Agreement in locative phrases in Luganda

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1. Introduction

Locative nouns in Bantu occupy a cross-linguistically ambiguous position (e.g. Gregoire 1975). In many Bantu languages, they appear to be part of the noun class system and syntactically project locative noun phrases. In other languages, such as isiZulu and siSwati, they have been analysed as being no longer part of the noun class system, and as heading prepositional phrases (e.g. Buell 2007, 2009; Marten 2010). Part of the evidence relevant for the analysis of locative nouns as one or the other is the agreement between locative nouns and dependent elements in the locative phrase such as adjectives, demonstratives or possessives. While there is no necessary correlation between locative agreement and the status of locative nouns, it is often assumed that a prepositional analysis implies the absence of locative agreement.

In this paper, I provide a short survey of locative marking and agreement with locative nouns in Bantu, based on Gregoire’s (1975) more extensive work, and show that Bantu languages fall into three types: Those in which nominal agreement with locative nouns is with the locative noun, those in which agreement is with the original, non-locative noun, and those in which both agreement patterns are found, a difference partly correlating with Guthrie’s (1967-71) geographic zones. I will then discuss in more detail agreement in Luganda, in which both patterns are possible, and provide a syntactic analysis of the patterns. Evidence for the syntactic analysis is presented by showing how the different agreement patterns are associated with distinct interpretational differences and pragmatic effects. The final section provides conclusions of the paper and discusses possible extensions of the analysis presented.

2. Variation in locative marking

Before discussing agreement with locative nouns, the present section surveys different morphological marking patterns of locative nouns in Bantu, following Gregoire (1975). The most common pattern of locative marking involves the class 16-18 locative prefixes pa- (class 16), ku- (class 17) and mu- (class 18), prefixed to the original noun class prefix, as shown in the Bemba examples in (1):

(1) a. pà-n-gándá 16-9-house
   ‘at the house’

b. kú-n-gándá 17-9-house
   ‘to the house’

c. mú-n-gándá 18-9-house
   ‘in the house’

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In addition, some Bantu languages have a class 25 locative prefix e-, such as Luganda, where class 17 (2a) and class 25 (2b) are used:

(2) a. ku-ky-alo
   17-7-village
   ‘at the village’

b. e-Kampala
   25-Kampala
   ‘in Kampala’

A fourth common locative affix is the locative suffix -(i)ni, as found, for example, in Bondei (3):

(3) nyumba-ni
    9.house-LOC
    ‘at/to the house’

Different Bantu languages combine these different marking strategies. For example in siSwati, locatives are marked with class 17 ku- (4a), class 25 e- (4b), or with a combination of e- and the suffix -ini (4c):

(4) a. ku-ba-fana
    17-2-boys
    ‘to/at the boys’

b. e-sitolo
    25-shop
    ‘at the shop’

c. e-ndl-ini
   25-house-LOC
   ‘at the house’

However, in a number of Bantu languages, particularly in the Northwest Bantu area, no locative marking, or only remnants of locative marking are found.

3. Agreement with locative nouns

Similar to variation in nominal locative morphology, variation exists in the marking of agreement with locative nouns. In verbal morphology, Bantu languages differ with respect to the possibility of marking verbal subject and/or object agreement with locative nouns. In nominal morphology, there is a difference between the possibility of nominal dependents to agree with the locative noun (‘outer agreement’), and the possibility of nominal dependents to agree with the original noun (‘inner agreement’). While some Bantu languages allow only one of these strategies, in others there is a choice of agreement. The present section provides illustrations of these possibilities.

3.1. Verbal agreement

In many Bantu languages, locative nouns can function as grammatical subjects and trigger subject agreement on the verb, for example in Bemba, where class 16-18 nouns are marked by a noun class prefix, and the verb agrees in class with the locative noun (5-7), and in Luganda where class 25 nouns trigger class 25 subject agreement (8).

(5) pà-ngándá pà-li àbà-nà.
    16-9.house SM16-be 2-children
    ‘There are children at home.’

