

Locative inversion in Cuwabo*

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This paper proposes a detailed description of locative inversion (LI) constructions in Cuwabo, in terms of morphosyntactic properties and thematic restrictions. Of particular interest are the use of disjoint verb forms in LI, and the co-existence of formal and semantic LI, which challenges the widespread belief that the two constructions cannot be found in the same language.

1 Introduction

Locative inversion is “well-reported” in many Bantu languages (Bresnan and Kanerva 1989, Demuth and Mmusi 1997, Marten 2006, Buell 2007, Creissels 2001, Diercks 2011). This construction involves inversion of a locative noun phrase with the logical or thematic subject. In this inversion process, the fronted locative becomes the grammatical subject, thus controlling agreement on the verb, and the postverbal noun phrase, although it occupies the object position, represents the logical subject.

The term “locative inversion” has been predominantly used in Bantu literature, as it is a very prominent construction in this linguistic area, otherwise very rare in the languages of the world. Among Bantu, locative inversion (LI) is a somewhat uniform construction, and yet, some variation exists, both regarding agreement morphology and thematic restrictions.

This paper aims at enriching the existing picture of LI variation in Bantu, by investigating LI constructions in Cuwabo (P34), an Eastern Bantu language spoken North Mozambique. I first identify in section 2 their morphosyntactic characteristics, with an emphasis on the grammatical status of both fronted locative and postverbal noun phrases. LI has once been claimed to be a

* I am very grateful to Sérgio Fernando Artur and Agostinho Primeiro, my two main linguistic consultants, for their kindness, patience, and cooperation in collecting and analysing the data presented here. Many thanks also go to Lutz Marten for providing helpful comments on the draft version of this work. Any remaining deficiencies are my own.

construction restricted to unaccusatives and passivised transitives (Bresnan and Kanerva 1989), but subsequent studies have underscored that many Bantu languages allow LI in a wider range of verbs. Section 3 investigates the interaction between LI and argument structure in Cuwabo, in order to identify which verb types are compatible with LI constructions. In addition to formal LI, another LI pattern known as semantic LI exists, in which a noun denoting a location but without any locative morphology occupies the grammatical subject position and thus triggers non-locative subject agreement on the verb. Both LI types are usually considered to be complementary, i.e. a Bantu language can display one type, but not both. Section 4 questions the grammaticality of the so-called semantic LI in Cuwabo. Finally, in section 5, the main conclusions of the paper are presented.

Most data for this paper is drawn primarily from elicitation led by the author during fieldwork investigation around Quelimane.

2 Morphosyntactic properties

As mentioned above, LI implies a linear inversion of the subject and the locative noun phrase. This positional reordering correlates with an agreement change: the front-shifted locative expression triggers subject agreement on the verb, and not the logical subject, which follows the verb. This is illustrated in the three-way morphological contrast of locative subject markers in (1). Each verb agrees in noun class with the fronted locative noun phrase, while the logical subject (*maánje* ‘water’ in (1)a, *fólóori* ‘flower’ in (1)b, and *álêddo* ‘guests’ in (1)c), remains postverbal.¹

- (1) a. vattólóní vahínjívâ maánje
 va-ttóló=ní va-Ø-hí-ínjívâ maánje
 16-well=LOC 16-PRS-PFV.DJ-abound 6.water
 lit. ‘at the well abounds water’
- b. ottólón’ uúkúl’ ookála fólóori
 o-ttóló=ni ókúle o-Ø-hi-kála fólóori
 17-well=LOC 17.DEM.III 17-PRS-PFV.DJ-be 9a.flower
 ‘at that well there is a flower’ (from story ddo.25)

¹ The following abbreviations are used in this paper : 1, 2, 3, ... = Noun Class, CJ = Conjoint, CON = Connective, CPM = Complementiser, DEM = Demonstrative, DJ = Disjoint, H = High (tone), HTD = High Tone Doubling, L = Low (tone), LOC = Locative, NAR = Narrative, OM = Object Marker, PFV = Perfective, PL = Plural, PL = Predicative Lowering, POSS = Possessive, PRS = Present, PST = Past, REL = Relative

- c. mmúruddání muúdha álêddo
 mu-múrudda=ni mu-Ø-hí-dha álêddo
 18-3.village=LOC 18-PRS-PFV.DJ-come 2.guest
 lit. ‘in the village came the guests’

The corresponding uninverted sentences, in which the verb agrees in noun class with the preceding logical subject while the locative noun phrase follows the verb, are shown in (2).

- (2) a. maánje ahíinjívâ vattólóni (class 6 agreement)
 maánjé a-Ø-hí-ínjívâ va-ttólô=ni
 6.water 6-PRS-PFV.DJ-abound 16-well=LOC
 ‘water abounds at the well’
- b. fólóori eekálá ottólóni ókúle (class 9 agreement)
 fólóori e-Ø-hi-kálá o-ttóló=ni ókúle
 9a.flower 9-PRS-PFV.DJ-be 17-well=LOC 17.DEM.III
 ‘there is a flower at that well’
- c. álêddo aádha mmúruddani (class 2 agreement)
 álêddo a-Ø-hí-dha mu-múrudda=ni
 2.guest 2-PRS-PFV.DJ-come 18-3.village=LOC
 ‘the guests came in the village’

It is very interesting to note that in addition to the locative prefixes, Cuwabo locative noun phrases also take a locative enclitic =ni. Such clitic, considered as the grammaticalised form of *-ini ‘liver’ (Samsom and Schadeberg 1994), is widespread in Eastern Bantu languages, where it supposedly originates, but is also well attested in Southern Bantu. This formal innovation is normally complementary to the historical locative prefixes, i.e. a language does in principle not exhibit both markers on a same lexical item. For instance, in Swati (Nguni group, Swaziland and South Africa), locative phrases are marked either by the class 17 locative prefix *ku-* (3)a, or by the prefix *e-* (3)b, productively combined with the clitic =ini (3)c. These examples, extracted from Marten (2010), are originally from Taljaard, Khumalo & Bosch (1991).

