'	(Baka 1992)
	Suku H32	ina	'be with'	(Piper 1977: 380-381)
	Totela K41	ina	'be with'	(Crane 2011: 34)
	Yeyi R41	na	'be with'	(Araújo 2013)
	Nzadi B865	mâŋ	'have, be'	(Crane et al. 2011)

In Tsootso H16hZ, Suku H32, and Totela K41 ina is used in PLs (79a) ((34a) in §2.2), which suggests that the shift to 'be' has been accomplished. Moreover, Suku possessive constructions require the use of the comitative marker ye. However, traces of the original comitative meaning are attested in Suku ELs (79b) and Tsootso and Totela possessive constructions (80a) and (34a). The Suku EL is exceptional in that the figure rather than the ground displays locative marking (79b). Our hypothesis is that the class 18 locative marker attaches to the verbal element, as we think is the case in Tsootso (80b), rather than to the figure and that the sentence can be translated as 'the iron has/is with inside the hammer'. The optionality of the comitative marker in Totela possessive constructions suggests that the comitative meaning persists in some contexts (34b-34c). The Tsootso possessive construction (80a) appears to be of the 'genitive possessive' type (Stassen 2013) expressing something like 'the person how many necks are his?', in which case ina would unambiguously express 'be'. However, it takes a subject marker referring to the possessor ('the person') rather than to the possessee ('how many necks') implying the translation 'the person how many necks he has his?'. In Tsootso, Suku, and Totela ina thus mainly expresses 'be', but in some particularities in use the original comitative meaning persists.

(79) Suku H32 (Piper 1977: 381)

- a. ýéna ha-máamba sm1sg.cop 16-6.water 'ich bin am Wasser' ['I am at the water']
- b. ki-séngú kyéná mu-nzúundu
   7-iron sм7.сор/сом 18-9.hammer
   'auf Eisen ist der Hammer' ['on the iron is the hammer']

- c. `pfúmú kéna ya bahika 1a.chief sм1.сор сом 2-slave 'der Häuptling hat Sklaven' ['the chief has slaves']
- (80) Tsootso H16hZ (Baka 1992: 87)
  - a. *è-mù:-nthù nsí:ngú kwá kénå záù* AUG-1-person 10.neck how\_many sM1.COP/COM 10.poss2 *`combien de cous l'homme a-t-il ?'* ['how many necks does the person have']
    b. mù-tótóphóló wú-ná mò mwà-wóóso
  - 3-ashes sм3-сор LOC18 18.conn-all *`il y a du cendre partout*' ['there are ashes everywhere']

Nzadi B865 is like Totela (34b–34c) in that the persistence of the possessive meaning is reflected by the optionality of the comitative marker in possessive constructions (81a).

- (81) Nzadi B865 (Crane et al. 2011: 145, 240, 210)
  - a. mi a máŋ (yε) bǎàn
     pron.1sg prs cop/com com children
     'I have children'
  - b. mwàán a máŋ kó ńdzɔ child prs сор/сом in house 'there is a child in the house'
  - c. *a máŋ kó ńdzɔ* PRS COP in house 'he is in the house'

Data from Yeyi R41 suggest that na is fully polysemous in this language. It is used in PLs, possessive constructions and ELs alike.

(82) Yeyi R41 (Seidel 2008: 421, 423, 422)

- a. *ka-na=po* sM12-COP=LOC16 'it (the axe) is (over) there'
- b. *mu-ti wu-na ma-papa* 3-tree sм3-сом 6-leaf 'the/a tree has leaves'

c. *mu-na u-ndavu mu-mu-tara* sм18-сор/сом 1a-lion 18-3-courtyard 'there is a lion in the courtyard'

# 3.2 Agreement patterns

One hundred and eleven sample languages display locative subject marking in ELs, which is clearly predominant when the copula is comitative. Locative copulas allow for more variation in agreement. Below we first look at locative and related expletive subject markers in ELs (§3.2.1) before turning to agreement with an inverted or non-inverted figure (§3.2.2). Many languages with non-inverted ELs have (severely) reduced agreement systems. The verbal element is often exempt of agreement markers.

# 3.2.1 Locative and expletive subject markers

As Grégoire (1975; 1983; 2003) points out, most forest Bantu languages (zone A, B10-70, C10-70 & D10-40) do not have agreement triggering locative classes, except for southern zone D (i.e. Mituku D13, Lega D25, South Binja D26, Holoholo D28, Nyanga D43 and Buyu D55) (Grégoire 2003: 358). Nonetheless, several of them do have ELs with locative subject marking. The class 17 subject markers in Kpe A22, Benga A34, Ewondo A72a, Teke Tyee B73d and Ombo C76 and the class 16 subject marker in Bulu A74a and Babole C101 are traces of a former locative system, as these languages only have locative prepositions (Grégoire 1975; 1983). Their synchronic use is expletive and not referential.

(83)	Kpe A22	0	(Tanda & Neba 2005: 210)
	Benga A34	0	(Nassau 1892)
	Ewondo A72a	0	(Grégoire 1975: 123)
	Ombo C76	kʊ	(Meeussen 1952: 31)
	Bulu A74a	а	(Grégoire 1975: 123)
	Babole C101	ha	(Leitch 2003)

Grégoire (2003: 359) notes that Tsogo B31 has two locative nouns  $g \partial m \dot{a}$  (class 17) and  $v \partial m \dot{a}$  (class 16) 'place' of which the second one can determine agreement. Tsogo ELs show that grounds of both class 17 (84a) and class 16 (84b) can determine agreement on the verb.

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- (84) Tsogo B31 (Marchal-Nasse 1979: 51)
  - a. go-sá-ba pógó go mó-dono sm17-NEG-COP 9.rat 17 3-roof *`il n'y a pas de rat sur le toit'* [*`there is no rat on the roof'*]
  - b. va-sí-báká mó-yakó vané
    16-NEG-COP.PST 3-food 16.DEM
    'il n'y avait pas de nourriture là' ['there was no food there']

In Nzebi B52, which has locative prepositions clearly relatable to PB \*pa- (16), \* $k\omega$ - (17) and \* $m\omega$ - (18), ELs exclusively use the class 17 subject marker (85a–85c). One presentational construction shows the expletive use of a class 16 subject marker (85d).

- (85) Nzebi B52 (Marchal-Nasse 1989: 530)
  - a. vaanôvá gu-líídi baato bá-kúnu
    here.16 sM17-COP.PRF 2.person 2-many *`ici, il y a beaucoup de gens*' [*`here there are a lot of people'*]
  - b. gú tsó nzɛlí gu-líídi bá-tſwí bá-kunu
    17 inside 9.river sM17-COP.PRF 2-fish 2-many
    'dans l'eau il y a beaucoup de poisons' ['in the river there are a lot of fish']
  - c. mu yul' á maambə gu-líídí ma-mbúngu móólə
    18 9.top 9.conn 6.water sm17-cop.prf 6-canoe 2.two
    'sur l'eau il y a deux pirogues' ['on the water there are two canoes']
  - d. va-líídí lə-sógá lə-kĭma lá ...
    SM16-COP.PRF 11-way 11-other REL.11
    'y a-t-il un autre moyen ...' ['is there another way that ...']

