Original article

The Syntax of Luganda Adjectives

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Abstract

The aim of this paper is to discuss descriptive adjectives in the syntax of Luganda. It deals with their function, position in noun phrase and their degree. It also explores the order of adjectives in the noun phrase and its hierarchy in Bantu languages in general and Luganda language in specific.

1. Introduction

Much attention has been drawn to various aspects of Bantu languages especially the initial vowel, tone and word order. Luganda adjectives, however, are not widely studied except in R.M.W. Dixon (1982) and E.O. Ashton (1954). Like almost all Bantu languages, Luganda, which belongs to zone JE 15 and is spoken in Kampala, Uganda, comprises a closed class of adjectives. Description is conveyed by adjectival stems, the associative marker and relative phrases. This paper aims to study the syntax of Luganda adjectives, yet it is solely concerned with descriptive adjectives, not with other noun modifiers such as demonstrative and possessive adjectives. The paper is organized as follows: § 1 deals with the function of adjectives in the noun phrase along with the role of the initial vowel. In § 2 the position of adjectives and word order in the noun phrase is tackled. § 3 is a semantico-syntactic study of adjectives based on Dixon's prominent paper "Where have all the adjectives gone?" . § 4 is an endeavour to find an answer to the following question: What is the degree of 'adjectivity' for Luganda adjectives? § 5 discusses in detail the stacking of adjectives in the noun phrase and adjectival ordering restrictions (AOR) in light of heaviness and the end weight principle. Examples cited in this article are given by the informant of Luganda at the Institute of African Research and Studies who is a

native speaker of the language and a few examples are cited from Ashton (1954).

2. The function of adjectives in the noun phrase

This section highlights the different functions of Luganda adjectives and it also shows the role of the initial vowel in determining two of these functions in the noun phrase. The initial vowel (IV), sometimes referred to as the augment or the preprefix, is a short unstressed vowel which precedes the concordial prefix of nouns, adjectives and possessives. It plays an intricate role on phonetic, morphological, syntactic and pragmatic levels[1].

2.1 *Syntactic distribution of parts of speech*

Parts of speech are defined in terms of their syntactic functions. According to David Beck (2002, p. 18):

> syntactic distribution is often more closely related to lexical class membership than are inflectional patterns; this observation has led to a number of attempts at defining parts of speech in purely distributional terms. The most elementary of these approaches defines each part of speech strictly on the basis of the syntactic roles in which it is permitted to appear: nouns are defined as lexical items that can be the subjects of a sentence, verbs can be syntactic predicates, and adjectives are attributive modifiers.

The main function of adjectives is modifying nouns, however, Luganda adjectives have three syntactic functions in the noun phrase. The first two of which are attribution and predication which are determined by the initial vowel. Adjectives in Luganda can also be used as nouns, hence they can be the head of the noun phrase.

2.2 *Adjectives and the initial vowel*

The initial vowel, which is (a-), (o-) or (e-) in Luganda according to the noun class, determines the first two functions of Luganda adjectives, namely attribution and predication. Adding the initial vowel to the adjective renders it attributive while omitting it renders the adjective predicative. Examples:

(1) a. A- yagala e-ki-teeteeyi e-ki-myufu
      3SMsg- want IV-7-dress IV-7-red
        She wants a red dress
    b. E-ki-teeteeyi ki-no ki-myufu
      IV- 7-dress 7-Dem 7-red
      This dress is red

In (1a) t he adjective 'ekimyufu' is attributive; it modifies the noun 'ekiteeteeyi' whereas in (1b) the adjective is the predicate. It should be mentioned here that the copula in such constructions is not needed; the complement, which can be a noun or an adjective, can be used as the predicate.

Note also that the construction based on the associative marker can be used predicatively and attributively as in (2a) and (2b) respectively:

(2) a. Kya n-naku nti a-ba-vuzi b' e-bi-dduka ba-ngi te-ba-manyi ma-teeka
      7-Ass   9-sadness Conj IV-2-drivers 2-Ass IV-8-cars 2-many Neg-3SMpl-know
      6- rules
        It is sad that many drivers do not know the (traffic) rules

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[1] For further reading, see Hyman (1993).

b. O-mu-lenzi o-w' e-ki-sa muyite
   IV-1-N   IV-Ass IV-7-N Obj-V
     Call the well-behaved boy

In (2a), the initial vowel is omitted from both the associative marker 'kya' and the following noun 'nnaku' which accounts for the predicative use of the adjective.

2.3 *Adjectives used as nouns*
Luganda adjectives can be used as nouns as in (3a) and (3b):
(3) a. O-w' e-ki-tiibwa a-zze
IV-1-Ass IV-7-honour 3SMsg-
Vcome
     The honourable has come
   b. A-ba-zira ba-fudde
      IV-2-brave
3SMpl-die
       The brave have died

   The adjectives 'ow'ekitiibwa' and 'abazira' in (3a) and (3b) replace the nouns in both sentences whose deep structures are:

 (4) a. Omwami ow'ekitiibwa azze
       The honourable chief has
 come
(4) b. Abaserikale abazira bafudde
       The brave soldiers have died
   To sum up, the adjectives in Luganda can be used attributively and predicatively according to the presence or omission of the initial vowel. They can also be used as the heads of sentences when they replace the nouns in the surface structure. It should also be noted that the adjectives, when used as nouns, retain the initial vowel.