(6) kú-ngándá kwà-li-is-à ábèni.
    17-9.house SM17-RecPast-come-FV 2-guests
    ‘To the house have come visitors.’

(7) mü-ngándá mü-lé-ímb-á ábà-nà.
    18-9.house SM18-PROGR-sing-FV 2-children
    ‘In the house children are singing.’
Verbal locative agreement can also be found in languages which do not mark locitive nouns with a class prefix, but where locative nouns are marked with the locative suffix -ni. In Swahili, class 16-18 subject concords are distinguished, even though no class 16-18 morphology is found on nouns.

Many people have died in the town.” (ASHTON 1947:128)

In addition to subject agreement, many Bantu languages display object agreement with locative nouns. In the Luguru example (10), the inherent locative noun Mlogholo agrees with the class 16 object marker ha-

There is some variation between Bantu languages as to which locative classes have subject and/or object markers, and how these interact with locative nouns (see e.g. MARTEN ET AL. 2007). While some Bantu languages display complex morphological marking of locative nouns and corresponding verbal agreement morphology, in others, no agreement relation is found between locative nouns and verbs. For example, in siSwati and isiZulu, locative nouns are no longer part of the class system and do not function as subjects and objects (e.g. BUELL 2009; MARTEN 2010). However, verbal locative agreement is to some extent independent of nominal locative agreement, discussed in the following section.

3.2. Agreement with nominal dependents

In addition to verbal agreement, locative nouns often show agreement with nominal dependents such as possessives, demonstratives or adjectives. In Kaguru, for example, nominal dependents of locatives show locative agreement, irrespective of the original noun class of the noun (GREGOIRE 1975:54; PETZELL 2008).

This agreement pattern is often called ‘outer agreement’, as the agreement is with the outer, locative prefix. Outer agreement is independent of the morphological locative marking of nouns, and it is also found in languages such as Bondei where locatives are marked by a locative suffix (GREGOIRE 1975:69).

Outer agreement is found in several Bantu languages, and is the most common or only agreement possibility of many Bantu languages of zone G. In Swahili, for example, agreement with the original noun class of the locative noun is not possible.
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(13) m-ooyo-ni mw-angu / *w-angu [Swahili G42]
    3-heart-LOC 18-my / 3-my
    ‘in my heart’

In contrast to outer agreement, in ‘inner agreement’ nominal dependents show agreement with the original noun class of the locative noun. Inner agreement is found for example in Yombe, and it is the dominant or only agreement possibility in much of western Bantu (zones H, K, and R).

(14) ku-bu-ala bu-anti [Yombe H16c]
    17-14-village 14-his/her
    ‘à son village’ (GREGOIRE 1975:29)

Like outer agreement, inner agreement is independent of the morphological marking of locative nouns. Inner agreement is found, for example, in Zigua where locative nouns are marked with class 16 or 18 noun class prefixes (GREGOIRE 1975:69).

(15) a. he-Þumba y-angu
    16-9-house 9-my
    ‘dans ma maison’

    b. mwo m-ooyo w-akwe
    18 3-heart 3-his/her
    ‘dans son coeur’

    c. he iki-ti ch-a zumbe
    16 7-chair 7-POSS chief
    ‘sur la chaise de chef’

However, inner agreement is also found in Kamba, where locatives are marked by a locative suffix (GREGOIRE 1975:69).

(16) a. nyumba-ni y-a-o
    9-house-LOC 9-their
    ‘dans leur maison’

    b. muunda-ni wa:kwa
    3-garden-LOC 3-my
    ‘dans mon jardin’

Languages like siSwati illustrate that inner agreement is also found (as the only agreement possibility with locative nouns) in languages which employ both locative prefixes (17) and locative suffixes (18).

(17) a. ba-fana b-am i
    2-boys 2-my
    ‘my boys’

    b. ku-ba-fana b-am i
    17-2-boys 2-my
    ‘at my boys’

(18) a. indlu y-am i
    9-house 9-my
    ‘my house’

    b. e-ndl-ini y-am i
    LOC-9.house-LOC 9-my
    ‘in my house’

While in many Bantu languages, only one of the two different agreement strategies is found, in a number of languages, both strategies are possible, as for example in Chichewa.