Southern Bantu languages of zone S also did not retain the PB locative nominal prefixes, except with some inherently locative nouns (Grégoire 1975; Marten 2010). Locative agreement is heavily reduced and typically selects the class 17 prefix (Grégoire 1975). Except for Shona S10, all zone S languages in our sample have class 17 subject marking in ELs, as illustrated in (86) with Ronga S54.

(86) Ronga S54 (Dimande 2020: 112) henhla ka n-sinya ku-ni nyoka
16.TOP 17.CONN 3-tree SM17-COM 9.snake 'em cima da árvore há cobra' ['on top of the tree there is a snake'] Except for these zone A, B, C and S languages, we find that the locative subject marker is mainly used referentially, i.e. agreeing with the locative class of the ground, as described in §2.3, in particular (36). Some exceptions do occur ranging from the loss of class 18 agreement in Kamba E55, Vunjo-Chaga E622C, Ishenyi JE45 and Tanzanian Ngoni N12, to agreement merger in favour of class 16 in Rwanda JD61 and Rundi JD62, and class 17 in Lozi K21 and Kwangali K33. Subject agreement with the ground is sometimes possible, but not obligatory, as in Swahili (38) (cf. §2.3). Similarly, the Tonga M64 expressions of generic existence show that the class of the locative subject marker may change depending on the semantics of the implicit ground. However, the IL in (87c) shows a mismatch between the locative subject marker and the locative class of the ground.

- (87) Tonga M64 (Collins 1962: 110)
  - a. *ku-li uu-zya* SM17-COP SM1.REL-come 'there is someone coming'
  - b. *mu-li uu-yimba* SM18-COP SM1.REL-sing 'there is someone inside singing'
  - c. *ku-li nhombe zyosanwe mu-zi-bili mu-muunda* sm17-cop 10.cow 10.five 18-10-two 18-3.field 'there are seven cows in the field'

This might point towards an ongoing change favouring the expletive use of one of the locative classes in ELs, which would be in line with the crosslinguistical tendency for ELs to be non-referential (Koch 2012; Creissels 2019a). Some ELs have non-locative expletive subject markers. They mainly occur in forest Bantu languages (Kwakum A91, Orungu B11b, Kota B25, Ngungwel B72a, Tiene B81, Bongili C15, Mboshi C25, Doko C301, Bangi C32, Bolia C35b, Linga C502, Gesogo C53, Ntomba C61J, Nkucu C73), which lack locative classes and agreement. Unlike Tsogo (84) and Ombo (83), these forest languages do not display traces of locative agreement in the subject marker slot. Instead, they use an invariable subject marker of a non-locative class, as shown in (40) and (88).

(88) Doko C301 (Twilingiyimana 1984: 131) ánê, é-dí n' òmôtò here sM5/7?<sub>EXPL</sub>-COP COM 1.person 'ici, il y a une personne' ['here, there is a person'] "Double" agreement marking which combines a locative or expletive subject marker with a locative enclitic appears to be a unique feature of interlacustrine Bantu languages.<sup>13</sup> Apart from zone J and Sumbwa F23, it is only attested in Shangaji and possibly also in Beo (6b). Shangaji has several ELs, of which the most frequently used ones are of the agreeing-inversion type (8b–8c, 14). They always include a locative enclitic referring to the ground. As will become clear in §3.2.2, the presence of a locative proform is a recurrent characteristic of agreeing-inversion type ELs. The presence of a locative enclitic in (89) could therefore be attributed to analogy with the more frequently occurring existential construction in which the subject marker agrees with the figure. Note that the locative enclitic does not attach to the comitative copula but rather to the figure.

 (89) Shangaji P312 (Maud Devos, field notes) okhúúle o-na ń-názií=wo na n-ráráanja
 17.DEMIII SM17-COM 3-coconut\_tree=LOC17 and 3-orange\_tree 'over there is a coconut tree and an orange tree'

Otherwise, double agreement including a locative or expletive subject marker seems an innovation of Great Lakes Bantu. Some languages, such as Soga JE16 and Tsotso JE32b in (90), have redundant double agreement: both the subject marker and the locative enclitic are referential with the ground.

(90) Tsotso JE32b (Dalgish 1976: 141) xu-mu-saala xu-li-xwo aBa-saatsa
17-3-tree SM17-COP-LOC17 2-man
'on the tree are the men'

In other languages, such as Sumbwa in (91), Rwanda, Rundi, and Nkore, subject agreement is restricted to a single locative class (typically class 16), whereas the locative enclitic is referential with the ground and can secure the semantics of a nominal ground in its absence.

(91) Sumbwa F23 (Grégoire 1975: 50) mu-numba ha-ta-li=mo shi-ntu 18-9.house sM16-NEG-COP=LOC18 7-thing 'dans la maison, il n'y a rien' ['in the house there is nothing']

<sup>&</sup>lt;sup>13</sup>Sumbwa F23 shares several features with zone J languages, which is either due to contact or suggests that genealogically speaking Sumbwa rather belongs to zone J (Bastin 2003: 521).

In still other languages, such as Ganda in (92), Kizu in (93) and Ishenyi in (94), the situation is less straightforward as both the subject marker and the locative enclitic display restricted locative agreement, but merger in locative class agreement appears to happen at different paces in both positions. In Ganda, merger in locative class agreement is more advanced in the subject marker slot than in the enclitic slot. A class 16 subject marker is often selected but classes 17 and 23/25 occur sporadically. The locative enclitic shows regular agreement with the ground but in the case of a class 17 or 18 nominal ground mismatches do occur, leading to configurations whereby neither the subject marker nor the enclitic are referential with the ground (92). Similar cases occur in Kizu and Ishenyi.

- (92) Ganda JE15 (Nanteza 2018: 36) wa-li=yo a-ba-ana ba-na mu ki-zimbe SM16-COP=LOC23 aug-2-child 2-four 18 7-building 'there are four children in the building'
- (93) Kizu JE402 (Gray 2013: 44)
   *mu-char mu-yo kw-a-re=ho mu-kari wmwi* 18-7.village 18-DEMII SM17-PST-COP=LOC16 1-woman 1.one
   'in that village, there was a certain woman'
- (94) Ishenyi JE45 (Bernander & Laine 2020: 76) η-ko-réŋge=hó eyi-táβo mu-méétfa FOC-SM17-PST.COP=LOC16 7-book 18-table 'there is a book on the table'

We also find double agreement involving a non-locative expletive subject marker in Great Lakes Bantu languages, such as Haya in (95) and Kerebe JE24. The invariable class 1 subject marker a- is in these languages accompanied by a locative enclitic referential with the ground.<sup>14</sup> In Kerebe, there is a choice between agreeing and expletive inversion (Thornell 2004).

(95) Haya JE22 (Grégoire 1975: 77) *a-ha-iguru a-li=ho enyanyinyi*AUG-16-9.sky SM1<sub>EXPL</sub>-COP=LOC16 AUG.10.star *'au ciel, il y a des étoiles*' ['in the sky, there are stars']

<sup>&</sup>lt;sup>14</sup>Grégoire (1983: 152) suggests that an expletive subject marker of class 16 became reanalysed as a class 1 subject marker in some zone A languages, because of their formal similarity. It is unlikely that a similar process took place in Haya and Kerebe as they have class 16 locative prefixes of the shape *ha*-.

