

Chapter 6

A comparative study of the locative system in South-Tanzanian Bantu languages

Gastor Mapunda^a & Fabiola Hassan^b

^aUniversity of Dar es Salaam ^bUniversity of Dodoma

The paper presents a comparative analysis of locative expressions in four South-Tanzanian Bantu languages, namely Bena (G60), Ngoni (N12), Yao (P21), and Makhuwa (P31). We more particularly explore the locative marking strategies within noun phrases, the issue of locative agreement, and locative inversion constructions. The article pursues two objectives: (1) To describe the form of locative affixes in each of the four languages, and (2) to establish resemblances and dissimilarities between four neighbouring languages spoken in the south of Tanzania. The findings show that, although the locative systems of the four sampled languages are overall very similar, Makhuwa still exhibits a few divergent features.

1 Introduction

In Eastern Bantu Languages, locative expressions have received enormous attention from various scholars (cf., among others, Harries 1965, Rugemalira 2004, Buell 2007, Marten 2012, Barlew 2013, Marten & van der Wal 2014, Guérois 2016, Zeller forthcoming). These different studies give insight into the high degree of variation of Bantu locatives.

The present article aims to show how Bena, Ngoni, Yao, and Makhuwa, four Eastern Bantu languages, vary in the expression of their locative noun phrases and locative clauses. The languages mentioned above have been selected because they represent different language groups that are found in the Eastern Bantu area, and are geographically close. Additionally, these languages are familiar to



the authors of this chapter. Bena is an Eastern Bantu language spoken in the Southern Highlands of Tanzania, mostly in Njombe District. It is also spoken in the north-western part of Songea District, the north-eastern part of Mbeya District, the southern part of Mufindi District, and the south-western part of Ulanga District. Guthrie (1971) classifies Bena under zone (G60) together with Ki-Hehe, Shi-Sango, Ki-Kinga, Ki-Kisi, and Ki-Wanji. Chaula (1989: 115) identifies seven main dialects of Bena, namely Lupembe, Masakati, Sovi, Maswamu, Mavemba, Ilembula, and Ulanga. Makhuwa (P31) is spoken in the north of Mozambique (Cabo Deldago, Nampula, Niassa, and Zambézia provinces), in Malawi (Mulanje and Tyholo), and in the southern part of Tanzania (Kröger 2005). In Tanzania, the principal regions where Makhuwa speakers live are Mtwara, Lindi, Morogoro, and the Coast. Ismail (2000) lists no less than twelve dialects,¹ most of which are located in Mozambique. This article focuses on the Imithupi dialect spoken in Tanzania, next to the three other languages analyzed in this chapter. Yao (P21) is spoken in Malawi, Mozambique, Tanzania, Zambia, and Zimbabwe. The current article uses data from Yao spoken in Tanzania, specifically in Masasi and Tunduru Districts. Finally, the Tanzanian Ngoni (N12) has four dialects, namely Maposeni-Peramiho, Likonde-Kigonserat, Matimira, and Rwanda. The data for the current study are based on the Maposeni-Peramiho dialect, which is also the best known (Mapunda 2015, Ngonyani 2003). These four variants analyzed in this chapter are spoken in Tanzania, as shown in Map 1 below. The four variants are in close geographical proximity, and the speakers of these dialects understand each other well.

Specifically, the article describes and is structured along the following lines, which resume some of the morphosyntactic parameters proposed by Guérois et al. (2017): i) what are the formal strategies of locative marking on nouns? (§2); ii) how does locative agreement operate within NPs and VPs? (§3); iii) are locative inversion constructions attested? (§4). As a general result, the paper shows how Makhuwa tends to behave differently from the other three languages.

The primary data used in this study were obtained through interviews with two adult consultants from each language. More specifically, consultants were prompted to translate Swahili sentences into their language. Then, the translations were cross-checked for consistence. Follow-up questions were also asked when additional information was required.

¹As we have not engaged with a comparative study of these twelve dialects, we cannot comment on their similarities and differences.

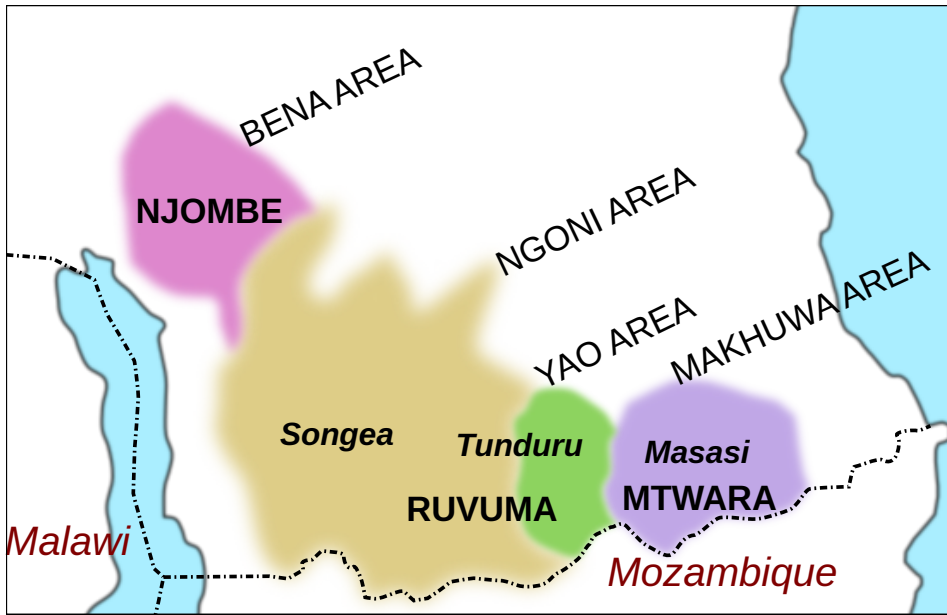


Figure 1: Approximate locations of the Bena, Ngoni, Yao and Makhuwa speaking areas in Tanzania (map produced by Sebastian Nordhoff based on work by G. Mapunda and F. Hassan)

2 Locative marking strategies

In many Bantu languages location is marked by nominal prefixation (Rugemalira 2004). Four locative prefixes were reconstructed to Proto-Bantu: class 16 **pa-*, class 17 **ku-*, class 18 **mu-*, and class 23/25 **i/e-*² (Bleek 1862–1869, Guthrie 1948, 1967–1971, Meeussen 1967). In semantics terms, **pa-* means nearness, adjacency, definiteness, specificity, limitedness or known location; **ku-* implies remoteness, farness, unspecificity, generalness, unlimitedness, not necessarily known or direction/towardness; and **mu-* denotes withinness, interiority or enclosed location. Whilst many Bantu languages have retained the first three historical locative prefixes, e.g. Shona [S10] illustrated in (1), other languages have retained two affixes, e.g. Vunjo [E62] (Mcha 1979) and yet others have retained only one class, e.g. Kiwoso [E621d] (Mallya 2011).