(19) pa-nyanjá p-ânga / y-áng a [Chewa N31]
    16-9.lake 16-my 9-my
    ‘at my lake’ (BRESNAN & MCHOMBO 1995:198)

Furthermore, nominal dependents can often be used independently of an overt head noun, including in cases where they are locative marked. Outer agreement structures can thus be ambiguous between true modification of a head noun by a modifier, and the adjunction of two nouns (with a possible empty head noun) without modification of one by the other.

(20) nyumba-ni kw-et u [Swahili G42]
    9-house-LOC 17-our
    ‘at our house’, ‘at the house/home, at our (place)’
The example in (20) can be analysed as modification structure, where kwetu ‘our’ modifies the head noun nyumbani ‘at the house’, or as adjunction structure, where both nyumbani and kwetu are independent phrases, resulting in a reading where both have independent reference. In this reading, kwetu can be analysed as modifying an empty locative head noun (‘place’). The word-order in (21) encourages this reading, as true modifiers tend to follow the head noun in Swahili (e.g. RUGEMALIRA 2007). I will return to this difference in the following Section 4.

4. Inner and outer agreement in Luganda

As mentioned above, in some Bantu languages, both inner and outer agreement with locative nouns is possible. In this section, I will discuss this situation in more detail, with reference to Luganda (based on data from ASHTON ET AL. 1954 and GREGOIRE 1975:76, 80, 82). After providing a range of examples, I will present syntactic analyses of the relevant structures, and then turn to pragmatic differences between the two agreement patterns.

4.1. Overview of the two agreement patterns

In Luganda, modifiers of locative nouns can show agreement with either the locative class of the head noun, or with the noun class of the original noun. There is no restriction on either agreement strategy in terms of head noun or modifier. In (22a), the head noun ku-bbalaza ‘terrace’ is modified by the possessive stem -ange ‘my’, which shows agreement with locative class 17, while in (22b) agreement is with the original class 7 of the head noun kya-lo ‘village’.

\[
\begin{align*}
\text{(22) a.} & \quad \text{ku-bbalaza} & \text{kw-ange} & \quad [\text{Ganda E15}] \\
& \quad 17-9.\text{terrace} & 17-\text{my} & \\
& \quad \text{‘sur ma terrasse’ (GREGOIRE 1975:82)} \\
\text{b.} & \quad \text{ku-ky-alolo} & \text{ky-ange} & \\
& \quad 17-7.\text{village} & 7-\text{my} & \\
& \quad \text{‘à mon village’ (GREGOIRE 1975:82)}
\end{align*}
\]

A similar pattern is observed with demonstratives modifying locative nouns. The examples in (23) show modification with the distal demonstrative stem V-o (Aug-Prefix-o), showing outer agreement (23a) and inner agreement (23b), while the examples in (24) show the same patterns with the proximal demonstrative stem -no.

\[
\begin{align*}
\text{(23) a.} & \quad \text{ku-ky-alolo} & \text{okwo} & \\
& \quad 17-7.\text{village} & \text{DEM17} & \\
& \quad \text{‘à ce village-là’ (GREGOIRE 1975:80)} \\
\text{b.} & \quad \text{ku-lu-sozi} & \text{olwo} & \\
& \quad 17-11.\text{hill} & \text{DEM11} & \\
& \quad \text{‘sur cette colline-là’ (GREGOIRE 1975:80)}
\end{align*}
\]
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(24) a. mu-nyumba mu-no 18-9-house 18-DEM
   ‘dans cette maison-ci’ (GREGOIRE 1975:80)

b. mu-ki-senge ki-no 18-7-room 7-DEM
   ‘dans cette chambre-ci’ (GREGOIRE 1975:80)

In addition to possessives and demonstratives, the alternation between locative, outer agreement and original, inner agreement is also found with focus-related adverbial stems such as -okka ‘only’ (25).