### 3.2.2 Agreement with the figure

In this section we take a closer look at ELs in which the subject marker agrees with the figure. A few counterexamples notwithstanding, this agreement pattern is restricted to ELs selecting a locative copula. This suggests that locative or related expletive agreement is a fundamental characteristic of ELs with a comitative copula. The ground and the figure function as the possessor and the possessee, respectively, and the verbal element agrees with the ground or takes an expletive subject marker.

### 3.2.2.1 Agreement with inverted figure

ELs with agreeing inversion occur less frequently and are less widespread than ELs with locative or expletive inversion. They are largely restricted to eastern Bantu. In some languages the locative copula agrees only with the figure and the construction does not include a locative proform. In Matengo N13, this appears to be the only way of expressing existential location. Manda has two types of ELs, a non-dedicated one characterised by agreeing inversion and the absence of a locative proform, and a dedicated one involving locative inversion.

Still, most languages displaying agreeing inversion do include a locative proform in ELs. With respect to PLs this locative proform may be non-dedicated (i.e. obligatory in ELs and PLs alike), conventionalised (i.e. obligatory in ELs and optional in PLs) or dedicated (i.e. obligatory in ELs and absent in PLs). The Mbukushu K333 example in (96a) illustrates the inclusion of a non-dedicated (pre-initial) locative marker in ELs. As seen in (96b), it is also present in PLs. In Nyakyusa, a locative enclitic is required in ELs (97a) but optional in PLs (97b–97c). Dedicated locative enclitics are found, among others, in a number of interlacustrine languages. Kerebe ELs combine a dedicated locative enclitic (98a–98c) with either agreeing or expletive inversion (98a–98b).

- (96) Mbukushu K333 (Fisch 1977; 1998: 118)
  - a. *mu-vinyu mo ghu di ghu-semwa* 18-wine LOC18 SM14 COP 14-truth 'in wine, there is truth'
  - b. *ha-nuke po ha di pa-mbongi* 2-child LOC17 SM2 COP 16-9.mission 'the children are at the mission'

- (97) Nyakyusa M31 (Persohn 2017: 310, 307, 315)
  - a. *n-k-iisv* k*i-mo*, *a-a-li=ko v-malafyale jv-mo* 18-7-land 7-one sM1-PST-COP=LOC17 AUG-1.chief 1-one 'in some land, there was a chief'
  - b. *s*-*mw*-*ana a*-*l*<sup>*i*</sup> *mu*-*m*-*piki* AUG-1-CHILD 1-COP 18-3-tree 'the child is in a/the tree'
  - c. *a-li=mo n-nyumba* SM1-COP=LOC18 18-9.house '(s)he is in the house'
- (98) Kerebe JE24 (Thornell 2004: 25)
  - a. βa-li-ho: a-βa-ntu
     SM2-COP-LOC16 AUG-2-person
     'there are people'
  - b. *a-li-ho: a-βa-ntu* SM1-COP-LOC16 AUG-2-person
     'there are people'
  - c. *a-n-te* zi-li mu ki-βuga
     2-10-cow SM10-COP LOC18 7-shed
     'the cows are in the cow shed'

Nyamwezi ELs regularly take a locative copula displaying double agreement: once with the figure through the subject marker and once with the ground through an obligatory locative enclitic (2b). We found one example where the locative copula combines with a comitative marker thus apparently constituting a comitative copula exceptionally agreeing with the figure rather than taking a locative subject marker. It could be that the comitative marker has a different function here. In Nyakyusa, we also found examples of a locative copula seemingly combining with a comitative marker in ELs characterised by agreeing inversion (100). As it turns out, the comitative marker is used as an additive focus marker, expressing 'also, too'. For a similar use of the comitative marker in Pare, see Mous & Mreta (2004: 221). Maybe the Nyamwezi example in (99) likewise expresses that there are also snakes inside of the beehive, but this is not reflected in the (free) translation.

- (99) Nyamwezi F22 (Maganga & Schadeberg 1992: 218, 222) nshikú zííngí gúúBaági ga-lí=mó ná=ma-yoká 10.day 10.many sм6.сор.нав sм6-сор=Loc18 сом=6-snake 'frequently, there are snakes inside'
- (100) Nyakyusa M31 (Persohn 2017: 316) ky-a-li=po n=i-ki-pikism7-pst-cop=loc16 com=AUG-7-stump 'there was also a wood'

ELs with agreeing inversion probably are an innovation motivated by a dispreference for locative subject marking rather than by a loss of it. Reference to the ground tends to be demoted to the post-final slot. In languages where ELs with locative inversion and ELs with agreeing inversion co-occur, the latter could involve a usage extension of the presentational construction, which often displays a preference for agreeing inversion. More fine-grained data are needed to confirm this hypothesis.

# 3.2.2.2 Agreement with non-inverted figure

ELs without figure inversion occur in 23 NWB and CWB languages and in seven scattered languages spoken elsewhere. As mentioned in §2.1, they are of two types: (i) "radical generic location" languages (Koch 2012) like Liko (3) and Lingala (5) with complete syntactic identity between ELs and PLs and thus ambiguous readings; and (ii) languages like Mbuun (21) allowing non-topical or even focal constituents in preverbal position. In the absence of information-structural analyses, the distinction is not always an easy one to make. Languages for which we have good indications that the preverbal, non-inverted position of the figure is due to a non-canonical word order include Mbuun (Bostoen & Mundeke 2012) (21), Mbugwe F34 (Vera Wilhelmsen, p.c.), Zombo (Araújo 2013) and Western Serengeti languages (Nicolle 2015; Aunio et al. 2019; Bernander & Laine 2020) (22). In Mbugwe and Zombo, ELs and PLs are not syntactically identical. Whereas the figure is preverbal in ELs, as in (101a) and (102a), the ground is preverbal in PLs, as in (101b) and (102b), suggesting that non-topical/focal constituents occur in preverbal position.

- (101) Mbugwe F34 (Vera Wilhelmsen, p.c.)
  - a. kaái νε-εηγi vá-re=koo
    9.house 2-guest sM2-COP=LOC17
    'there are guests at home'

- b. *Ally geri á-re* Ally 9.car sm1-cop 'Ally is in the car'
- (102) Zombo H16hK (Araújo 2013: 164, 148)
  - a. mùnà dínà kàfì sukádi zénà mó 18.DEM 5.DEM 5.coffee 10.sugar sm10.COP LOC18
     'naquele café tem açucar' ['in that coffee there is sugar']
  - b. à-ntù mù-nzó ènà
    2-person 18-9.house sM2.COP
    'as pessoas estão em casa' ['the people are in the house']

In all these languages, the ground precedes the figure, itself preceding the verbal element, which may or may not have a locative proform added to it. Similar word orders are attested in six other languages with non-inverted ELs: Bakoko A43b, Mmala A62B, Gyeli A801, Leke C14, Tetela C71, Budu D332. In Bakoko, Gyeli, Tetela and Budu both Ground-Figure-Copula-[Locative] (103a) and Figure-Copula-Ground (103b) word orders are possible. For Mmala and Leke (104a), we only have examples with a sentence-initial ground. Still, the PLs do not display non-canonical word orders (103c, 104b). It thus remains unclear whether these languages are of the Mbuun- or the Lingala-type.