- (3) a. bafana ‘boys’ > ku-bafana ‘to/at the boys’
 b. sitolo ‘shop’ > e-sitolo ‘at the shop’
 c. indlu ‘house’ > e-ndl=ini ‘at the house’

In Cuwabo, both locative prefixes and the clitic =ni do co-occur in most locative expressions, as evidenced in (1), with *va-ttólô=ni* (class 16), *o-ttóló=ni* (class 17), and *mu-múrudda=ni* (class 18). This double locative marking, which

represents an innovation shared by P30 languages (Makhuwa group), is exceptional in Bantu languages.

2.1 Grammatical status of locative and postverbal elements

Both (1) and (2) above share the same thematic role structure, but differ in their syntactic properties. The subject-verb agreement observed in (1) conveys first evidence that the locative phrase may be analysed as the grammatical subject. Co-variation between the three possible locative class prefixes (respectively, class 16 *va-*, class 17 *o-*, and class 18 *mu-*) exists both on the locative expression and on the subject prefix of the following verb, which agrees accordingly. Another argument in favour of this agreement morphology (i.e. the grammatical subject status assumed by the locative noun phrase) is that the locative noun phrase can be postposed, as shown in (4).

- (4) a. vahíinjívá maánjé vattólôni
 va-Ø-hí-ínjívá maánjé va-ttólô=ni
 16-PRS-PFV.DJ-abound 6.water 16-well=LOC
 lit. ‘there abounds water at the well’
- b. ookála fólóóri ottólóni ókûle
 o-Ø-hi-kála fólóóri o-ttóló=ni ókûle
 17-PRS-PFV.DJ-be 9a.flower 17-well=LOC 17.DEM.III
 ‘there is a flower at that well’
- c. muúdha áléddó mmúrúddani
 mu-Ø-hí-dha áléddó mu-múrúdda=ni
 18-PRS-PFV.DJ-come 2.guest 18-3.village=LOC
 lit. ‘in there came the guests in the village’

Furthermore, in case of a biclausal sentence such as in (5)a, whose subordinate clause is introduced by the complementiser *wi* ‘that’, the locative noun phrase can be topicalised and then dislocated to the left periphery of the whole sentence, and thus separated from the rest of its origin clause by the embedded independent clause *muhúúbúwélá* ‘do you think’. Compare the LI in embedded position without extraction in (5)b, with the extracted LI in (5)c.

- (5) a. muhúúbúwélá wi álêddo aádhówa omúruddani ? (declarative)

mu-Ø-hí-úbúwélá wi álêddo a-Ø-hí-dhówa
 2PL-PRS-PFV.DJ-think CMP 2.guest 2-PRS-PFV.DJ-go
 o-múrudda=ni
 17-3.village=LOC

‘do you think that the guests went to the village?’

- b. muhúúbúwélá wi omúruddani oódhówa álêddo ? (LI)

mu-Ø-hí-úbúwélá wi o-múrudda=ni o-Ø-hí-dhówa
 2PL-PRS-PFV.DJ-think CMP 17-3.village=LOC 17-PRS-PFV.DJ-go
 álêddo
 2.guest

lit. ‘do you think that to the village went the guests?’

- c. omúruddání | muhúúbúwélá wi oódhówa álêddo ? (LI+extraction)

o-múrudda=ni mu-Ø-hí-úbúwélá wi o-Ø-hí-dhówa
 17-3.village=LOC 2PL-PRS-PFV.DJ-think CMP 17-PRS-PFV.DJ-go
 álêddo
 2.guest

lit. ‘to the village, do you think that (there) went the guests?’

Finally, the fronted locative noun phrase, as a grammatical subject and discourse topic, can also be dropped, since a locative feature with a locative anaphoric reference remains on the verb through the subject marker, as shown in (6).

- (6) a. vahíinjívá maánje

va-Ø-hí-ínjívá maánje
 16-PRS-PFV.DJ-abound 6.water
 lit. ‘there abounds water’

- b. ookála fólóori

o-Ø-hi-kála fólóori
 17-PRS-PFV.DJ-be 9a.flower
 ‘there is a flower’

- c. muúdha álêddo

mu-Ø-hí-dha álêddo
 18-PRS-PFV.DJ-come 2.guest
 lit. ‘in there came the guests’

While there is solid evidence toward the subjecthood of the fronted locative noun phrase, the grammatical status of the postverbal logical subject is less clear. Considering word order, it assumes an object position, since it always

occurs in immediate adjacency to the verb. Yet, it fails the typical test of objecthood in that it cannot be cross-referenced with an object marker on the verb, as shown in (7). As a comparison, the sentence in (8) illustrates the necessity of object marking (but only restricted to classes 1 and 2 in Cuwabo) when the postverbal element assumes an object grammatical function.

- (7) * mu-múrudda=ni mu-Ø-hí-a-dha álêddo
 18-3.village=LOC 18-PRS-PFV.DJ-OM2-come 2.guest
 lit. ‘in the village came the guests’

- (8) múttú oovényá: , oómútelá mwáádhíyé: , waabaál’ áanááyé: , [...]
 múttú o-Ø-hi-vényá o-Ø-hí-**mú**-telá
 1.person 1-PRS-PFV.DJ-rise.up 1-PRS-PFV.DJ-OM1-marry
 mwáádhíyé o-**a**-baála áanááyé
 1.wife.POSS.1 NAR-OM2-give.birth 2.child.POSS.1
 ‘a man grew up, married a woman, had his children, [...]’ (story mbíli.7)

Furthermore, the postposed logical subject cannot be demoted to an optional adjunct in that it cannot be omitted (9), nor can it be separated from the verb by the locative noun phrase (10).