(25) a. ku-ky-alo kw-okka 17-7-village 17-only
   ‘au village seulement’ (GREGOIRE 1975:80)

b. mu-ki-senge e-ki-nene ky-okka 18-7-room AUG-7-big 7-only
   ‘dans la grande chambre seulement’ (GREGOIRE 1975:80)

The data shown so far illustrate that the choice between inner and outer agreement is not restricted by morpho-syntactic features of the modification construction. Either inner or outer agreement is possible with possessives, demonstratives and adverbial stems. However, even though this is not clear from the translations provided so far (which are taken from GREGOIRE 1975), there is a difference in interpretation between the two structures, which is related to their underlying syntactic representations, as discussed in the following section.

4.2. Syntactic analyses of locative agreement in Luganda

In this section I propose that the two agreement possibilities in Luganda reflect two distinct syntactic underlying representations: one in which the modifier is part of the lower syntactic domain of the original noun, and one where it is part of the domain of the locative noun. I assume that locative nouns in Luganda consist of complex syntactic structure, in which the locative prefix functions as a syntactic head, governing an NP complement. The NP in turn is composed of a noun, which in itself is composed of a noun class prefix and a nominal stem (26).

(26) Luganda locative noun structure (ku-ky-alo ‘at the village’):

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LocP
  ku-ky-alO
    Loc
      NP
          ku-
                N
                  ky-alO
                  Prefix
        Stem
            ky-
                 -alo
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The representation in (26) assumes that locative noun class prefixes are different from canonical noun class prefixes in taking a phrasal complement, rather than a noun stem. I also assume that locatives in Luganda project a locative phrase. As shown above, in terms of clausal syntax, the locative phrase in Luganda functions like a noun phrase, since it can function as syntactic subject and object. This is in contrast to languages like siSwati and

1 The status of derivationally used noun class prefixes is interesting from this perspective, in that these are also often combined with a fully inflected noun. However, non-locative nouns with multiple prefixes typically do not allow inner agreement and so presumably have a different syntactic structure. See KAVARI and MARTEN (2009) for a short discussion of multiple noun class prefixes in Herero, and CARSTENS (1991, 1997), BRESNAN and MCHOMBO (1995), and MUGANE (1998) for more general discussions of Bantu noun phrases.
isiZulu, where locative phrases behave like prepositional phrases. A final aspect of Luganda nouns and noun phrases is that they often include an augment, or pre-prefix, in addition to the noun class prefix (Hyman & Katamba 1993; Ferrari-Bridders 2008). I have ignored this in the representation in (26), since it is not primarily relevant for locative nouns, but further study of the topic might shed further light on noun phrase structure in Luganda.

Against the background of the syntactic analysis of Luganda locative nouns in (26), the two different agreement patterns found with locative nouns can be explained by assuming that nominal modifiers can either be locative phrase modifiers or noun phrase modifiers. In (27), showing outer agreement with locative class 17, the modifier, which I assume for the present purposes projects a possessor phrase, is part of the locative phrase, as a syntactic sister to some intermediate projection Loc' as shown in (28).

\begin{equation}
\text{(27) } \text{ku-ky-alo} \quad \text{kw-ange} \\
17-7\text{-village} \quad 17\text{-my} \\
\text{‘at my village’}
\end{equation}

\begin{equation}
\text{(28) }
\begin{array}{c}
\text{LocP} \\
\text{Loc'} \\
\text{Loc} \\
\text{Agr}_{\text{Loc}} \\
\text{N} \\
\text{N}_{\text{Cl}} \\
\text{ki} \\
\text{Cl 7} \\
\text{village}
\end{array}
\begin{array}{c}
\text{PossP} \\
\text{Poss}_{\text{stem}} \\
\text{ange} \\
\text{ku} \\
\text{N} \\
\text{N}_{\text{stem}} \\
\text{alo} \\
\text{Cl 7}
\end{array}
\end{equation}