(103) Gyeli A801 (Nadine Grimm, p.c.)

- a.  $kw\dot{a}d\dot{o} d\dot{e} t\dot{u} m-\dot{u}d\hat{a} m-v\dot{u}d\hat{u}^{15} n\dot{u}\dot{u}$ 7.village LOC inside 1-woman 1-one 1.COP 'in the village there is a woman'
- b. *m-ùdâ m-vúdû* àà *kwádò dé* tù
  1-woman 1-one 1.COP 7.village LOC inside 'there is a woman in the village'
- c. Ada àà ndáwò dé tù Ada 1.COP 9.house LOC inside 'Ada is in the house'

<sup>&</sup>lt;sup>15</sup>Note that the numeral 'one' marks indefiniteness in this context (Nadine Grimm, p.c.).

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(104) Leke C14 (Vanhoudt 1987: 131)

- a. wó-ndákwe éde móyõ õ-zi
  17-9.house 9.DEM 3.fire SM3-COP
  'dans cette maison il y a du feu' ['in that house there is fire']
- b. ma-mvã ã-zi mba
  6-dog SM6-COP where
  'où sont les chiens?' ['where are the dogs?']

The remaining languages are of the Lingala "radical generic location" type (see also Liko in (3a). Their ELs and PLs are morphosyntactically identical. In Nyokon A45, this clearly correlates with a fixed word order. Nyokon may select a locative (105a) or a comitative copula (105b) in ELs. In both cases the figure is preverbal and the ground follows the copula. The copula in ELs is the same as in PLs (105c).

- (105) Nyokon A45 (Mous 2005: 7, 8; Barreteau s.d.)
  - a. àtán nà kīnōŋ
    6.stones COP 7.road
    'there are stones on the road'
  - b. mànóŋ nà àŋgá nyá nìkùŋ
    6.blood сор сом poss.2sg 5.spear
    'there is blood on your spear < blood is with your spear'</li>
  - c. ù nà mɨi:mɨ nà ùkùs pron.3sg сор near сом 3.fire *`il est près du feu'* [*`he is close to the fire'*]

# 4 Non-inverted existential constructions: archaism or innovation?

Bantu existential constructions overwhelmingly display figure inversion with non-inverted constructions being largely restricted to northern Bantu borderland languages. In historical terms, this allows for at least two hypotheses.

First, seeing that non-inverted ELs are (i) cross-linguistically rare (Creissels 2013; 2015; 2019a,c), and (ii) within the Bantu domain mainly found in the area closest to the Bantu homeland, more specifically in languages belonging to the NWB and CWB branches, an obvious inference would be that PB only had non-dedicated, non-inverted ELs and that the cross-linguistically more common in-

verted ELs were innovated after these first branches split off. Interpreting noninverted ELs as an archaism questions the PB reconstruction of "anastasis" ("*renversement*") or subject inversion (Meeussen 1959: 215; 1967: 120). Recent studies on subject inversion claim that there is an implicational hierarchy following which there is no inversion with full lexical verbs in a language without inversion with copula (Marten & van der Wal 2014: 59). If PB did not have (locative, expletive or agreeing) inversion in ELs then it most probably did not have it in other constructions either. §4.1 further considers the hypothesis of non-inverted ELs being a PB feature.

Second, if we assume that PB had ELs with figure inversion then we need to account for the non-inverted constructions in the NWB and CWB languages. They could be interpreted as an areal feature. As suggested by Creissels (2019a), and also taken up by Güldemann (2018), exactly this type of non-dedicated and non-permuted existential construction might well be one of the defining features of a linguistic area known as the "Sudanic Belt" (Clements & Rialland 2008) or "Macro-Sudan Belt" (Güldemann 2008). Following Güldemann (2008: 152), the Macro-Sudan Belt covers an area in Northern sub-Saharan Africa "sandwiched between the Atlantic Ocean and the Congo Basin in the south and the Sahara and Sahel in the north, and spans the continent from the Atlantic Ocean in the west to the escarpment of the Ethiopian Plateau in the East". Some features of peripheral northern Bantu have non-Bantu donors belonging to the Macro-Sudan Belt (Güldemann 2018: 456). Although some such shared features, such as base-4 numeral systems, seem confined to the eastern parts of the northern Bantu borderland (see Hammarström 2010), several other features such as labial-velar stops and cross-height ATR vowel harmony have affected languages "from the Atlantic in the west to Lake Albert in the east" (Clements & Rialland 2008: 43). The question now is whether non-inverted ELs can likewise be the result of areal diffusion of a Sudanic Belt feature. In §4.2 we take a closer look at the pros and cons of the areal innovation hypothesis.

### 4.1 Non-inverted ELs as an archaic feature

As was mentioned in §3.2.2.2, non-inverted ELs are mainly found in NWB and CWB languages. Table 4 shows the distribution of non-inverted ELs over the different phylogenetic groups of Grollemund et al. (2015).

Twenty-four languages with non-inverted ELs belong to the NWB and CWB branches. The remaining nine languages are scattered across the other branches. Their non-inverted ELs could be interpreted as cases of archaic persistence but it seems that at least four of them, i.e. Mbuun (21), Zombo (102), Mbugwe (101)

NWB	Basaa A43a, Bakoko A43b, Nen A44, Nyokon A45, Kpa A53, Mmala A62B, Gunu A622, Eton A71, Gyeli A801, Koonzime A842, Kwakum A91
CWB	Aka C104, Leke C14, Lingala C30B, Bomboma C411, Kele C55, Mongo C61, Tetela C71, Kela C75, Ndengese C81, Liko D201, Bila D311, Bira D32, Budu D332
WWB	Nzadi B865, Mbuun B87, Zombo H16hK, Tsootso H16hZ
SWB	Mbukushu K333
EB	Mbugwe F34, Ngoreme JE401, Nata JE45, Mwera P22

Table 4: Phylogenetic distribution of non-inverted ELs

and the Western Serengeti languages JE45, have non-canonical information structural characteristics which allow or even require (Mbugwe) the non-topical/ focused figure to occur in preverbal position. Moreover, the focalisation of the figure often triggers the ground to move to clause-initial position. The Nata JE45 EL in (106) has a special word order with the ground preceding the figure, itself preceding the copula. It also includes a dedicated locative proform. The non-inverted ELs in these languages can thus be attributed to language-specific characteristics, which at least in the Western Serengeti languages could have been triggered by language contact.

- (106) Nata JE45 (Bernander & Laine 2020: 61, 71)
  - a. mo-mo-súko e-βi-yέrɔ m-be-epi=mú
    18-3-bag AUG-8-thing FOC-SM8-PRS.COP=LOC18
    'there is a thing in the bag'
  - b. a-βá-áto βá-áru m-ba-apí mw-i-sóko AUG-2-person 2-many FOC-SM2-PRS.COP 18-5-market 'many people are at the market'

Mbukushu (107) and Mwera (41), have non-inverted ELs featuring a pre-initial locative marker. Whereas in Mwera the pre-initial locative marker is obligatory

in ELs and optional in PLs (108a–108b), Mbukushu displays the opposite pattern with a dedicated locative marker in PLs (96b) and an optional one in ELs. Tsootso includes a locative enclitic in ELs (80b) which is not present in PLs.