- (9) a. * vattólóní vahínjíva
 va-ttóló=ni va-Ø-hí-ínjíva
 16-well=LOC 16-PRS-PFV.DJ-abound
 lit. ‘at the well abounds’
 b. * ottólóni ókúle ookála
 o-ttóló=ni ókúle o-Ø-hi-kála
 17-well=LOC 17.DEM.III 17-PRS-PFV.DJ-be
 lit. ‘at that well there is’
 c. * mmúruddání muúdha
 mu-múruddá=ní mu-Ø-hí-dha
 18-3.village=LOC 17-PRS-PFV.DJ-come
 lit. ‘in the village came’
- (10) a. * vahínjívá vattólóní maánje
 va-Ø-hí-ínjívá va-ttóló=ní maánje
 16-PRS-PFV.DJ-abound 16-well=LOC 6.water
 lit. ‘abounds at the well water’

- b. * ooká^á ottólóni ókúle fólóóri
 o-Ø-hi-ká^á o-ttóló=ni ókúle fólóóri
 17-PRS-PFV.DJ-be 17-well=LOC 17.DEM.III 9a.flower
 lit. ‘there is at that well a flower’
- c. * muúdhá mmú^úruddani álê^êdo
 mu-Ø-hí-dhá mu-mú^úrudda=ni álê^êdo
 18-PRS-PFV.DJ-come 18-3.village=LOC 2.guest
 lit. ‘came in the village the guests’

The linear order of the elements in LI is thus not free, and the postverbal logical subject systematically follows the verb. This close relation between the verb and the postverbal logical subject is further confirmed by prosodic evidence: a pause (represented in (11) by |) is usually heard after the topicalised locative noun phrase, but never between the verb and the postverbal logical subject. Furthermore, these two elements seem to form a suitable environment with respect to H tone doubling (HTD) at the phrasal level. In (11), each verb has a primary (underlined) H tone on the penult mora, which doubles onto the following mora when the next word has an initial LH sequence (11)a, but does not double when the next word has an initial H tone (11)b and (11)c, because of the Obligatory Contour Principle effect. These constraints on HTD suggest that both the verb and the postverbal logical subject form a prosodic unit, represented into brackets in (11).

- (11) a. vattólóni | (vahí^ínjívá maá^ánje)
 lit. ‘at the well abounds water’
 b. ottólón’ uúkú^úlé | (ooká^ála fóló^óri)
 ‘at that well there is a flower’
 c. mmú^úruddání | (muú^údha álê^êdo)
 lit. ‘in the village came the guests’

All these aforementioned syntactic and prosodic properties of the postverbal element are explained by its “presentational focus” discourse function (Bresnan and Kanerva 1989, Demuth and Mmusi 1997, Marten 2006). Compare the noun phrase *áyaná* ‘women’ in (12), immediately following the verb and introducing new information, with (13), where it represents a right-dislocated topic, with an afterthought interpretation.

- (12) munólóbéla áyanā
 mu-Ø-ni-ólóbéla áyanā
 18-PRS-IPFV.DJ-15.pray 2.woman
 lit. ‘in there are praying the women’

- (13) anólóbéla, áyanā
 a-Ø-ni-ólóbéla áyanā
 2-PRS-PFV.DJ-15.pray 2.woman
 ‘they are praying, the women’

Locative inversion constructions illustrated in this sub-section have been widely discussed in the Bantu literature. Buell (2007) refers to these constructions as “agreement constructions”, opposed to “non-agreeing constructions”, which often make use of a single verb prefix with an expletive function.

2.2 Locative marking on the verb

Interestingly, an agreeing locative enclitic on the verb (class 16 =*vo*, class 17 =*wo*, and class 18 =*mo*) cannot co-occur with the locative head-agreeing prefix, as shown in (14).

- (14) a. * vattólóní vawíinjívá=*vo* maánje
 lit. ‘there at the well abounds (there) water’
 b. * ottólóni ókúle ookálá=*wo* fólóóri
 lit. ‘there at the well there is (there) a flower’
 c. * mmúrúddání muúdhá=*mo* álêddo
 lit. ‘in the village came (in there) the guests’

In comparison, such double locative marking on the verb is obligatory in Bukusu (J30, Kenya). Diercks (2011) refers to this construction, exemplified in (15), as “repeated agreement” LI.

- (15) mú-músiirú mw-á-kwá=*mó* kú-músaala [Bukusu]
 18-3.forest 18-PST-fall=18LOC 3-3.tree Repeated Agreement LI
 ‘in the forest fell a tree’

Furthermore, note that another construction with a preverbal locative exists in Cuwabo, which strongly differs from the aforementioned LI in term of verbal agreement. Instead of agreeing with the preverbal locative noun phrase, the verb prefix agrees with the postverbal logical subject. In parallel, a locative

agreement clitic (=vo, =wo, =mo) is obligatorily suffixed to the verb, as illustrated in (16). Omitting these locative suffixes is considered ungrammatical.