In contrast, inner agreement as for example in (29) can be analysed by assuming that the possessive phrase is part of the noun phrase, and a sister to the intermediate projection N’ as shown in (30).

\begin{equation}
\text{(29) } \text{ku-ky-alo} \quad \text{ky-ange} \\
17-7\text{-village} \quad 7\text{-my} \\
\text{‘at my village’}
\end{equation}

\begin{equation}
\text{(30) }
\begin{array}{c}
\text{LocP} \\
\text{Loc} \\
\text{Agr}_{\text{Cl}} \\
\text{N} \\
\text{N}_{\text{Cl}} \\
\text{ki} \\
\text{Cl 7} \\
\text{village}
\end{array}
\begin{array}{c}
\text{NP} \\
\text{ku} \\
\text{N'} \\
\text{PossP} \\
\text{Poss}_{\text{stem}} \\
\text{ange} \\
\text{ku} \\
\text{N} \\
\text{N}_{\text{stem}} \\
\text{alo} \\
\text{Cl 7}
\end{array}
\end{equation}

The different agreement patterns are thus explained as reflecting nominal agreement as a local, phrasal phenomenon. Inner agreement signals a local relationship with the head of the noun phrase, while outer agreement signals a local relationship with the head of the locative phrase. Since the noun phrase is a complement of the locative head, the semantic effect of the modification in both cases will be quite similar, however, I will come back to this point in the following section.

Before turning to the interpretation of the structures proposed in (28) and (30), a third structural alternative has to be considered briefly. The two structures discussed so far both involve modification of a syntactic head – the locative head or the noun. However, as mentioned above, an alternative analysis is to assume that the two locative nouns are syntactically independent of each other, and enter into an adjunction relation. This
is illustrated with the Swahili example already noted above, in which the possessive could be analysed as modifying an empty locative head (31).

(31) nyumba-ni kw-etu [Swahili G42]
    9.house-LOC 17-our
    ‘at the house/home, at our (place)’

In terms of structure, both nyumbani and kwetu can be analysed as independent locative phrases, which are adjoined to each other, but which do not stand in a modification relationship (32). There is thus strictly speaking no agreement relation between the two nouns, as they are not local to each other, and thus these are not examples of outer agreement.

(32)

I will not discuss adjunction structures like (32) in any further detail, but it is useful to keep in mind that this is available as an alternative analysis to many examples which appear to show outer agreement.

4.3. Pragmatic effects of different agreement patterns with locatives

The syntactic analysis of inner and outer agreement in locative phrases presented above assumes that the two different agreement patterns reflect two different syntactic structures. Under the assumption that syntactic structure drives interpretation, this entails that it is likely that the two different patterns are associated with different interpretations. Indeed, ASHTON ET AL. (1954) note that there are pragmatic differences associated with the two structures. In discussing examples (33) and (34), below (ASHTON ET AL. 1954:253; emphasis, glosses and translation in the original), they note that in (33), with inner agreement, ‘the qualifier is in apposition to kya-lo and defines it’, while in (34), with outer agreement, ‘the qualifier is merged into the whole’ (ASHTON ET AL. 1954:253).

(33) ku-kyalo e-kyo
    17-7-village AUG-DEM7
    ‘at that village’ (ASHTON ET AL. 1954:253)

(34) ku-kyalo o-kwo
    17-7-village AUG-DEM17
    ‘there at the village’ (a unit of thought) (ASHTON ET AL. 1954:253)

In terms of the analysis developed here, the demonstrative in (33) modifies the noun phrase head and thus can be thought of as ‘defining it’. In contrast, in (34), the modifier is part of the larger locative structure, presumably the ‘whole’ in Ashton et al.’s terms. The examples, and associated discussion of Ashton et al., thus show that inner and outer agreement are associated with slight differences in interpretation, reflecting the fact that they result from different syntactic configurations.