- (107) Mbukushu K333 (Fisch 1998: 119) ha-genda (ko) ha di ku-di-ghumbo 2-guest LOC17 sM2 cop 17-5-village 'there are guests in the village'
- (108) Mwera P22 (Harries 1950: 114, 115)
  - a. *ŋguku i-li n-nyumba* 9.chicken sм9-сор 18-9.house 'the chicken is in the house'
  - b. *mu-tu-li muno* LOC18-SM1PL-COP 18.DEM 'we are in here'

Nzadi, finally, appears to be a radical generic location language and should thus be interpreted as a case of archaic persistence in light of the present hypothesis.

It should be noted that most languages, except Nzadi, Tsootso and Mbugwe, also have inverted ELs. Mwera (109) and Mbuun (110), for example, have alternative ELs characterised by locative and agreeing inversion, respectively.

- (109) Mwera P22 (Harries 1950: 115) *mu-li wa-ndu amula* SM18-COP 2-person 18.DEM 'there are people inside'
- (110) Mbuun B87 (Léon Mundeke, p.c.) wó ó-nkáán ká-ngyéng a mées COP(=PP3) 3-book LOC-on\_top CONN 6.table 'there is a book on the table'

The NWB and CWB languages mostly do not show intralingual variation although we must admit that data are often limited. Bila D311 and Bira D32, however, do have alternative inverted constructions, both involving agreeing inversion. Kwakum has an alternative EL involving expletive inversion. Moreover, for

	locative inversion	expletive inversion	agreeing inversion
NWB	Kpe A22, Benga A34, Ewondo A72a, Bulu A74a Tsogo B31	Kwakum A91 Orungu B11b, Kota B25	
CWB	Babole C101, Ombo C76	Bongili C15, Mboshi C25, Doko C301, Bangi C32, Linga C502, Gesogo C53, Ntomba C61J, Nkucu C73	Bila D311, Bira D32

Table 5: Inverted ELs in NWB and CWB

a number of NWB and CWB languages in our database we only have ELs characterised by figure inversion and a (locative) expletive subject marker. Table 5 categorises all the languages involved.

If we consider the non-inverted ELs as archaic, then the inverted ones should be interpreted as innovations, which is not unlikely seeing that inverted ELs are much more common cross-linguistically. However, when taking a closer look at the inverted constructions in question, they rather seem to be archaisms. First, all the NWB and CWB ELs with locative inversion have expletive locative subject markers, which are interpreted as traces of a former locative system (Grégoire 1975; 1983; 2003, and §3.2.1), an interpretation which is not consistent with the supposed innovative nature of the construction. In the Ewondo example in (111) the ground is introduced by the preposition *a*, a trace of the class 16 nominal (pre-)prefix, and the copula takes a class 17 expletive subject marker.

(111) Ewondo A72a (Grégoire 1975: 123) *á-ndá ó-nə díbi*16-house sM17-COP darkness *'dans la maison, il fait noir'* ['in the house, there is darkness']

In the corresponding Bulu utterance, the copula is co-referential with the ground. Note, however, that the class 16 subject marker has formally merged with the class 1 subject marker.

(112) Bulu A74a (Grégoire 1975: 123)
á-ndá a-nε díbi
16-house sM16-COP darkness
'dans la maison, il fait noir' ['in the house, there is darkness']

Babole has traces of a class 16 locative subject marker in existential constructions (113).

(113) Babole C101 (Leitch 2003: 405)
 *hé na múmgwà* sм16.сор сом 3.salt
 'there is salt'

Next, non-locative expletive subject marking can be analysed as the result of the total disappearance of the locative system. (Non-locative) Expletive inversion is almost entirely restricted to forest Bantu languages, which are known to have lost locative agreement. As pointed out by Grégoire (1983: 152; see also note 14) the class 16 expletive subject marker became reanalysed as a class 1 subject marker in some zone A languages, because of their formal similarity. This might well have happened in Kwakum, which has inverted ELs with an expletive subject marker of class 1/3sG. It should be noted that Kwakum has a heavily reduced concord system (Hare 2018; Njantcho Kouagang 2018). Subject markers, for example, are either 3sG(a) or 3PL(je). In (114) the 3sG subject marker is used expletively as it does not agree in number with the inverted figure.

 (114) Kwakum A91 (Hare 2018: 213)
 a bε me tεſi ne akaŋ i-dʒambu sm1/3sg cop pst4 also com warriors conn-war
 'there were also a lot of warriors (in Til)'

As was mentioned before, Kwakum also has non-inverted ELs. Bila and Bira similarly display variation between non-inverted (115a) and inverted (115b) ELs.

(115) Bila D311 (Brisson 1965: 66, 109)

a. ba-bí ba-kibóko subá lìbo
sM2-COP.PRF 2-7.hippo in 5.water *`il y avait des hippopotames dans la rivière*' [*`there were hippos in the river*']

b. nyodwa ndi suba ngoli
9.knot COP in 9.rope *`il y a un nœud dans la corde*' [*`there's a knot in the rope'*]

Bila and Bira also have severely reduced concord systems. Their inverted ELs are characterised as "agreeing inversion" because the subject marker agrees in number with the inverted figure (115a). However, exceptions do occur, especially in Bira, where the subject marker tends to be 3sG, irrespective of the number value of the lexical subject (Meinhof 1939: 253). As pointed out by Meinhof (1939: 284–285), the severe reduction of the concord system triggers a more rigid SVO word order. Still following Meinhof (1939: 285) ELs can constitute an exception to the SVO word order (116a). However, several examples suggest that ELs too "succumb" to word order restrictions triggered by the reduced agreement system (116b).

- (116) Bira D32 (Meinhof 1939: 278, 285)
  - a. na karai a-bi-kau<sup>16</sup> gani and beginning sM3sG-8-COP.PRF 5.word
     *'und im Anfang war das Wort'* ['and in the beginning was the word']
  - b. na mbili a tali madia a-bi-kau kube and 10.pitcher CONN 6.stone six SM3SG-?-COP.PRF there 'und es waren dort sechs Krüge von Stein' ['and there where six stone pitchers there']

In sum, even though the genealogical/phylogenetic distribution of the noninverted ELs suggests they are an archaic feature, the inverted ELs attested in the NWB and CWB branches cannot straightforwardly be analysed as innovations but rather point towards the reduction of the concord system as a possible trigger of a more rigid word order resulting in non-inverted ELs. Note that the hypothesised link between a reduced concord system and non-inverted ELs needs further research as not all NWB and CWB languages in Table 4 show heavily restricted subject agreement. Kela is a case in point. The subject marker of the copula varies in accordance with the preverbal figure (see also 126a).

<sup>&</sup>lt;sup>16</sup>Meinhof (1939: 276) suggests that kau could be an old perfect form of a verb 'to be'. It is used to express 'to occur, be there/somewhere' and combines with the class 8 prefix bi-. Note that the class 8 demonstrative bindo is used as a locative particle (Meinhof 1939: 253).