- (16) a. vattólóní | awíínjívávo maánje
 va-ttóló=ní a-Ø-hí-ínjívá=vo maánje
 16-well=LOC 6-PRS-PFV.DJ-abound=16.LOC 6.water
 lit. ‘at the well (it) abounds there water’
 * vattólóní, awíínjívá maánje
- b. ottólóni ókúlé | eekáláwo fólóóri
 o-ttóló=ni ókúlé e-Ø-hi-kálá=wo fólóóri
 17-well=LOC 17.DEM.III 9-PRS-PFV.DJ-be=17.LOC 9a.flower
 lit. ‘at that well over there (it) is there a flower’
 * ottólóni ókúlé, eekála fólóóri
- c. mmúrúddání | aádhámo álêddo
 mu-múrúddá=ní a-Ø-hí-dhá=mo álêddo
 18-3.village=LOC 2-PRS-PFV.DJ-come=18.LOC 2.guest
 ‘in the village came (in) the guests’
 * mmúrúddání, aádha álêddo

In such constructions, the preverbal locative is more loosely connected to the verb and does not constitute a core constituent of the sentence. Instead it occupies a peripheral position, where it displays a scene or frame setting function for the remaining sentence, and is interpreted as an external topic. Note that these constructions do not represent instances of LI in the strict sense.

Interestingly, this construction is the only one attested in Makhuwa, which does not display LI. Van der Wal (2008) reports that the subject marker always agrees with the postverbal logical subject (17)a, while a locative subject agreement on the verb is not allowed (17)b.

- (17) a. wakisírwa a-náá-phíyá alétto (van der Wal 2008: 346)
 16.island 2-PRS.DJ-arrive 2.guests
 b. * wakisírwa wa-náá-phíyá alétto
 16.island 16-PRS.DJ-arrive 2.guests
 ‘on the island arrive guests’

The crucial difference between Cuwabo and Makhuwa is the presence of the agreeing locative enclitics on the verb, not needed in Makhuwa, while obligatory in Cuwabo as seen in the examples in (16) above. Further note that such a construction is not available with transitive verbs, as exemplified in (18).

- (18) *muttólóní | oomútúkumamo múlóbwana mülêddo
 mu-ttóló=ní o-Ø-hi-mú-túkuma=mo múlóbwana mülêddo
 18-well=LOC 1-PRS-PFV.DJ-OM1-push=18.LOC 1.man 1.guest
 lit. ‘into the well pushed a man a guest’

2.3 LI and disjoint verb forms

An important precision must be made concerning the alternation between conjoint (CJ) and disjoint (DJ) verb forms. A certain number of Bantu languages display a morphological alternation in certain tenses of their verbal paradigms. This alternation is often referred to as conjoint/disjoint alternation, first labelled by Meeussen (1959). Despite their different segmental morphology, these verb forms encode the same tense/aspect semantics, but differ in their relation with what follows the verb, and more particularly, this alternation is generally associated with focal interpretations. In conjoint forms (19), an element following the verb is necessarily needed, assuming a focus position, reflected prosodically by Predicative Lowering, a process whereby the first underlying high tone lowers, thus avoiding subsequent High Tone Doubling (e.g. *nígágádda* ‘dry cassava’ lowers to *nigagádda*). In disjoint forms (20), it is the verb itself which is in focus, not its complement, whose presence is possible but not required, which means that disjoint verbs can appear clause-finally.

- (19) CJ múyaná **ónígúlihá** nigagádda ‘the woman is selling dry cassava’
 * múyaná óngúliha ‘the woman is selling’

- (20) DJ múyaná **ónógúliha** (nígágádda) ‘the woman is selling (dry cassava)’

Intestingly, relative verb forms in Cuwabo correspond from a morphological point of view to the seven conjoint verb forms, as shown in Table 1.

Table 1: Morphological similarity between Conjoint and Relative verb forms

	CJ	REL
PRS IPFV	<i>ońgúlihá</i> <i>nigagádda</i> ‘he is selling dry cassava’ (DJ <i>ónógúliha</i>)	<i>ońgúliha</i> (<i>nígagádda</i>) ‘who is selling (dry cassava)’
PST IPFV	<i>waágúla</i> <i>nyumba</i> ‘he was buying a house’ (DJ <i>wááńgulá</i>)	<i>waágúla</i> (<i>nyúmba</i>) ‘who was buying (a house)’
PRS PFV	<i>ofullé</i> <i>mútede</i> ‘he washed the dress’ (DJ <i>ohílévéléla</i>)	<i>ofúllé</i> (<i>mutéde</i>) ‘who washed (the dress)’
PST PFV	<i>waaveéttíle</i> <i>mbuga</i> ‘he had winnowed the rice’ (DJ <i>wahíveétta</i>)	<i>waaveéttíle</i> (<i>mbúga</i>) ‘who had winnowed (the rice)’
FUT	<i>onábúddúgélé</i> <i>guluwe</i> ‘he will attack the pig’ (DJ <i>oneelóóbuddugele</i>)	<i>onábúddúgélé</i> (<i>gulúwe</i>) ‘who will attack (the pig)’
CONT FUT	<i>ogásákula</i> <i>kalruúnga</i> ‘he will be choosing the hoe’ (DJ <i>ogáńsakula</i>)	<i>ddigásákula</i> (<i>kálrúúnga</i>) ‘who will be choosing (the hoe)’
HYP	<i>ogaattukúlle</i> <i>nyangaséra</i> ‘he would carry the fishing basket’ (DJ <i>ogahíttúkula</i>)	<i>ogaattukúlle</i> (<i>nyángaséra</i>) ‘who would carry (the fishing basket)’

All these examples show that Cuwabo relatives have no specific morphology, nor do they exhibit a specific tone pattern, except for the Present Perfective (PRS PFV) tense, in which an additional H tone stands on S2. The reason why a tone difference between conjoint and relative forms exists only for the Present Perfective but not for the other tenses is still unclear at this moment, but is of importance for the present discussion.

The careful reader will have noted that every aforementioned LI construction makes use of a disjoint verb form, which is rather unexpected. In order to introduce a focused element, the conjoint form is indeed required in Cuwabo, as seen in (19) above. And yet, in LI constructions, disjoint verb forms are necessarily chosen over conjoint verb forms, since the latter would involve a relative reading, as shown in (21) and (22).