²This locative affix is attested in very few Bantu languages. Ganda (JE15 Uganda) is an example, e.g. *e-Kampala* ‘in Kampala’.

- (1) class 16 *pa-imba* ‘at the house’
 class 17 *ku-imba* ‘to the house’
 class 18 *mu-imba* ‘in the house’

A second strategy to expression locative consists in suffixing *-(i)ni ~ -n ~ -eng* to the end of the noun stem. Examples in (2) illustrate this strategy in several Eastern languages.

- (2) a. Swahili [G42] *nyumba-ni* ‘at/to/in the house’
 b. Sesotho [S33] *thab-eng* ‘to/on the mountain’ (Machobane 1995: 120)
 c. Chaga [E30] *ruko-nyi* ‘at/to/in the kitchen’ (Moshi 1995: 131)

Note that the loss of locative morphology in these languages is restricted to noun class prefixes. As will be made clear in §2, noun modifiers and verb forms controlled by a locative head noun necessarily host locative agreement markers (Mpiranya 2015).

Double affixation, which involves both a locative noun class prefix and a locative suffix, is a third strategy very rarely attested across Bantu. As far as we know, only P30 languages productively exhibit double affixation,³ as illustrated in (3) with Cuwabo [P34] and Makhuwa-Enahara [P31] which both combine class 17 prefix *o-* and locative suffix *-ni*.

- (3) a. Cuwabo *o-ma-básá-ni* (cl.17) ‘at work’
 b. Makhuwa-Enahara *o-n-tékô-ni* (cl.17) ‘at work’ (Guérois 2016: 51)

Guérois (2016) suggests that whilst locative prefixes were inherited, the suffixation of *-ni* is a later innovation resulting from a contact situation with Swahili.

Finally, it should be noted that names of places or cities do not commonly host locative marking. In Swahili, for instance, cities like Tokyo, London, or Paris are not modified when used locatively (Mkude 2005: 153). Cities from Tanzania also do not host locative markers (e.g. Arusha, Dar es Salaam, Dodoma, Mbeya).

Two of the strategies above are attested in our sample of languages, namely prefixation (for Bena, Ngoni, and Yao) and double affixation (for Makhuwa), as shown in (4).⁴

³In Swati [S43], some locative nouns necessarily combine the class 25 locative prefix *e-* and the locative suffix *-ini*, e.g. *e-ndl-ini* ‘at/to/in the house’ (Marten 2010: 254), but this double affixation is restricted to a few nouns only.

⁴N is a homorganic nasal, i.e. its surface realization depends on its phonetic environment, such as N > [m] / _ bilabial C and N > [ŋ] / _ velar C.

- (4)
- | | Bena | Ngoni | Yao | Makhuwa-I. | |
|-------|-----------------------|-------------------------|-------------------------|--------------------------|----------------|
| cl.16 | <i>pa-kaye</i> | <i>pa-nyumba</i> | <i>pa-nyumba</i> | <i>va-nupa-ni</i> | ‘at the house’ |
| cl.17 | <i>ku-kaye</i> | <i>ku-nyumba</i> | <i>ku-nyumba</i> | <i>u-nupa-ni</i> | ‘to the house’ |
| cl.18 | <i>mu-kaye</i> | <i>mu-nyumba</i> | <i>n-nyumba</i> | <i>n-nupa-ni</i> | ‘in the house’ |

In each sampled language, locative prefixes are additive, i.e. they are added to the stem which has an inherent noun class prefix. For instance, in Makhuwa, the locative prefixes *va-*, *u-* and *N-* can be added to the noun stem *mwiri* ‘tree’ which has an inherent noun class 3 prefix *mw-* as seen in example (5).

- (5) cl.16 *va-mw-iri-ni* ‘at the tree’ [Makhuwa-I.]
 cl.17 *u-mw-iri-ni* ‘to the tree’
 cl.18 *m-mw-iri-ni* ‘in the tree’

Looking back at Table 2, we see that Makhuwa-Imithupi behaves as Makhuwa-Enahara illustrated in (3), i.e. locative nouns are by default built upon the combination of a locative prefix (class 16 *va-*, class 17 *u-*, and class 18 *N-*) and the locative suffix *-ni*. Only a few nouns deviate from this pattern by not admitting the locative suffix. These are lexicalized locatives such as *vachula* ‘at the top’ and *uchulu* ‘to the top’, and proper locative nouns such as names of towns, countries and continents, as in (6).

- (6) Makhuwa
- a. i. ***u-Dar es salaam***
17-Dar es Salaam
'to Dar es Salaam'
- ii. ****u-Dar es salaam-ni***
17-Dar es Salaam-LOC
- b. i. ***u-Tanzania***
17-Tanzania
'to Tanzania'
- ii. ****u-Tanzania-ni***
17-Tanzania-LOC

On the other hand, mere locative prefixation with common nouns seems to be strictly prohibited in Makhuwa-Imithupi, as shown in (7). Both nouns *patsári* ‘market’ and *matta* ‘field’ are made locative by double affixation, i.e. by one of the three locative prefixes and by the locative suffix *-ni* (*u-patsári-ni* ‘to the market’ and *m-matta-ni* ‘in the field’). In this respect, it is worth noting a dialectal difference with Makhuwa-Enahara, whereby certain common nouns may be marked

for locative uniquely through prefixation (8). Some others freely add the locative suffix *-ni* (8).

- (7) Makhuwa-Imithupi
- a. * *u-patsári*
17-9.market
'to the market'
 - b. * *m-matta*
18-field
'in the field'
- (8) Makhuwa-Enahara (Guérois 2016: 53–54)
- a. *o-patsári*
17-market
'at/to the market'
 - b. *m-mátta(-ni)*
18-field-LOC
'in the field'

If the locative suffix *-ni* is present in certain locative expressions in Bena, Ngoni, and Yao, its use is not productive at all. In these three languages, locative NPs are expressed through prefixation only. In Ngoni, for instance, *-ni* is present in two specific contexts, i.e. in lexicalized locative NPs (9)⁵ and in borrowed locative NPs (10). Since *-ni* is not segmentable in these words, it does not convey any locative meaning, hence locative prefixation is still needed.