(117) Kela C75 (Forges 1977: 78)

- a. *iy a-yadí nd âtény a:nd ânt a:íko* 1.thief sm1-cop.prs in 2.inside 2.conn 2.people 2.dem *'il y a un voleur parmi nous'* ['there is a thief among us']
- b. mpw é-yadí nd ôtém o:nda mpoke
  9.mouse sM9-COP.PRS in 3.heart 3.CONN 9.POT
  'il y a une souris à l'intérieur du pot' ['there's a mouse inside of the pot']

# 4.2 The areal innovation hypothesis

ELs not showing morphosyntactic differences from plain locational constructions constitute the dominant type in the Macro-Sudan Belt (Creissels 2019a,c). Furthermore, they are especially prominent in its core area where the Benue-Congo, Adamawa-Ubangi and Central Sudanic languages border on the Bantu domain. Indeed, more than 80% of the languages of the core area sample have ELs characterised by word order "rigidity" and absence of morphological specialisation in relation to PLs. Below we give examples of non-inverted ELs from Benue-Congo, Adamawa-Ubangi and Central Sudanic languages. The Benue-Congo languages are Mungbam (118a), Tiv (119a) and Mundabli (120a) (see also Creissels 2019b).<sup>17</sup> PLs are given as well for the sake of comparison.

- (118) Mungbam [Benue-Congo > Southern Bantoid] (Lovegren 2013: 441)
  - a. ā-dzaŋ ì-fɛ<sup>°</sup> ì-kòŋ á mò
    12-fly 5-head 5-funnel PREP LOC.at
    'there's a fly on the rim of the funnel'
  - b.  $\bar{\iota}-t\bar{\iota}$   $j\bar{\iota}$   $k\bar{\rho}-kp\bar{\epsilon}$   $k\bar{\rho}$   $\dot{a}$  su 5-stone 5.DET 12-shoe 12.DET PREP LOC.face 'the stone is in front of the shoe'
- (119) Tiv [Benue-Congo > Bantoid > Tivoid] (Abraham 1940: 24, 68)
  - a. *kwaghyan ŋgu* food COP.CL1 'there is food'

<sup>&</sup>lt;sup>17</sup>Benue-Congo languages not mentioned by Creissels (2019a,c) also possibly conflating location and existence include Kwanja (Thwing 2006), Tikar (Stanley 1991: 303), Kemezung (Smoes 2010: 35), Esimbi (Coleman et al. 2004: 58), Yemba (Bamileke) (Haynes 1996), Limbum (Fransen 1995: 316) and Kom (Shultz 1997: 40).

- *iyo* ŋgi shin nya snake COP.CL2 in ground 'the snake is on the ground'
- (120) Mundabli [Benue-Congo > Bantoid > Yemne-Kimbu] (Voll 2017: 304, 303)
  - a. mbí dť wú gbà
     6.wine COP POSS1 house.LOC
     'there is wine in his house'
  - b.  $w\dot{u} \quad d\tilde{t} \quad (\tilde{i}) \quad f\tilde{i} \quad m\bar{t}$ PRON1 COP LOC 9.market in 'she is at the market'

For Adamawa-Ubangi and Central Sudanic, examples from Samba Leko and Ngambay are given (see also Creissels 2019a). As can be gathered from the translation equivalents in (121) and (122), the lack of differentiation with PLs leads to ambiguity.

(121)	Samba Leko [Adamawa-Ubangi] (Fabre 2002: 297)
	wēl tá wūurú
	water COP backwater.at
	<i>'il y a de l'eau dans le marigot/l'eau est dans le marigot'</i> ['there is water
	in the backwater/water is in the backwater']

(122) Ngambay [Central Sudanic] (Ndjerareou et al. 2010: 22) dău àr kái person 3sG.stand house
'there is someone at home/someone is at the house'

Out of the 33 sample languages with non-inverted ELs, 21 are spoken in an area more or less bordering the Macro-Sudan Belt, thus allowing for an explanation in terms of areal diffusion. The languages in question belong to zones A, C and D: Basaa A43a, Bakoko A43b, Nen A44, Nyokon A45, Kpa A53, Mmala A62B, Gunu A622, Eton A71, Gyeli A801, Koonzime A842 and Kwakum A91, Aka C104, Leke C14, Lingala C30B, Bomboma C411, Kele C55, Mongo C61, Liko D201, Bila D311, Bira D32 and Budu D332. Examples from Nyokon (105a), Gyeli (103b), Lingala (5), Bila (115a) and Bira (116b) have already been given. Additional examples follow. PLs are provided for the sake of comparison.

- (123) Gunu A622 (Rekanga 1989: 172) nɛfɛ́bɛ́ nɛ́-lɛ́ gu tsi
  5.paper sм5-cop 17 ground *`par terre il y a un papier/il y a un papier par terre*' ['there is a paper on the ground/the paper is on the ground']
- (124) Aka C104 (Thomas & Bahuchet 1991: 134)
  - a. mòbódì ndé vê mushroom COP there
     *`il y a des champignons par là-bas*' [*`there are mushrooms over there'*]
  - b. àmɛ ndé ngô mbúsà
     I COP far 1.last
     'moi, je suis là-bas, loin derrière' ['I am there, far behind']
- (125) Budu D332 (Asangama 1983: 400, 174)
  - a. akuu bá-noi bá=o<sup>18</sup>
    high 2-bird sM2.COP=LOC
    'au-dessus, il y a des oiseaux' ['there are birds up there']
  - b. mo-kósa u-á aká
    3-corn sM3-coP here
    'le maïs est ici' ['the corn is here']

In Budu, the ground is right-dislocated which could be suggestive of a noncanonical word order as attested in Mbuun and Western Serengeti languages. In Mbuun, subjects "are focused in situ but their focalisation triggers movement of the object to clause-initial position" (Bostoen & Mundeke 2012: 139). It could thus be the case that the non-topical nature of the figure in (125a) causes the ground to move to clause-initial position. If so, ELs in Budu do not display complete syntactic identity to PLs. Nevertheless, the non-inverted ELs in the other languages of the northern Bantu borderland are very similar to the ELs found in the core area of the Macro-Sudan Belt and could thus be the result of areal diffusion.

Still, there are eight western and four<sup>19</sup> eastern Bantu languages in our sample which like the ones above have ELs characterised by a non-inverted word order.

<sup>&</sup>lt;sup>18</sup>Note that the locative enclitic is not dedicated to the expression of inverse location. It also occurs in plain locational clauses, cf. a-á-o 'he is there' (Asangama 1983: 166).

<sup>&</sup>lt;sup>19</sup>In Table 1 the JE45 Western Serengeti languages are counted as a single language.

However, their geographical distribution makes the areal diffusion hypothesis doubtful or even completely unlikely. With reference to the phylogeny in Grollemund et al. (2015), the western Bantu languages in question belong to three distinct branches: CWB, i.e. Tetela C71, Kela C75 and Ndengese C81; WWB, i.e. Nzadi B865, Mbuun B87, Zombo H16hK and Tsootso H16hZ; and SWB, i.e. Mbukushu K333. The EB languages include Mbugwe F34, the Western Serengeti languages Nata JE45, Ikoma JE45, Ishenyi JE45 and Ngoreme JE401, and Mwera P22.

Only Tetela, Kela (126), Ndengese and Nzadi (81b–81c) behave like the majority of northern languages (and Macro-Sudan Belt languages) discussed above in that they lack morphosyntactic differentiation between ELs and PLs.