- (21) *vasíkóóla ápa vaasuúzíle áyíma*
vasíkóóla ápa [va-a-suúz-íle áyíma]_{rel}
 16-9a.school 16.DEM.I 16-PST-learn-PFV.REL 2.children
 ‘at this school where children had studied’
- (22) *m̀múrúddání munlába álóbwana*
mu-múrúddá=ní [mu-Ø-ni-lába álóbwana]_{rel}
 18-3.village=LOC 18-PRS-IPFV.CJ-work 2.men
 ‘in the village where the men work’

Such constructions are common in the language, but they do not represent cases of LI, but rather locative relatives, in which the locative noun phrase is the head noun to be modified. In order to avoid a relative reading, LI constructions rely on the other available verb forms in the language, namely the disjoint verb forms. But interestingly, one conjoint tense is attested in LI constructions: the Present Perfective, as illustrated in (23), extracted from a story. Remember that for this tense, the conjoint form and the relative exhibit a different tone pattern (see Table 1). In (23), no ambiguity in interpretation is possible, since the tone pattern of *vamèllé*² ‘germinated’ corresponds solely to the conjoint form. In contrast the relative form would be rendered by *vamèllé* ‘where germinated’. Furthermore, the focus position of the postverbal logical subject *fólóóri* ‘flower’ is confirmed by Predicative Lowering (*foloóri*).

- (23) Ddabun’ óókwééné: , **vattólóní vāmèllé foloóri** énddímúwá vaddíddí y’
 oókóddéla vaddíddi. [Fólóór’ iíjíl’ ookomesáári wííba : ...]
ddabunó ókú=éné va-ttóló=ní vá-Ø-mel-ilé
 then 17.DEM.I=INT 16-well=LOC 16-PRS-germinate-PFV.CJ
foloóri é-nddímúwá vaddíddí ya ókóddéla vaddíddi
 9a.flower.PL 9-big much 9.CON 15.be.beautiful much
 ‘Then, there at the well a flower germinated, a very big and very
 beautiful flower. [That flower began to sing: ...]’ (from ddoo.23)

Now that the formal and agreement properties of LI in Cuwabo have been discussed, let’s examine the range of arguments and verb types which LI may occur with.

² Note that in the form *vāmèllé*, the H tone found on the locative prefix *va-* is the result of High Tone Doubling.

3 LI & argument structure

The Bantu languages in which locative inversion is attested differ in the (semantic) types of verbs allowed in such constructions. The thematic restrictions imposed on predicates undergoing LI vary from one language to another. The array goes from languages which restrict LI to unaccusative verbs only (e.g. Chewa, see Bresnan and Kanerva 1989), to languages which only prohibits LI to ditransitives (e.g. Herero, see Marten 2006).

Among this existing variation, this sub-section examines how LI constructions in Cwabo interact with argument structure. Verbs of different argument structure (unaccusatives, unergatives, and transitives), which involve different thematic roles (theme, agent, or both theme and agent), will be considered in turn.

3.1 Unaccusatives

Unaccusative verbs form a sub-group among the intransitive verbs. They are typically verbs of movement or location, whose single argument is assigned a theme role, not actively responsible thus for the action of the verb. This subclass of intransitives comprises many motional and postural verbs, like *ofíya* ‘arrive’, *ógwa* ‘fall’, *ógoná* ‘sleep’, *ováta* ‘spread, ramify’, *ókwa* ‘die’, etc, as well as verbs of existence, like *okála* ‘be, stay’.

Among Bantu, LI is widely attested with this class of verbs. It also functions in Cwabo, as illustrated in (24), with the motional verb *ofíya* ‘arrive’, in (25) with the postural verb *wííméla* ‘stand’, and in (26), with the verb *wíínjíva* ‘abound’, which expresses a container-contained relation between arguments.

(24) *ofíya* ‘arrive’

- a. *áléddo aafíyá mmúruddani* (declarative)
áléddo a-Ø-hi-fíyá mu-múrudda=ni
 2.guest 2-PRS-PFV.DJ-arrive 18-3.village=LOC
 ‘the guests arrived at the village’
- b. *mmúruddání muufíya áléddo* (LI)
mu-múrudda=ní mu-Ø-hi-fíya áléddo
 18-3.village=LOC 2-PRS-PFV.DJ-arrive 2.guest
 lit. ‘at the village arrived the guests’

(25) *wííméla* ‘stand’

- a. *áyáná ahííméla mukápééla* (declarative)
áyáná a-Ø-hí-íméla mu-kápééla
 2.woman 2-PRS-PFV.DJ-stand 18-9a.church
 ‘in the church are standing the women’
- b. *mukápééla mwihííméla áyanā* (LI)
mu-kápééla mu-Ø-hí-íméla áyanā
 18-9a.church 18-PRS-PFV.DJ-stand 2.women
 ‘in the church are standing the women’

(26) *wíínjiva* ‘abound’

- a. *maánjé ahíínjívá vattólôni* (declarative)
maánjé a-Ø-hí-ínjívá va-ttólô=ni
 6.water 6-PRS-PFV.DJ-abound 16-well=LOC
 ‘water is abounding at the well’
- b. *vattólóní vahíínjívâ maánje* (LI)
va-ttólô=ní va-Ø-hí-ínjívâ maánje
 16-well=LOC 16-PRS-PFV.DJ-abound 6.water
 ‘at the well is abounding water’

3.2 Unergatives

Unergative verbs are also intransitive, but differ semantically from unaccusatives in having an agentive argument, actively responsible for the action expressed by the verb. In Cuwabo, LI perfectly holds with motional unergatives, as illustrated with *óvólówa* ‘enter’ (27) and *óttámága* ‘run’ (28).