- (9) *mfuleni* 'well' *pa-mfuleni* 'at the well' [Ngoni]
bomani 'town' *pa-bomani* 'to/in (?) town'
- (10) *m-jini* 'town' < Swahili *mjini* [Ngoni]
pa-m-jini (cl.16) 'at the town'
ku-m-jini (cl.17) 'to the town'
mu-m-jini (cl.18) 'in the town'

In Yao, the locative suffix *-ni* may optionally be added on loan words (11), reminiscent of equivalent Makhuwa double affixed locative NPs *umsikitini* 'to the mosque', *ukanisani* 'to the church', *ushuleni* 'to school' and *umahakamani* 'to the court'. Different from Yao, in Bena the locative marker *-ni* cannot be added (12).

⁵However, it cannot be excluded that these lexicalized locative NPs are originally loans from Swahili where locative is marked by suffixation.

- (11) Yao
msikiti ‘mosque’ (cl.3) → ***pa-m-sikiti(-ni)*** ‘at the mosque’ (cl.16)
kanisa ‘church’ (cl.5) → ***ku-kanisa(-ni)*** ‘to the church’ (cl.17)
shule ‘school’ (cl.9) → ***ku-shule(-ni)*** ‘to the school’ (cl.18)
mahakama ‘court’ (cl.9) → ***mu-mahakama(-ni)*** ‘in the court’ (cl.18)
- (12) Bena
msikiti ‘mosque’ (cl.3) → ***pa-m-sikiti(*-ni)*** ‘at the mosque’ (cl.16)
kanisa ‘church’ (cl.5) → ***ku-kanisa(*-ni)*** ‘to the church’ (cl.17)
sule ‘school’ (cl.9) → ***ku-sule(*-ni)*** ‘to the school’ (cl.18)
mahakama ‘court’ (cl.9) → ***mu-mahakama(*-ni)*** ‘in the court’ (cl.18)

Table 1 shows a summary of locative marking in Bena, Ngoni, Yao, and Makhuwa.

Table 1: Locative marking in Bena, Ngoni, Yao, and Makhuwa

locative marking strategies	prefixation only	suffixation only	prefixation + suffixation
Bena Ngoni Yao	yes	no	yes in (Swahili) loans
Makhuwa-I.	restricted to lexicalized locative nouns + proper geographical names	no	yes by default

As seen in Table 1, the locative marking strategies attested in the selected languages are prefixation and double affixation. The sampled languages differ from other Eastern Bantu languages spoken in Tanzania such as Swahili and Chagga, whose nouns become locative via suffixation only.

3 Locative agreement

Several linguists have discussed locative agreement systems in Bantu languages (e.g., among others, Stucky 1976, Harford 1983, Kahigi 2005, Marten 2012, Ngunga & Mpofu-Hamadziripi 2013). Agreement occurs: i) within locative NPs, between the locative head noun and its modifiers; ii) within clauses, between the locative head noun and its dependent verb. The two types of agreement are discussed in the two following subsections.

3.1 Agreement within NPs

Locative agreement is a morphosyntactic process whereby the dependent elements in the locative NP agree with the locative. Noun dependents here involve possessives, associatives, adjectives, and demonstratives. They are commonly referred to as modifiers. Agreement-wise, languages show a three-way distinction (e.g. Marten 2012, Machobane 1995). Firstly, there are languages with an inner agreement system, whereby the inherent noun class prefix of a noun controls the agreement between the locative head and its dependents. This is shown in (13) with Runyambo [JE21], where the first person singular possessive stem *nje* agrees in noun class with *citabo* ‘book’, i.e. class 7. Secondly, there are languages with an outer agreement system, whereby noun modifiers receive locative agreement prefixes. In (14), the Swahili first person singular possessive stem *angu* takes class 18 agreement to express withinness. Thirdly, there are languages which exhibit both outer and inner agreement systems. In these languages, the inherent noun class prefix of a noun or the locative prefix controls the agreement between the locative head and its dependents. In Tshiluba [L31], demonstratives modifying locative nouns may agree either with the leftward locative prefix (15a) or with the inherent noun prefix (15b).

- (13) o-mu-ci-tabo ca-nje
 AUG-18-7-book 7-my
 ‘In my book’ (Runyambo, Rugemalira 2004: 6)
- (14) chumba-ni mw-angu
 7.room-LOC 18-POSS.1SG
 ‘In my room’ (Swahili, Mkude 2005: 154)
- (15) a. mu-di-kopu e-mu mu-di mu-tooke
 18-5-cup DEM-18 SM18-be 18-clean
 ‘This cup is clean inside’
 b. mu-di-kopu e-di mu-di mu-tooke
 18-5-cup DEM-5 SM18-be 18-clean
 ‘The space inside this cup is clean’ (Tshiluba, Stucky 1976: 180)

Based on this typology, our data show that Bena and Yao both have outer and inner types of agreement on all types of modifiers, namely adjectives, connectives, demonstratives, and possessives, just like Tshiluba in (15). Bena data are provided in Table 2 and Yao data in Table 3. The difference in meaning is not entirely clear-cut, but it seems that outer agreement gives more emphasis on

the locative aspect of the event, i.e. it relates to a place and not somewhere else. On the other hand, inner agreement gives more importance to the modifier as such. For instance, *pakaye inofu* ‘to a good house’ in Bena, provided in Table 2, underlies the fact that the house is good (and not bad).

Table 2: Outer and inner agreement in Bena

	Outer AGR	Inner AGR
<i>ahele ...</i> ‘he has gone’	pa-kaye pa-nofu 16-9.house 16-good ‘to a good house’	pa-kaye i-nofu 16-9.house 9-good ‘to the place where the house is good’
	pa-kaye pa vaanu 16-9.house 16.CON 2.people ‘to the people’s house’	pa-kaye ja vaanu 16-9.house 9.CON 2.people ‘to the place where the house is of the people’
	pa-kaye pa-la 16-9.house 16.DEM.II ‘to that house’	pa-kaye i-la ‘to the 16-9.house 9.DEM.II place of that house’
	pa-kaye pa-angu 16-9.house 16-POSS.1SG ‘to my house’	pa-kaye ya-angu 16-9.house 9-POSS.1SG ‘to my house’

Ngoni resembles Runyambo (illustrated in (13) above): outer and inner types of agreement are only attested between the locative head noun and demonstratives. The other modifiers (adjectives, connectives, possessives) may only receive inner agreement, whereas outer agreement is ungrammatical, as seen in Table 4.