(126) Kela C75 (Forges 1977: 78)

- a. *nnyàmà i-yàdí ndá bòkòndà*10.animal sM10-COP.PRS in 3.forest *il y a des bêtes dans la forêt* ['there are animals in the forest']
  b. *niàdí ndá* Bònómbà
- b. *njali naa Bonomba* sm1sg.cop.prs in Bonomba *'j'habite à Bonomba*' ['I live/am in Bonomba']
- (127) Ndengese C81 (Goemaere 1980: 42; Galerne 2001: 90)
  - a. bonto a-le=ko
    1.person SM1-COP=LOC
    'daar is iemand' ['there is someone']
  - b. bo-sóŋgo bź-lɛ=kź lɛ́ myvúfulu
    3-tree SM3-COP=LOC behind 9.house
    'l'arbre est derrière la maison' ['the tree is behind the house']

Mbukushu allows both ELs with agreeing inversion (96a) and non-inverted ELs (107) which are morphosyntactically similar to PLs (96b). The ELs of the other languages either display morphological specialisation in relation to their PLs or no complete syntactic identity. Tsootso includes a locative enclitic in ELs (80b) which is not present in PLs. Mwera has both an EL characterised by locative inversion (109) and a non-inverted EL (41) which takes a pre-initial locative marker which is optionally present in PLs (108a-b). Mbuun (21), Zombo (102), Mbugwe (101) and the Western Serengeti languages (22b), (50b), (106) all have non-canonical information structural characteristics which allow or even require the non-topical/focused figure to occur in preverbal position.

In sum, the majority (21) of languages with non-inverted ELs are spoken in an area compatible with the areal diffusion hypothesis. Moreover, most of the non-inverted ELs in languages spoken further away from the Macro-Sudan Belt differ from the northern non-inverted languages in that they display some morphosyntactic particularities in comparison to PLs.<sup>20</sup> This does not apply to Tetela, Kela, Ndengese and Nzadi. The first three are CWB languages which adds some weight to the archaic feature hypothesis. However, the WWB language Nzadi does not fit either the archaic feature or the areal innovation hypothesis. Interestingly, it has an extremely reduced concord system probably due to contact with non-Bantu languages (Crane et al. 2011: 4) which again points towards a link between reduced concord systems and non-inverted ELs.

# 5 The Proto-Bantu existential locational construction(s)

The frequencies and geographical spread of the following two types of ELs attested in the Bantu languages of our convenience sample straightforwardly suggest their reconstruction to at least node 5 in the phylogenetic tree of Grollemund et al. (2015):

- A. EL featuring a locative copula and (formal) locative inversion (**1.A.i** in Table 2)
- B. EL featuring a comitative copula with a locative subject marker (2.A.i in Table 2)

Both strategies are widely and frequently attested in our sample (see Table 2). This, together with the fact that the most frequently attested intralingual variation in ELs concerns the choice between a locative and a comitative copula, makes the reconstruction of two existential strategies plausible. Their reconstruction all the way up to node 1 is less straightforward because of the scarcity of both types in the NWB and CWB languages. Instead, languages belonging to these branches often have non-inverted ELs which are rare outside of these branches and cross-linguistically. This allows for at least two possible scenarios.

First, PB had non-dedicated, non-inverted ELs and the inverted constructions (A & B) were innovated after the NWB and CWB branches had split off. The rare non-inverted constructions in other branches can then be considered archaic

<sup>&</sup>lt;sup>20</sup>At least for the Western Serengeti languages and Mbugwe, it cannot be excluded that their irregular existential constructions may be connected to contacts with languages of other families, such as Nilotic and Cushitic.

heterogenities. However, several (21 languages in our sample vs. 24 with noninverted ELs) NWB and CWB languages have inverted constructions which are not easily interpreted as independent innovations but rather seem to involve traces of a former full-fledged concord system with locative agreement.

This leads us to the second scenario, which rather argues for the presence in PB of dedicated inverted ELs (A & B). The 21 NWB and CWB languages with inverted ELs can then be considered (adapted) retentions of the original structure. However, we then still need to explain the innovation of the cross-linguistically rare non-inverted EL. We suggest that the reduction of the concord system (and more specifically the loss of locative agreement, an essential characteristic of Bantu ELs), witnessed across the north-western periphery of Bantu languages and possibly an effect of contact with non-Bantu languages (cf. e.g. Maho 1999; Good 2018; Verkerk & Garbo 2022) was an important trigger of this innovation. It prompted speakers to use alternative constructions or adapt the existing ones. Our data suggests that they had recourse to either an adapted or an alternative construction. The adapted construction is the EL with expletive inversion, which is especially frequent in zone C languages, but also occurs in other forest Bantu languages. The locative subject marker probably first became expletive, and merged at a later stage with a non-locative class (cf. Grégoire 1975; 1983: 124).

The alternative construction is the non-inverted EL, which in most cases shows no morphosyntactic differences from the plain locational construction (§3.2.2.2 & §4.2). In certain languages with dedicated ELs, PLs occasionally have existential readings. The Nata example in (128) is a case in point. In Nata, the existential reading is facilitated by the fact that the language allows non-topical constituents in preverbal position. In other languages, the existential reading of a PL is mostly observed in the absence of an explicit ground. The preverbal figure in (129) from Swahili, for example, can have a topical or non-topical interpretation resulting in ambiguous locational/existential readings.

- (128) Nata JE45 (Gambarage 2019: 54)
   o-mu-sekeenya woní mu-umweerí
   AUG-3-sand SM3.PRS.COP 18-3.moon
   'there is sand on the moon/sand is on the moon'
- (129) Swahili G42d (Marten 2013: 47) *wa-tu wa-po*2-person sM2-COP
  'there are people/people are there/people are available'

If the reduction or loss of the locative agreement system triggers the loss of ELs characterised by locative agreement, this alternative reading of a PL (with a preverbal figure) may become the preferred way of expressing an existential locational meaning. The predominance of non-inverted existential constructions in the languages of the Macro-Sudan Belt might well have been an important factor in the consolidation of the non-inverted strategy. Twenty-one languages with non-inverted ELs are spoken in an area compatible with the hypothesis that the absence of figure inversion in Bantu languages of the northern borderland is an areal feature originating from non-Bantu donors from the Macro-Sudan Belt. However, a few languages (Tetela, Kela, Ndengese and Nzadi) of the radical generic location type are spoken too far away from the Macro Sudan Belt to be consistent with the areal diffusion hypothesis. In sum, we suggest that contactinduced noun class reduction and ensuing loss of locative agreement are the main explanatory factors for the innovation of non-inverted ELs in the northern Bantu borderland rather than the areal diffusion of a radical generic location type. Interestingly, counterexamples to both the archaic feature hypothesis and the areal diffusion hypothesis point towards the severe reduction of the concord system as a possible trigger for a more rigid word order and consequently noninverted ELs. However, languages like Kela, which have non-inverted ELs and do not display heavily reduced concord systems, suggest that the latter hypothesis is in need of further research. For now, we reconstruct types A and B to node 5 and suggest that their reconstruction to PB is plausible.