(27) *óvólówa* ‘enter’

- a. *nówá yaávólówa(mo) mba mwa múzûgu* (declarative)
nówá e-a-hí-vólówa=mo mba mwa múzûgu
 9a.snake 9-PST-PFV.DJ-enter=18.LOC 18.in 18.CON 1.white.man
 ‘the snake had entered into the white man’s house’
- b. *mba mwa múzûgu mwaávólówa nówa* (LI)
mba mwa múzûgu mu-a-hí-vólówa nówa
 18.in 18.CON 1.white.man 18-PST-PFV.DJ-enter 9a.snake
 lit. ‘into the white man’s house had entered the snake’

(28) *óttámága* ‘run’

- a. *áyímá anóttámágá mutákwâni* (declarative)
áyíma a-Ø-ni-óttámágá mu-tákwâ=ni
 2.children 2-PRS-IPFV.DJ-15.run 18-9a.forest=LOC
 ‘the children are running in the forest’
- b. *mutákwání munóttámága áyíma* (LI)
mu-tákwá=ní mu-Ø-ni-óttámága áyíma
 18-9a.forest=LOC 18-PRS-IPFV.DJ-15.run 2.children
 ‘in the forest are running the children’

Interestingly, the non-motional unergative patterns also exhibit the LI construction in Cuwabo, as exemplified with the verbs *otéya* ‘laugh’ (29), *olába* ‘work’ (30), and *ólóbéla* ‘pray’ (31).

(29) *otéya* ‘laugh’

- a. *áyíma anotéya vatákûlu* (declarative)
áyíma a-Ø-ni-otéya va-tákûlu
 2.child 2-PRS-IPFV.DJ-15.laugh 16-9a.courtyard
 ‘the children are laughing at home’
- b. *vatákúlú vanotéya áyíma* (LI)
va-tákúlú va-Ø-ni-otéya áyíma
 16-9a.courtyard 16-PRS-IPFV.DJ-15.laugh 2.child
 lit. ‘at home are laughing the children’

(30) *olába* ‘work’

- a. *áyímá anolábá omúndda* (declarative)
áyímá a-Ø-ni-olábá o-múndda
 2.children 2-PRS-IPFV.DJ-15.work 17-3.field
 ‘the children are working in the field’
- b. *omúnddá onolába áyíma* (LI)
o-múnddá o-Ø-ni-olába áyíma
 17-3.field 17-PRS-IPFV.DJ-15.work 2.children
 ‘on the field work the children’ (more general meaning)

(31) *ólóbéla* ‘pray’

- a. *áyáná aálóbébá mukápééla* (declarative)
áyáná a-Ø-hí-lóbébá mu-kápééla
 2.women 2-PRS-PFV.DJ-pray 18-9a.church
 ‘the women have prayed in the church’
- b. *mukápéélá muúlóbéla áyanā* (LI)
mu-kápéélá mu-Ø-hí-lóbéla áyanā
 18-9a.church 18-PRS-PFV.DJ-pray 2.women
 ‘in the church have prayed the women’

This means that LI seems to apply to all intransitive verbs in the language.

3.3 Transitives

In contrast to unaccusative and unergative verbs, transitive verbs, which complicate the argument structure in adding a thematic object, fail to undergo LI. This ungrammaticality is exemplified below with two transitive verbs, *óddaddá* ‘catch, find’ (32) and *ósuwá* ‘wipe’ (33).

(32) *óddaddá* ‘catch, find’

- a. *ábáabí aámúddoddá mwáaná mucélâni* (declarative)
ábáabí a-Ø-hí-mú-ddoddá mwáaná mu-célâ=ni
 2.parents 2-PRS-PFV.DJ-OM1-grab 1.child 18-well=loc
 ‘the parents found the child in the well’
- b. * *mucélání mwiímúddoddá ábáabí mwáaná* (LI)
mu-célâ=ni mu-Ø-hí-mú-ddoddá ábáabí mwáaná
 18-well=loc 18-PRS-PFV.DJ-OM1-grab 2.parents 1.child
 lit. ‘in the well found the parents the child’

(33) *ósuwá* ‘wipe’

- a. *múyaná onósúwá dhoóbo vatákûlu* (declarative)
múyaná o-Ø-ni-ósúwá dhoóbo va-tákûlu
 1.woman 1-PRS-IPFV.DJ-15.wipe 10.dish 16-9a.courtyard
 ‘the woman is wiping the dishes at home’
- b. * *vatákúlú vanósúwa múyaná dhoóbo* (LI)
va-tákúlú va-Ø-ni-ósúwa múyaná dhoóbo
 16-9a.courtyard 1-PRS-IPFV.DJ-15.wipe 1.woman 10.dish
 lit. ‘at home is wiping the woman dishes’

The same holds true for ditransitives, rendered by the addition of a second object (usually a beneficiary): LI remains ungrammatical.

- (34) a. mwááná o-Ø-hí-léb-él-a njángára áamáambaál' áaye vatákûlu (declarative)
 1.child 1-PRS-PFV.DJ-write-APPL-FV 5.card 2.parents
 áaye va-tákûlu
 2.POSS.1 16-9a.courtyard
 'the child wrote a letter for his parents at home'
- b. * vatákúlú vahílébéla mwááná njángára áamáambaál' áaye (LI)
 va-tákúlú va-Ø-hí-léb-él-a mwááná
 16-9a.courtyard 16-PRS-PFV.DJ-write-APPL-FV 1.child
 njángára áamáambaáli áaye
 5.card 2.parents 2.POSS.1
 lit. 'at home wrote the child a letter for his parents'

3.4 Passivised transitives

Transitive verbs that have been passivised allow LI. (35) and (36) provide examples of LI constructions applied to transitive verbs which underwent passivisation.