A second, similar example is provided by the difference between (35) and (36) (ASHTON ET AL. 1954:253). The modifier in these examples is the focus-related modifier -okka ‘only’. Note that due to its semantics, this modifier is unlikely to modify an empty head, and so example (36) is probably a true example of outer agreement, as the alternative adjunction analysis is unlikely to be correct in this case.
The difference in interpretation between (35) and (36) shows that the modifier restricts the head it agrees with. In (35) kyokka restricts the (modified) noun phrase kisenge ekinene, while in (36) mwokka restricts the whole locative phrase mukisenge.

A final example of the interpretational effect of different agreement patterns comes from the interaction of agreement with the focus particle -e (ASHTON ET AL. 1954:439-441). According to ASHTON ET AL. (1954:439), the particle -e takes the concord prefix of the noun or adverb to which it refers, and brings the noun or adverb to which it refers into prominence. A non-locative example of the function of -e is provided in (37) and (38).

The difference between the two examples solely rests on the presence of the focus particle be agreeing with the head noun abalenzi abo abakulu in (38). The difference in interpretation is that in (38), the head noun is emphasized or focused, as indicated by the translation as an English cleft sentence provided by ASHTON ET AL. (1954). A similar effect is found when -e modifies locatives, as shown in the examples (39) and (40).

In (39) the locative phrase functions as a subject of the locative inversion construction, and it appears from the translation that the post-verbal noun phrase is presentationally focused as has often been observed in relation to Bantu locative inversion constructions (BRESNAN & KANERVA 1989; DEMUTH & MMUSI 1997; MARTEN 2006). In contrast, in (40), the focus particle mwe follows the locative phrase, agreeing with class 18. Note that the demonstrative kino now shows inner agreement, modifying the noun phrase. The effect of the focus particle, like in the non-locative examples above, is to place emphasis on the preceding locative phrase. It appears from the translation that mukisenge kino is focused, even though the phrase remains the grammatical subject of the locative inversion construction. While this raises interesting questions for the analysis of locative constructions, for the present analysis, it confirms the idea that agreement reflects different levels of modification, so that in (40), kino modifies the noun phrase head, showing inner agreement, while mwe modifies the locative head showing outer agreement.

The examples discussed in this section show that there are interpretative differences associated with the difference between inner and outer agreement. The differences are pragmatic, rather than semantic, and this may reflect the fact that the syntactic locative head of the locative phrase does not contribute its own referential semantic meaning, so that the meaning of the locative phrase is a result of the combined semantic contribution of head and complement. In contrast, the nominal head of the noun phrase does have referential meaning, and so modification of the two heads has rather different effects. Nevertheless, the presence of pragmatic effects systematically related to inner and outer agreement provides support for the syntactic analysis of Luganda locative phrases proposed in this paper as involving modification at the noun phrase level (inner agreement) and at the locative phrase level (outer agreement).
5. Conclusions

In this paper, I have provided an overview of locative agreement in Bantu, with particular emphasis on agreement within the locative phrase. Across Bantu, both locative agreement (outer agreement) and agreement with the original, non-locative noun (inner agreement) are found. While in some Bantu languages, only one type of agreement is possible, others allow both types. Against this background, I have proposed an analysis of agreement in locative phrases in Luganda, where both types are found. I have proposed that different agreement patterns reflect a syntactic difference between the modification of the head noun and the modification of the locative head. In addition, some apparent outer agreement cases have been argued to involve locative phrase adjunction structures, and thus strictly speaking no agreement at all. The difference between the two modification structures is reflected in interpretative differences between the two agreement patterns, as can be seen from distinct pragmatic effects associated with the two structures.

The analysis proposed for Luganda locative phrases is to some extent similar to analyses proposed for locative nouns in other Bantu languages (e.g., Bresnan & Mchombo 1995 for Chichewa), while it differs from the analysis of locatives as prepositional phrases, for example in siSwati (Marten 2010). However, it remains an outstanding question if and if so, how the analysis proposed here can be extended to those Bantu languages which only allow one agreement pattern with locative nouns. It seems unlikely that modification of either the locative phrase or the noun phrase is somehow impossible, and so the presence of only inner or only outer agreement might be indicative of different underlying structures of locative phrases in these languages.

References