The reconstruction of the first strategy implies the reconstruction of locative inversion. Meeussen (1967: 120) reconstructs "anastasis" or subject-object inversion for PB and considers locative inversion as a special case of subject-object (patient) inversion or "*renversement*" (Meeussen 1959: 215). Moreover, there is an implicational hierarchy that there is no inversion with full lexical verbs in a language without inversion with copula (Marten & van der Wal 2014: 59). Therefore, if subject-object inversion can be reconstructed for PB, then inversion as found in Bantu ELs predominantly involving locative copula can also be reconstructed. The predicator slot was most probably filled with defective \**dì* 'be' (Bastin et al. 2002), at least in present tense contexts. In sum, we suggest the following morphosyntactic pattern for the EL featuring a locative copula and locative inversion:

## A. \*[(LOC.NP #) LOC.SM-dì # NP (# LOC.NP)] (# = word boundary)

In non-present contexts, \* $b\dot{a}$  'be, dwell, become' (Bastin et al. 2002) was probably used as copula.

The second EL strategy does not involve locative inversion, but still takes a locative subject marker, as the ground is considered the possessor of the figure. The comitative copula most probably consisted of \*di or \*ba immediately followed by \*na 'with, also, and' (Meeussen 1967: 115; Bastin et al. 2002). Although the inflected comitative copula is also frequent in our sample, it is less widespread and thus probably a later development. We therefore propose the following morphosyntactic pattern for the EL featuring a comitative copula:

# B. \*[(LOC.NP #) LOC.SM-dì (#) na (#) NP (# LOC.NP)]

Throughout the Bantu area locative morphology plays an important role in ELs and this is also true for the suggested reconstructions which both involve locative subject marking. Locative noun classes and their agreement sets have been reconstructed for PB (Meeussen 1967; Grégoire 1975).<sup>21</sup>

The proposed reconstructions assume a level of fusion of the verbal form which, following Güldemann (2003; 2011; 2022), did not exist in PB. Following this hypothesis, PB was characterised by a "split predicate" with a self-standing subject pronoun and verb (stem), which only at a later stage came to fuse into the synthetic verbal "template" characteristic for Bantu languages. The question of how agglutinative PB was again ties in with the larger debate on whether features witnessed in north-western Bantu which match with those of the Macro-Sudan area are to be considered retentions of the original structure or rather as representing later instances of (contact-induced) loss (see Good & Güldemann 2006; Hyman 2007; Nurse 2007; Güldemann 2008; Nurse 2008: 62-72; Güldemann 2011; Hyman 2011). However, it should be noted that Güldemann (2011) himself claims that subject pronouns or other class indexing markers - such as locative class markers - fused earlier in "simple" verb forms, i.e. predicate constructions without any intervening TAM marking, as is precisely the case with the copula in our suggested reconstructions. So, even if we accept the "split predicate" hypothesis, the suggested reconstructions could still be valid for PB and certainly for a reconstruction to node 5. However, we cannot preclude that the locative subject marker and the copula formed two disparate words and hence that the hyphen between LOC.SM and COP should rather be a <#>, marking word boundary (or a clitic <=> representing some in-between state of fusion).

<sup>&</sup>lt;sup>21</sup>See also Good (2018: 33) for further Bantu-external evidence showing that the locative classes are at least as old as PB.

# 6 Conclusions

The main goal of this chapter was to reconstruct the morphosyntactic pattern of PB existential constructions. To be able to do so, we investigated the synchronic variation in existential strategies in 157 Bantu languages. It would have been nice to be able to include more data and especially more fine-grained data (cf. all the test sentences in (1)) in order to avoid the risk of comparing apples and oranges, as we might have done now and again when comparing inverse/rhematic locationals with instances of generic and bounded existence. Also, in order to establish whether a language has expletive or referential locative agreement, we ideally should have equivalents of utterances like 'on the table, there is a cat', 'at the market, there are fruits' and 'in the house, there are rats'. This way we can ascertain whether the locative marker, if present, shows agreement with the locative ground or is of an expletive nature. We hope that this chapter may trigger researchers to include all these types of sentences in their elicitation lists so the current dataset can be expanded and improved.

Based on the present sample, we were still able to come up with two sets of variables regarding "existential locationals" (ELs) in Bantu languages. The first set pertains to word order and agreement patterns and distinguishes a non-inverted type and three types involving figure inversion: locative inversion, expletive inversion, and agreeing inversion. The second set concerns the type of verbal element, typically a locative or comitative copula. have-verbs, polysemous locative/ possessive copulas and specialised EL verbs also occur in our sample but much less frequently.

Bantu languages often have more than one existential strategy. The most recurrent and most widely spread strategies are the ones involving figure inversion, a locative subject marker, and either a locative or a comitative copula. The use of a comitative copula and referential locative subject markers are typical features of Bantu ELs (see also Creissels 2019a: 26–33). Locative and comitative copulas are almost equally frequent and widespread. We therefore put forward two existential locational strategies as the best candidates for reconstruction to at least node 5 of the phylogenetic tree of Grollemund et al. (2015) and possibly to PB:

### A. \*[(LOC.NP #) LOC.SM-dì # NP (# LOC.NP)]

### B. \*[(LOC.NP #) LOC.SM-dì (#) na (#) NP (# LOC.NP)]

The reason for not straightforwardly reconstructing these morphosyntactic patterns to PB lies in the fact that they are only scarcely attested in forest Bantu

languages, which rather have non-inverted ELs or ELs characterised by expletive inversion. We suggested that the almost (!) complete absence of the A and B patterns in the NWB and CWB branches can be explained in two ways: (i) PB had a non-dedicated, non-inverted EL and the present-day non-inverted ELs are retentions; (ii) PB had the ELs in A and B and the non-inverted ELs are (contactinduced) innovations. Although further research and more data are needed, our preference goes to the second explanation which assumes that the innovation was triggered by the severe reduction or even complete loss of (locative) noun classes and the ensuing (locative) agreement system in the concerned languages. The reduced concord system resulted in ELs with expletive inversion and exempt of locative marking, or in a more rigid word order and consequently non-inverted ELs.

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# Abbreviations

1, 2, 3	noun class 1, 2, 3	СОР	copula
SG/PL	person singular/plural	CWB	Central-Western Bantu
AUG	augment	DEF	definite
СЈ	conjoint	DEM	demonstrative
CL	class	DET	determiner
СОМ	comitative	DIST	distal
CONJ	conjunction	DJ	disjoint
CONN	connective	DUR	durative

EB	Eastern Bantu	PLUR	pluractional
EXIST	existential	POSS	possessive
EXPL	expletive	PRED	predicative
FOC	focus	PREHOD	prehodiernal
FUT	future	PREP	preposition
$\mathbf{FV}$	final vowel	PRF	perfect
HAB	habitual	PROH	prohibitive
INAM	inanimate	PRON	personal pronoun
IPFV	imperfective	PRS	present
LOC	locative	PST	past
NEG	negation	R	realis
NF	non-final form of the	REL	relative
	hesternal and the	SEQ	sequential
	hodiernal past perfective	SIT	situative
NPST	non-past	SM	subject marker
NUM	numeral	STAT	stative
NWB	North-Western Bantu	SWB	South-Western Bantu
ОМ	object marker	VDS	valence-decreasing
PASS	passive		suffix
PFV	perfective	WWB	West-Western Bantu

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