From our sample, Makhuwa differs the most, as it only displays outer agreement (as in Swahili in (14) above). This is illustrated in Table 5.

Table 3: Outer and inner agreement in Yao

	Outer AGR	Inner AGR
<i>ajawile...</i> 'he has gone'	pa-nyumba pa-ambone 16-9.house 16-good 'to the good house'	pa-nyumba ja-ambone 16-9.house 9-good 'to the place where the house is good'
	pa-nyumba pa vandu 16-9.house 16.CON 2.people 'to the people's house'	pa-nyumba ja vandu 16-9.house 9.CON 2.people 'to the place where the house is of the people'
	pa-nyumba a-pa-la 16-9.house AUG-16-DEM.III 'to that house'	pa-nyumba a-ja-la 16-9.house AUG-9-DEM.III 'to the place of that house'
	pa-nyumba pa-angu 16-9.house 16-POSS.1SG 'to my house'	pa-nyumba ja-angu 16-9.house 9-POSS.1SG 'to the place of my house'

Table 4: Inner agreement in Ngoni

	Outer AGR	Inner AGR
<i>ahambi...</i> 'he has gone'		
'to a good house'	*pa-nyumba pa-bwina 16-9.house 16-good	pa-nyumba ya-bwina 16-9.house 9-good
'to the house of the people'	*pa-nyumba 16-9.house pa-vanu 16.CON-2.people	pa-nyumba ya vanu 16-9.house 9.CON 2.people
'to that house'	pa-nyumba pa-la 16-9.house 9-DEM.III	pa-nyumba yi-la 16-9.house 9-DEM.III
'to my house'	*pa-nyumba *pa-angu 16-9.house 16-POSS.1SG	pa-nyumba ya-angu 16-9.house 9-POSS.1SG

Table 5: Inner agreement in Makhuwa-Imithupi

<i>ahorwa...</i> 'he has gone'	Outer AGR	Inner AGR
to a good house	va-i-nupa-ni va-orera 16-9-house-loc 16-good	* va-i-nupa-ni * y-orera 16-9-house-loc 9-good
to the house of the people	va-i-nupa-ni 16-9-house-loc va-atu 16.CON-people	* va-i-nupa-ni * y-atu 16-9.house-loc 9.CON-people
to that house	va-i-nupa-ni va-le 16-9-house 9-DEM.III	* va-i-nupa-ni * i-le 16-9-house 9-DEM.III
to my house	va-i-nupa-ni va-aka 16-9-house 16-POSS.1SG	* va-i-nupa-ni * y-aka 16-9-house 9-POSS.1SG

3.2 Agreement within VPs

Within VPs, locative indexation on the verb usually involves subject, object and relative prefixation as well as locative cliticization. Locative verbal enclitics are not attested in the selected languages. Therefore, in this chapter, we only discuss locative subject and object prefixation. In the four sampled languages, locative subject prefixes exist for the three historical locative classes. Class 16 *pa-* (or variant *va-* in Makhuwa-I.) is illustrated in (16). More examples of locative verbal agreement are described in §4 on locative inversion construction.

(16) Class 16 locative subject prefixes

Bena	pa-i-nung-a	a-ma-futa	pa-kaye
	SM16-PRS-smell-FV	AUG-6-oil	16-9.house
Ngoni	pa-gi-nung'-a	ma-huta	pa-nyumba
	SM16-smell-FV	6-oil	16-9.house
Yao	pa-ku-nung-a	ma-huta	pa-musi
	SM16-PRS-smell-FV	6-oil	16-9.house
Makhuwa	va-no-nukh-a	ma-khura	va-nupa-ni
	SM16-PRS-smell-FV	6-oil	16-9.house- LOC

'It smells oil at the house.'

Locative object marking is also attested in our sample, except in Makhuwa where object marking is restricted to classes 1 and 2 (17).

(17) Class 16 locative object prefixes

Bena	u-mw-ana	a-ku- pa -nogw-a	pa-sule
	AUG-1-child	SM1-PRS-OM16-like-FV	16-school
Ngoni	mw-ana	a- pa -gan-i	pa-shuli
	1-child	SM1-OM16-like-FV	16-school
Yao	mw-anache	a-ku- pa -sak-a	pa-shule
	1-child	SM1-PRS-OM16-like-FV	16-school
Makhuwa	*mw-ana	a-no- va -tun-a	va-shule-ni
	1-child	SM1-PRS-OM16-like-FV	16-9.school-LOC

‘The child likes school.’ (lit. ‘The child likes there at the school.’)

3.3 Summary

Table 6 summarizes the locative agreement system as found in each sampled language. As can be seen, Bena and Yao behave alike: both languages allow locative inner and outer agreement within NPs and both have locative subject and object verbal markers. Ngoni is very similar, except for outer agreement which is restricted to the demonstratives, whereas it is observed with all modifiers in Bena and Yao. Makhuwa, in turn, differs from the other three languages in two respects: first it prohibits inner agreement, second it does not have locative object markers.

4 Locative inversion constructions

Locative inversion (LI) is part of those inversion constructions whereby a logical subject, i.e. the highest thematic role selected by the verb, occupies a postverbal position and the locative phrase is raised to the preverbal position where it grammatically behaves like a regular subject, i.e. it controls agreement on the verb. This change in word order is often motivated by information-structural considerations (Marten & van der Wal 2014, Hamlaoui 2014). Two types of LI are traditionally distinguished (Buell 2007): formal agreeing LI and semantic agreeing LI. The former relies on locative morphology and implies that languages have maintained a productive locative system. This is the case in Chewa as shown in (18) where the verb *li* ‘be’ agrees with the preverbal locative phrase *kumudzi* ‘to the village’. Semantic agreeing LI, in turn, involves nouns which are inherently locative without any additional locative marking. This is illustrated in Zulu (19)

6 The locative system in South-Tanzanian Bantu languages

Table 6: Overview of locative agreement systems

Agreement system	Bena	Ngoni	Yao	Makhuwa
<i>within NPs</i>				
inner agreement				
with adjectives	✓	✓	✓	✗
with connectives	✓	✓	✓	✗
with demonstratives	✓	✓	✓	✗
with possessives	✓	✓	✓	✗
outer agreement				
with adjectives	✓	✗	✓	✓
with connectives	✓	✗	✓	✓
with demonstratives	✓	✓	✓	✓
with possessives	✓	✗	✓	✓
<i>within VPs</i>				
locative subject marker	✓	✓	✓	✓
locative object marker	✓	✓	✓	✗

with *lezi zindlu* ‘(in) these houses’, which triggers subject agreement on *hlala* ‘live’.