- (35) a. kónóono onóttáddíwá na anámáttaddá ñmuttátti (declarative)
 kónóónó o-Ø-ni-óttádd-íw-á na anámáttaddá
 1a.fish.sp 1-PRS-IPFV.DJ-15.fish-PASS-FV by 2.fishermen
 mu-muttátti
 18-3.swamp
 'the fish *konoono* is being fished in the swamp by the fishermen'
- b. ñmuttátti munóttáddíwa kónóónó na anámáttaddā (LI)
 mu-muttátti mu-Ø-ni-óttádd-íw-a kónóónó na
 18-3.swamp 18-PRS-IPFV.DJ-15.fish-PASS-FV 1a.fish.sp by
 anámáttaddā
 2.fishermen
 lit. 'in the swamp is being fished the fish *konoono* by the fishermen'

- (36) a. dhoójá dhiípíyíwá ìmmúkáátténi óbu (declarative)
 dhoójá dhi-Ø-hí-píy-íw-á mu-múkáátté=ni óbu
 10.food 10-PRS-PFV.DJ-cook-PASS-FV 18-3.jug=LOC 3.DEM.I
 ‘the food was cooked in this pot’
- b. ìmmúkáátténi óbu muúpíyíwá dhoója (LI)
 mu-múkáátté=ni óbu mu-Ø-hí-píy-íw-a dhoója
 18-3.jug=LOC 3.DEM.I 18-PRS-PFV.DJ-cook-PASS-FV 10.food
 ‘in this pot was cooked the food’

4 Semantic Locative Inversion?

Another LI pattern known as semantic LI exists, which is less widely discussed in the Bantu literature. Semantic LI is not essentially different from formal LI: the fronted expression occupies the grammatical subject position and triggers agreement on the following verb, but the difference lies on its non-locative morphology. Instead, it appears in its canonical class, and denotes the place or the space inherently rooted in the semantic of the noun. This means that semantic LI is only allowed with expressions which refer to a possible location, such as school, house, church, shop, etc.

An agreement relation is thus established between the inherent noun class of the fronted expression and the verb. Such constructions are found in Zulu and Tharaka (Buell 2007), respectively illustrated in (37), and (38).

- (37) lezi zindlu zi-hlala abantu abadala [Zulu]
 10.these 10.houses 10-stay 2.people 2.old
 ‘old people live in these houses’
- (38) kanisa i-thom-ag-îr-a twana [Tharaka]
 9.church 9-study-HAB-APPL-FV 13.children
 ‘the children study at the church’

It has been suggested (Buell 2007) that semantic and formal LI constructions are essentially equivalent, but that they cannot co-exist in a language. In Cuwabo, a considerable preference is given on formal locative LI. Still, it turns out that semantic LI is also considered grammatical, at least with the stative unaccusative verb *okála* ‘be, stay’, as shown in (39).

- (39) nyúmba éji eekálá akálâba
 nyúmba éji e-Ø-hi-kálá akálâba
 9a.house 9.DEM.I 9-PRS-PFV.DJ-be 2.older
 lit. ‘in this house were/lived old people’

Now, with another stative unaccusative verb, namely *wííméla* ‘stand’ (40), and with unergatives (41), which imply an agentive thematic role, two of my consultants have different judgements on the acceptability of such sentences. On the first hand, Agostinho thinks that they are grammatical, but that they do not represent natural options in discourse. In other words, he can interpret such sentences, but will likely not utter them spontaneously. On the other hand, Sérgio perfectly accepts them.

- (40) a.(?) kápééla éji ehííméla áyanā
 kápééla éji e-Ø-hí-íméla áyanā
 9a.church 9.DEM.I 9-PRS-PFV.DJ-stand 2.women
 ‘in this church stood the women’
- (41) a.(?) síkóóla éji eésúúza áyîma
 síkóóla éji e-Ø-hí-súúza áyîma
 9a.school 9.DEM.I 9-PRS-PFV.DJ-learn 2.children
 ‘at this school have studied the children’
- b.(?) kápééla éji enólóbéla áyanā
 kápééla éji e-Ø-ni-ólóbéla áyanā
 9a.church 9.DEM.I 9-PRS-IPFV.DJ-15.pray 2.women
 ‘in this church are praying the women’
- c.(?) mbúró ési dhiídhówa álédodo éénjééne
 mbúró ési dhi-Ø-hí-dhówa álédodo á-ínjí=éne
 4.place 4.DEM.I 4-PRS-PFV.DJ-go 2.guests 2-many=INT
 ‘to these places went many guests’

Note that the first consultant prefers constructions in which the verb receives a locative subject agreement, as illustrated in (42) with the class 16 prefix *va-*, in (43) with the class 17 prefix *o-*, and in (44) with the class 18 prefix *mu-*.

- (42) kápééla éji vahííméla áyanā
 kápééla éji va-Ø-hí-íméla áyanā
 9a.church 9.DEM.I 16-PRS-PFV.DJ-stand 2.woman
 lit. ‘in this church (there) are standing the women’
- (43) mbúró ési oódhówa álédodo éénji
 mbúró ési o-Ø-hí-dhówa álédodo á-ínji
 4.place 4.DEM.I 17-PRS-PFV.DJ-go 2.guest 2-many
 lit. ‘to these place (there) went many guests’

- (44) nyúmba éji muukálá akálâba
 nyúmba éji mu-Ø-hi-kálá akálâba
 9a.house 9.DEM.I 18-PRS-PFV.DJ-live 2.older
 lit. ‘in this house (in there) live old people’

In such cases, the subject position is no longer assumed by the preverbal noun phrase, henceforth analysed as a frame-setting adjunct occupying a peripheral position and assuming a topic interpretation. With respect to the locative subject markers, they cannot be considered as expletive since they have a clear locative interpretation. The choice between the three locative classes seems to be determined in function of the locative semantic implied by the preverbal noun phrase, toward which the subject marker entertains an anaphoric locative reference.

Furthermore, while Agostinho refuses the construction in (45), with the unergative verb *olába* ‘work’, Sérgio acknowledges it.

- (45) (?) múndda óbu onolába áyîma
 múndda óbu o-Ø-ni-olába áyîma
 3.field 3.DEM.I 3-PRS-IPFV.DJ-15.work 2.children
 lit. ‘in this field are working children’

Finally, whereas intransitives seem to tolerate semantic LI (with some variation), transitive verbs are generally more subject to a consensus among my two consultants, who both disallow semantic LI constructions, as illustrated in (46) and (47).

- (46) * lózha éji enógúla múyaná málrûwa
 lózha éji e-Ø-ni-ógúla múyaná málrûwa
 9a.shop 9.DEM.I 9-PRS-IPFV.DJ-15.buy 1.woman 6.flower
 lit. ‘in this shop is buying a woman flowers’

- (47) * nyúmba éji enólóga áttú ottámbi
 nyúmba éji e-Ø-ni-ólóga áttú ottámbi
 9a.house 9.DEM.I 9-PRS-IPFV.DJ-15.tell 2.people 14.lie
 lit. ‘in this house tell people lies’

However, and against all expectation, the transitive construction given in (48) and rejected by Agostinho, has been approved by Sérgio. This is the only example so far which attests LI in a higher thematic structure, where the verb conveys both an <agent> and a <theme> role.

- (48) (?) síkóóla éji enósúúza áyíma dhílógélo dhíínji
síkóóla éji e-Ø-ni-ósúúza áyíma
9.school 9.DEM.I 9-PRS-IPFV.DJ-15.learn 2.children
dhílógélo dhí-ínji
10.languages 10-many
lit. ‘at this school are studying children several languages’

All these data about semantic LI reveal two important points. First, they demonstrate the co-existence of both formal and semantic LI in Cuwabo. This is of particular interest from a typological point of view, since it is generally assumed that a given language can only have one of the two constructions (Buell 2007). In Cuwabo, both formal and semantic LI are attested with a sample of intransitives. However, and this constitutes the second important point, a high degree of variation exists, regarding both speakers and thematic constraints. More particularly, the different judgments put forward by my consultants reveal some lexical variation inside the existing categories of predicate types. These questions of variation may indicate a change in progress, whereby semantic LI would represent a recent innovation, in a process of gradual diffusion, with variation implications. In view of the limited nature of the data presented here, further research is needed, which would cover a greater number of verb types, to be surveyed over a greater number of speakers, in order to determine which intransitives and which transitives are best accepted in semantic LI constructions, and thus provide a more refined categorisation of the different verb types.

5 Conclusion

Cuwabo (formal) LI constructions are similar in several respects to most Bantu languages: the fronted locative noun phrase has a discourse topic interpretation, and functions as grammatical subject, triggering locative subject agreement on the verb. In this respect, Cuwabo is part the Bantu languages which retained the use of the three locative prefixes, in nominal morphology (with further addition of the locative clitic =*ni*) as well as in verbal morphology. In this subject-verb agreement, locative subject markers on the verb always encode semantic locative information, even if the fronted locative subject is not overtly present.

The logical subject is expressed immediately after the verb, with which it has a close relation, as shown by prosodic and syntactic evidence. It is interpreted as a presentational focus.

In terms of argument structure, it looks like LI in Cuwabo is possible with any predicate, except for active transitives and ditransitives. In other words, LI disallows verbs which have both an <agent> and a <theme> role.

Table 2, adapted from comparative works by Demuth and Mmusi (1997: 14) and Marten (2006: 116), gives a typological overview of the constituent and thematic structures displayed in Cuwabo LI (in bold), in comparison to well-documented Bantu languages on this issue.

Table 2: Variation in LI constructions, comparing Cuwabo to other Bantu languages

language	Constituent Structure			Thematic structure	
	locative morph.	SM morph.	gramm. function of SM	highest thematic role	verb type
Chewa	16/17/18	16/17/18	locative	theme	unaccusative
Chaga	-	17/18	locative	theme	unaccusative
Shona	16/17/18	16/17/18	locative	- agent	all except agent actives
		17	expletive		
Tswana	16/17/18	17	expletive	*(agent + theme)	all except active transitives
Sotho	-	17	expletive	*(agent + theme)	all except active transitives
Cuwabo	16/17/18	16/17/18	locative	*(agent + theme)	all except active transitives
Herero	16/17/18	16/17/18	locative	*(agent + theme + ben)	all except ditransitives
		16	expletive		

From Table 2, the data of Cuwabo bring a further piece of evidence of the existing variation of LI constructions among Bantu languages. In terms of morphology, Cuwabo patterns with Chewa, Shona and Herero, but differs from these three languages regarding thematic restrictions. Instead, it rather patterns with Tswana and Sotho. In this respect, Cuwabo can be considered more liberal than Chewa, Chaga, and Shona, but more restricted than Herero, where LI is also possible with transitive predicates.

A final point noteworthy in relation to the typology of LI in Bantu, concerns the co-existence of a semantic LI in Cuwabo in addition to the formal LI. This construction in which the fronted argument is realised as a plain noun phrase, without any locative morphology, also triggers agreement in noun class on the verb. Although formal LI and semantic LI are not assumed to co-exist in a language, Cuwabo seems to constitute an exception in this respect, and preliminary conclusions indicate that semantic LI constructions might have less restricted thematic constraints than formal LI constructions, but still, with significant variation at play. Further research on this matter is undoubtedly needed for a more detailed analysis.

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