- (18) a. Chi-ttime chi-li **ku-mu-dzi**. [Chewa]
 7-well SM7-be 17-3-village
 ‘The well is to the village.’
 b. **Ku-mu-dzi** ku-li chi-ttime.
 17-3-village SM17-be 7-well
 ‘To the village there is a well.’ (Salzmann 2005: 5)
- (19) a. **Aba-ntu** aba-dala **ba-hlala lezi** **zi-ndlu**. [Zulu]
 2-people 2-old SM2-live 10.DEM.I 10-house
 ‘Old people live in these houses.’
 b. **Lezi** **zi-ndlu** **zi-hlala** aba-ntu aba-dala.
 10-DEM.I 10-house SM10-live 2-people 2-old
 ‘(In) these houses live old people.’ (Buell 2007: 107–108)

More recently, Guérois (2014) shows that both locative LI and semantic LI exist in Cuwabo [P34]. Other languages such as Olutsootso [JE32b] and Swahili

(Marten & van der Wal 2014), and Kinyarwanda [JD61] (Ngoboka 2016) show the same feature. Our collected data show no evidence of semantic LI constructions; only formal LI is attested in the 4 sampled languages, in accordance with the most common Bantu pattern (Marten & van der Wal 2014). An example of each language is provided below.

- (20) a. a-ma-futa ma-gi-nung'-a mu-shumba [Bena]
 AUG-6-oil SM6-PRS-smell-FV 18-7.room
 'Oil is smelling in the room'
 b. **mu-shumba** mu-gi-nung-a a-ma-futa
 18-7.room SM18-PRS-smell-FV AUG-6-oil
 'In the room is smelling oil'
- (21) a. ma-huta ma-gi-nung'-a mu-chumba [Ngoni]
 6-oil SM6-PRS-smell-FV 18-7.room
 'Oil is smelling in the room'
 b. **mu-chumba** mu-gi-nung'-a ma-huta
 18-7.room SM17-PRS-smell-FV 6-oil
 'In the room is smelling oil'
- (22) a. ma-huta ma-ku-nung-a mu-ch-umba [Yao]
 6-oil 6-PRS-smell-FV 18-7-room
 'Oil is smelling in the room'
 b. **mu-chumba** mu-ku-nung-a ma-huta
 18-7.room-LOC SM18-PRS-smell-FV 6-oil
 'In the room is smelling oil'
- (23) a. ma-khura a-no-nukh-a n-ch-umba-ni [Makhuwa]
 6-oil 6SM-PRS-smell-FV 18-7-room-loc
 'Oil is smelling in the room'
 b. **n-chumba-ni** n-no-nukh-a ma-khura
 18-7.room-LOC SM18-PRS-smell-FV 6-oil
 'In the room is smelling oil'

Other examples with the copula verb *li ~ ri* 'be' are provided in (24)–(27).

- (24) **mu-shumba** mu-li mw-ana [Bena]
 18-7.room SM18-be 1-child
 'In the room there is a child.'

- (25) **mu-chumba mu-wi** (na) mw-ana [Ngoni]
 18-7.room SM18-be (with) 1-child
 'In the room there is (with) a child.'
- (26) **mu-nyumba mu-li** mw-anache [Yao]
 18-9.house SM18-be 1-child
 'In the house there is a child.'
- (27) **m-nupa-ni m-ri** mw-ana [Makhuwa]
 18-9.house-LOC SM18-be 1-child
 'In the house there is a child.'

The preverbal locative phrase behaves, in many ways, just like a regular subject. Like in most Bantu languages, finite verbs in the four sampled languages have an obligatory subject prefix that agrees with the subject NP in noun class. In LI constructions, the subject prefix of the verb obligatorily agrees with the preverbal locative phrase, in one of the three locative noun classes. Such agreement is a clear indicator of the subject status of the fronted locative phrase.

As a grammatical subject and discourse topic, the fronted locative NP may be dropped or may be postponed clause-finally. In both cases, it keeps licensing subject agreement on the verb. This is shown below.

- (28) **mu-li** mw-ana (**mu-shumba**) [Bena]
 SM18-be 1-child (18-7.room)
 'There is a child (in the room).'
- (29) **mu-wi** (na) mw-ana (**mu-chumba**) [Ngoni]
 SM18-be (with) 1-child (18-7.room)
 'There is (with) a child (in the room).'
- (30) **mu-li** mw-anache (**mu-nyumba**) [Yao]
 SM18-be 1-child (18-9.house)
 'There is a child (in the room).'
- (31) **m-ri** mw-ana (**m-nupa-ni**) [Makhuwa]
 SM18-be 1-child (18-9.house-LOC)
 'There is a child (in the room).'

On the other hand, the inverted subject appears immediately after the verb, i.e. the object position, but maintains a thematic role of subject. Its presence is mandatory. Omitting the inverted subject would make the sentence ungrammatical, as seen in the examples below.

- (32) * mu-shumba mu-li [Bena]
 18-7.room SM18-be
 lit. 'In the room there is.'
- (33) * mu-chumba mu-wi(na) [Ngoni]
 18-7.room SM18-be
 lit. 'In the room there is.'
- (34) * mu-nyumba mu-li [Yao]
 18-9.house SM18-be
 lit. 'In the house there is.'
- (35) * m-nupa-ni m-ri [Makhuwa]
 18-9.house-LOC SM18-be
 lit. 'In the house there is.'

Despite its postverbal object position, the inverted subject does not really behave as an object. First, it cannot be object-marked on the verb as seen in examples (36)–(39).

- (36) * mu-sh-umba mu-i-**ma**-nung-a **a-ma-futa** [Bena]
 18-7-room SM18-PRS-OM6-smell-FV AUG-6-oil
 'In the room is smelling it, oil'
- (37) * mu-ch-umba mw-i-**mu**-nung'-a **ma-huta** [Ngoni]
 18-7-room SM18-PRS-OM6-smell-FV 6-oil
 'In the room is smelling it, oil'
- (38) * mu-chumba mu-**ma**-kunung-a **ma-huta** [Yao]
 18-7.room SM18-OM6-smell-FV 6-oil
 'In the room is smelling it, oil'
- (39) * m-chumba-ni m-no-**mw**-unl-a **mw-ana** [Makhuwa]
 18-7.room-LOC SM18-PRS-OM6-smell-FV 1-child
 'In the room is crying him, the child'

Second, the logical subject cannot be passivized, as seen in (40)–(43).

- (40) * **ma-futa** ma-i-nung-w-a (ni mu-ki-yumba) [Bena]
 6-oil SM6-PRS-smell-PASS-FV (by 18-7-room)
 'Oil is smelled (in the room)'

- (41) * **ma-huta** ma-inung'-iw-a (ni mu-chumba) [Ngoni]
 6-oil SM6-smell-PASS-FV (by 18-7.room)
 'Oil is smelled (in the room)'
- (42) * **ma-huta** ma-kungung-w-a (ni mu-chumba) [Yao]
 6-oil SM6-smell-PASS-FV (by 18-7.room)
 'Oil is smelled (in the room)'
- (43) * **ma-khura** ma-no-nukh-iy-a (ni m-chumba-ni) [Makhuwa]
 6-oil SM6-PRS-smell-PASS-FV (by 8-7.room-LOC)
 'Oil is smelling (in the room)'

Third, the logical subject cannot be extracted by relativization, as seen in (44)–(47).

- (44) * ani ye mu-kaye i-vemb-a? [Bena]
 who 1.DEM 18-9.house SM1.PRS-cry-FV.REL
 'Who is it that is crying in the house?'
- (45) * yani mwe mu-nyumba i-vemb-a? [Ngoni]
 who 1.DEM 18-9.house SM1.PRS-cry-FV.REL
 'Who is it that is crying in the house?'
- (46) * nduni jwelejo m-nyumba a-ku-lil-a? [Yao]
 who 1.DEM 18-9.house SM1.PRS-cry-FV.REL
 'Who is it that is crying in the house?'
- (47) * mpani yo m-nupa-ni a-no-unl-a? [Makhuwa]
 who 1.DEM 18-9.house-LOC SM1-PRS-cry-FV.REL
 'Who is it that is crying in the house?'

As noted by Bresnan & Kanerva (1989), the impossibility to object-mark, to passivize and to relativize the postverbal logical subject of a LI construction, suggests that it is not a typical object complement of the verb. Yet, its inflexible immediate-after-the-verb position and its obligatory presence still liken it to a core argument rather than an adjunct.

Argument structures involved in LI may differ. For example, Demuth & Mmusi (1997) argue that in Tswana, LI is possible with active transitive verbs. In contrast, in Chewa, Bresnan & Kanerva (1989) observe that those verbs do not allow LI. In the four sampled languages, LI is possible with unaccusative verbs, i.e. intransitive verbs which take one argument with the semantic role of theme. The verb may in most cases also take a locative argument. Examples of these verbs are

'smell', 'be full', 'spread', and 'germinate'. Examples in (20)–(23) above illustrate the point with the verb 'smell'. However, LI is no longer possible when unaccusative verbs are used in the passive voice. Examples in (48)–(51) illustrate this point.

- (48) * ku-sh-umba ku-i-nung'-w-a a-ma-futa (na va-ana) [Bena]
17-7-room SM17-PRS-smell-PASS-FV AUG-6-oil (by 2-child)
'To the room is being smelled the oil (by the children)'
- (49) * ku-ch-umba ku-i-nung'-iw-a ma-huta (na va-ana) [Ngoni]
17-7-room SM17-PRS-smell-PASS-FV 6-oil (by 2-child)
'To the room is being smelled the oil (by the children)'
- (50) * mu-ch-umba mu-ku-nung-w-a ma-huta (ni va-ana) [Yao]
17-7-room-LOC SM17-PRS-smell-PASS-FV 6-oil (by 2-child)
'In the room is being smelled the oil (by the children)'
- (51) * n-ch-umba-ni n-no-nukh-w-a ma-khura (na ashana)
18-7-room-LOC SM18-PRS-smell-PASS-FV 6-oil (by 2.child)
[Makhuwa]
'In the room is being smelled the oil (by the children)'

On the other hand, unergative verbs do not allow LI. Unergative verbs are intransitive verbs that are semantically distinguished by having an agent argument. Examples of these verbs are 'vomit', 'defecate', 'run', and 'cry'. Bena examples in (52) illustrate the point with the verb *vemba* 'cry'.

- (52) a. * mu-shumba mu-vemb-a mw-ana [Bena]
18-7.room sm18-cry-FV 1-child
'The child is crying in the room.'
- b. * mu-chumba mu-vemb-a mw-ana [Ngoni]
18-7.room sm18-cry-FV 1-child
'The child is crying in the room.'
- c. * mu-ki-yumba mu-vemb-a mw-ana [Yao]
18-7-room sm18-cry-FV 1-child
'The child is crying in the room.'
- d. * n-chumba-ni n-no-unl-a mw-ana [Makhuwa]
18-7.room-loc sm18-prs-cry-FV 1-child
'The child is crying in the room.'

In the same way, passivised unergative verbs cannot appear in LI. Example in (53) illustrates the point with the verb *vembwa* ‘cried by’.

- (53) a. * mu-sh-umba mu-vemb-w-a (ni mw-ana) [Bena]
 18-7-room SM18-cry-PASS-FV (by 1-child)
 ‘It is being cried in the room (by the child).’
 b. * mu-ch-umba mu-vemb-w-a (ni mw-ana) [Ngoni]
 18-7-room SM18-cry-PASS-FV (by 1-child)
 ‘It is being cried in the room (by the child).’
 c. * mu-ki-yumba mu-vemb-w-a (ni mw-ana) [Yao]
 18-7-room SM18-cry-PASS-FV (by 1-child)
 ‘It is being cried in the room (by the child).’
 d. * n-ch-umba-ni n-no-unl-w-a (ni mw-ana) [Makhuwa]
 18-7-room SM18-prs-cry-PASS-FV (by 1-child)
 ‘It is being cried in the room (by the child).’

Transitive verbs, which add a thematic object to the argument structure, fail to undergo LI. This is expected when the thematic object precedes the inverted subject, as the latter necessarily follows the verb. The order inverted subject-theme is nevertheless just as ungrammatical. Infelicitous examples are provided in (54)–(57) with the verbs ‘cultivate’ and ‘put’.

- (54) a. * a-pa-ono pa-limil-e i-ki-tu kuku [Bena]
 AUG-16-place SM16-cultivate-PRF AUG-7-thing 1.grandfather
 ‘Grandfather has cultivated something on the place.’
 b. * a-pa-ono pa-limil-e kuku i-ki-tu
 AUG-16-place SM16-cultivate-PRF 1.grandfather AUG-7-thing
 ‘Grandfather has cultivated something on the place.’
 (55) a. * ap-a naha pa-limil-e chi-tu gogu [Ngoni]
 16-DEM int SM16-cultivate-PRF 7-thing 1.grandfather
 ‘Grandfather has cultivated something on the place.’
 b. * ap-a naha pa-limil-e gogu chi-tu
 16-DEM int SM16-cultivate-PRF 1.grandfather 7-thing
 ‘Grandfather has cultivated something on the place.’
 (56) a. * pa-m-keka pa-vichil-e chi-ndu baba [Yao]
 16-3-mat SM16-put-PRF 7-thing 1.father
 ‘Father has put something on the mat.’

- b. * pa-m-keka pa-vichil-e baba chi-ndu
 16-3-mat SM16-put-PRF 1.father 7-thing
 ‘Father has put something on the mat.’
- (57) a. * va-m-pasa-ni va-ho-wesh-a i-tu athatha [Makhuwa]
 16-3-mat-LOC SM16-PRF-put-FV 7-thing 1.father
 ‘Father has put something on the mat.’
- b. * va-m-pasa-ni va-ho-wesh-a athatha i-tu
 16-3-mat-LOC SM16-PRF-put-FV 1.father 7-thing
 ‘Father has put something on the mat.’

On the other hand, passivized transitive verbs do allow LI. Examples in (58)–(61) illustrate the point with the verb ‘being put’.

- (58) a-pa-ono pa-limil-w-e i-ki-tu (ni kuku) [Bena]
 AUG-16-place SM16-put-PASS-PRF AUG-7-thing (by 1.grandfather)
 ‘Something has been cultivated on the place (by grandfather).’
- (59) ap-a naha pa-lim-iw-e i-ki-tu (na gogu) [Ngoni]
 16-place int SM16-put-PASS-PRF AUG-7-thing (by 1.grandfather)
 ‘Something has been cultivated on the place (by grandfather).’
- (60) pa-m-keka pa-vichil-w-e chi-ndu (ni baba) [Yao]
 16-3-mat SM16-put-PASS-PRF 7-thing (by 1.father)
 ‘Something has been put on the mat (by father).’
- (61) va-m-pasa-ni va-ho-wesh-iy-a i-tu (ni athatha) [Makhuwa]
 16-3-mat-LOC SM16-PRF-put-FV 7-thing (by 1.father)
 ‘Something has been put on the mat (by father).’

Table 7 summarizes the findings for LI. As argued above, the four sampled languages behave alike, both in terms of types of LI allowed (formal versus semantic) and the interaction between LI and the argument structure.

5 Conclusion

This paper has provided a comparative description of the locative system of four South-Tanzanian Bantu languages, namely Bena, Ngoni, Yao and Makhuwa. The study shows that these languages overall exhibit similar locative constructions with similar properties. This is particularly clear with LI constructions, which

Table 7: Locative inversion in Bena, Ngoni, Yao, and Makhuwa

Parameters	Bena	Ngoni	Yao	Makhuwa
<i>Types of LI</i>				
formal agreeing LI	✓	✓	✓	✓
semantic agreeing LI	✗	✗	✗	✗
<i>LI and argument structure</i>				
active unaccusative verb	✓	✓	✓	✓
passive unaccusative verb	✗	✗	✗	✗
active unergative verb	✗	✗	✗	✗
passive unergative verb	✗	✗	✗	✗
active transitive verb	✗	✗	✗	✗
passive transitive verb	✓	✓	✓	✓

show identical properties. Furthermore, the four languages make a productive use of the three historical locative prefixes of class 16, 17 and 18 in both nominal and verbal domains. While Bena and Yao are strictly identical for all properties discussed in this paper, Ngoni differs from the three others in that it does not allow outer agreement within NPs (except with demonstrative modifiers). The most notable differences come from Makhuwa. In this language, in addition to locative prefixation, locative nouns are further marked with a locative suffix *-ni*. The only cases of exception are lexicalized locatives and nouns referring to administrative-geographical entities, such as names of towns or countries. What looks like double affixation in Bena, Ngoni or Yao is attested in loanwords only, especially from Swahili. Furthermore, Makhuwa is the only sampled language which does not allow inner agreement within NPs. Only outer agreement is attested. One last major difference observed in Makhuwa is the absence of a full paradigm of object prefixes. The system eroded to such a point that only classes 1/2 have object agreement markers in the language. In contrast, Bena, Ngoni and Yao have full object markers paradigms, which includes locative object markers.

Bena and Yao, in spite of sharing identical locative features, are geographically not proximal. In fact, and as already shown in Map 1, Bena and Yao areas are separated by the Ngoni linguistic group. Influence from Swahili, as a lingua franca across north-eastern Bantu, is perceptible in all four languages, with lexical borrowing of words such as *mafuta/mahuta* ‘oil’, or in Bena and Ngoni, *chumba* ‘room’, and *lima* ‘cultivate’. As far as the locative system is concerned, however, only Makhuwa seems to have been more directly affected by Swahili through the

suffixation of *-ni* on locativized nouns. Beyond Swahili influence, the few examples retrieved in this paper may not warrant any conclusion on mutual influence within the sampled languages.

Avenues for future research would at least involve extending the study to include locative verbal enclitics which have been excluded from this paper because of a lack of clear data in the selected languages and the difficulty to further investigate on them *ex situ*. As explained in the introduction, the languages surveyed here represent a convenience sample. Further light could be shed on the micro-variation of locative systems in Eastern Bantu through a broader comparative work covering a certain number of Eastern Bantu languages to see how our four sampled languages fit in a wider geographical area.

Abbreviations

FV	Final Vowel	REL	Relative
LOC	Locative	SM	Subject Marker
OM	Object Marker	TAM	Tense Aspect Mood
PRF	Perfective	DEM	demonstrative
PRS	Present	INT	intensifier
PASS	Passive		

References

- Barlew, Jefferson. 2013. Point of view in Mushunguli locatives. In Olanike Olorie & Karen W. Sanders (eds.), *Selected Proceedings of the 43rd Annual Conference on African Linguistics*, 115–129. Somerville, MA: Cascadilla proceedings Project.
- Bleek, Wilhelm H. I. 1862–1869. *A comparative grammar of South African languages*. London: Trübner.
- Bresnan, Joan & Jonni M. Kanerva. 1989. Locative inversion in Chichewa: A case study of factorization in grammar. *Linguistic Inquiry* 20(1). 1–50.
- Buell, Leston. 2007. Semantic and formal locatives: Implications for the Bantu locative inversion typology. *SOAS Working Papers in Linguistics* 15. 105–120.
- Chaula, Edigio Hangaika Yamligile. 1989. *Aspects of Ki-Bena phonology: The case of Ki-Mavemba variety*. Dar es Salaam: University of Dar es Salaam. (MA thesis).
- Demuth, Katherine & Sheila Mmusi. 1997. Presentational focus and thematic structure in comparative Bantu. *Journal of African Languages and Linguistics* 18(1). 1–19. DOI: 10.1515/jall.1997.18.1.1.

- Guérois, Rozenn. 2014. Locative inversion in Cuwabo. *ZAS Papers in Linguistics* 57. 49–71.
- Guérois, Rozenn. 2016. The locative system in Cuwabo and Makhuwa (P30 Bantu languages). *Linguistique et Langues Africaines* 2. 43–75.
- Guérois, Rozenn, Hannah Gibson & Lutz Marten. 2017. *Parameters of Bantu morphosyntactic variation: Draft master list*. Report produced as part of Leverhulme project “Morphosyntactic Variation in Bantu: Typology, contact and change”. DOI: 10.5281/zenodo.3958997.
- Guthrie, Malcolm. 1948. *The classification of the Bantu languages*. London: Oxford University Press.
- Guthrie, Malcolm. 1971. *Comparative Bantu*, vol. 2. London: Gregg International Publishers.
- Guthrie, Malcolm. 1967–1971. *Comparative Bantu: An introduction to the comparative and prehistory of the Bantu languages*, vol. 1–4. London: Gregg International.
- Hamlaoui, Fatima. 2014. A note on bare-passives in (selected) Bantu and Western Nilotic languages. *ZAS Papers in Linguistics* 57. 160–182.
- Harford, Carolyn. 1983. Locative pseudo-subject in Shona. *Journal of African languages and linguistics* 5. 131–155.
- Harries, Lyndon. 1965. Locative agreement in Swahili. *Swahili* 35(2). 70–73.
- Ismail, Joseph Hokororo. 2000. *Aspects of Makua phonology: The case of Meto variety*. Dar es Salaam: University of Dar es Salaam. (MA thesis).
- Kahigi, Kulikoyela. 2005. The Sisumbwa noun: Its classes and derivation. In David P. B. Massamba (ed.), *LOT occasional papers in linguistics*, vol. 1, 117–154. Dar es Salaam: University of Dar es Salaam.
- Kröger, Oliver. 2005. Report of a survey of coastal Makhuwa dialects. *Journal of Language Survey Reports* 2. 9108.
- Machobane, 'Malillo 'Matsepo. 1995. The Sesotho locative constuctions. *Journal of African Languages and Linguistics* 16(2). 115–136. DOI: 10.1515/jall.1995.16.2. 115.
- Mallya, Aurelia. 2011. *Locative expressions in Kiwoso*. Dar es Salaam: University of Dar es Salaam. (MA thesis).
- Mapunda, Gastor. 2015. An analysis of the vitality of the intangible cultural heritage of the Ngoni people of Tanzania: Lessons for other ethnolinguistic groups. *Nordic Journal of African Studies* 24(2). 169–185.
- Marten, Lutz. 2010. The great siSwati locative shift. In Anne Breitbarth, Christopher Lucas, Sheila Watts & David Willis (eds.), *Continuity and change in grammar*, 249–267. Amsterdam: Benjamins.

- Marten, Lutz. 2012. Agreement in locative phrases in Luganda. In Matthias Brenzinger & Anne-Maria Fehn (eds.), *Proceedings of the 6th World Congress of African Linguistics (Cologne 2009)*, 433–443. Cologne: Köppe.
- Marten, Lutz & Jenneke van der Wal. 2014. A typology of Bantu subject inversion. *Linguistic Variation* 14(2). 318–368.
- Mcha, Yohana. 1979. *The locative in Vunjo*. Dar es Salaam: University of Dar es Salaam. (MA thesis).
- Meeussen, Achille E. 1967. Bantu grammatical reconstructions. *Africana Linguistica* 3. 79–121.
- Mkude, Daniel J. 2005. *The passive construction in Swahili*. Tokyo: Institute for Languages, Cultures of Asia & Africa.
- Moshi, Lioba. 1995. Locatives in Kivunjo-Chaga. In Akinbiyi M. Akinlabí (ed.), *Theoretical approaches to African linguistics*, 129–145. Trenton NJ: Africa World Press.
- Mpiranya, Fidèle. 2015. *Swahili grammar and workbook*. London & New York: Routledge.
- Ngoboka, Jean Paul. 2016. *Locatives in Kinyarwanda*. Durban: University of KwaZulu-Natal. (Doctoral dissertation).
- Ngonyani, Deo. 2003. *A grammar of Chingoni*. München: Lincom.
- Ngunga, Armindo & Nomalanga Mpofu-Hamadziripi. 2013. A study of Bantu locatives: The case of Shona and Yao. *Journal of LASU* 1(1). 44–55.
- Rugemalira, Josephat M. 2004. Locative arguments in Bantu. In Akinbiyi Akinlabi & Oluseye Adesola (eds.), *Proceedings of the 4th World Congress of African Linguistics*, 285–295. Köln: Rüdger Köppe.
- Salzmann, Martin David. 2005. *Theoretical approaches to locative inversion*. Zurich: University of Zurich. (MA thesis).
- Stucky, Susan U. 1976. Locatives as objects in Tshiluba: A function of transitivity. *Studies in Linguistic Sciences* 6(2). 174–202.
- Zeller, Jochen. Forthcoming. Locatives. In Lutz Marten, Nancy Kula, Ellen Hurst & Jochen Zeller (eds.), *The Oxford guide to the Bantu languages*. Oxford: Oxford University Press.