3. Word order and the position of adjectives in the noun phrase
    The position of adjectives in the noun phrase as well as the order of adjectives and nouns have been mistakenly postulated to correlate with the type of language itself: is the language verb initial or object initial? Dryer (2007, p. 101) puts it as follows:
          It is often thought that OV languages tend to be AdjN and
          that VO languages tend to be NAdj, but it turns out in fact
          that this is not so, that NAdj is somewhat more common
          than AdjN among both OV and VO languages.
    Much of this misunderstanding is related to Greenberg (1963), who generalized his findings about word order in African languages, and to a number of linguists who believed that AdjN, which is common in the OV languages in Europe and Asia, is the unmarked order in most languages (p 101).
3.1. *Word order and the position of adjectives in Bantu languages*
All Bantu languages, except for Nen, are SVO languages and belong to type A of word order patterns which are shown by Heine (1976, pp. 39-40) as follows:
- The subject precedes the verb
- The object follows the verb
- Nominal qualifiers like adjective, numeral, possessive, demonstrative or relative

clause follow the noun
- The possessive adjective precedes the other adjectives
- The adverb follows the verb and the adjective
Bantu adjectives follow the order NAdj in the noun phrase which is not only common among VO languages, but among OV languages as well.

3.2. *The position of Luganda adjectives in the noun phrase*

Luganda adjectives, which include adjectival stems, the constructions based on the associative marker and relative clauses, follow the noun they modify. According to Nurse & Philipson (2003, p.9):

> As expected from languages which are VO and largely prefixing, the N precedes its modifiers within the NP. The common order is N+ Adj+ Numeral+ other constituents, but pragmatic considerations lead to much flexibility.

This flexibility is clear in the following examples:
(5)   a. e-mmotoka ye eyo e-n-nungi
IV-9-car   Poss Dem IV-9-beautiful   This beautiful car of his
b. a-ba-wala ba-satu a-ba-wanvu
IV-2-girl   2-three IV-2-tall
      three tall girls

   c. abawala abawanvu abasatu
    three tall girls

In (5a) the unmarked order of the adjective and demonstrative is defied as the latter precedes the former for laying emphasis on the adjective. Hence, it follows the numeral and comes last in the noun phrase. In (5b) and (5c) the position of the adjective changes according to pragmatic reasons. In (5c) the adjective precedes the numeral only to stress the fact that the tall girls are only three not four or five.

Word order in Luganda, as well as in Bantu languages, is flexible. It is mainly governed by pragmatic factors which determine the category to be emphasized, which is therefore the last word in the noun phrase. The only fact which is fixed and cannot be altered is that the noun precedes all its modifiers[2].

4. Semantico-syntactic study of Luganda adjectives

This section explores how the semantic types of adjectives are expressed in the syntax of Luganda. Languages which lack an open class of adjectives are of two types:
 1- Languages with no class of adjectives like Chinese
 2- Languages with a closed class of adjectives like Igbo and Swahili (Schachter & Shopen 2007)
As a language of the second type, description in Luganda is expressed by:
 1- Adjectival stems which are almost forty-odd pure adjectives, i.e. they are not participial
 2- Constructions based on the associative marker, approximately two hundred constructions
 3- Relative clauses (almost thirty)
 3.1 The semantic types of adjectives
According to Dixon (2004), there are four core semantic types, which are typically associated with both large and small adjective classes:
 1- Dimension
 2- Age

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[2] The only modifiers which precede the noun in Luganda are 'Buli' and 'Kiisi' (all and every).

3- Value

4- Colour...A number of peripheral semantic types are typically associated with medium-sized and large adjective classes

5-Physical Property

6- Human Propensity

7- Speed

The "four core semantic types", namely dimension, age, value and colour, are expressed by adjectival stems. Examples:

(6) a. e-mi-sota e-mi-nene

     IV-4-snake   IV-4-large

     large snakes

   b. Kabaka o-mu-kadde

      1a-King   IV-1-old

     the old king

   c- e-ki-fo   e-ki-rungi

   IV- 7-place IV-7-beautiful

    a beautiful place

   d. e-n-viiri e-n-jeru

   IV-10-hair IV-10-white

   white hair

Adjectival stems express the four main semantic types; in (6a), (6c) and (6d) dimension, value and colour are conveyed by purely adjectival stems, whereas age is rendered by the participial adjective 'kadde' in (6b).

The other semantic types of adjectives are rendered by nouns, verbs, adverbs or adjectives. Human propensity, for instance, is expressed by the constructions based on the associative marker followed by a noun:

(7) a. o-mu-somesa o-w' e-ki-sa

     IV-1-teacher IV-1-Ass IV-7-kindness

    a kind teacher

    b. a-ba-ntu si ba ssanyu

    IV-2-people Neg 2-Ass 9-

    happiness

    unhappy people

Human propensity can be also expressed using adjectival stems as in (7c):

    c. o-mu-yizi o-mu-gezi, o-mu-lungi

     a clever and kind student

Physical property is rendered by the three means of expressing description in Luganda as shown in (8):

(8) a. e-jjinja e-ggumu   Adjectival stem

     IV-5-stone   IV-AP-hard   a

     hard stone

    b. o-mu-sumeeno o-gw' o-bw-ogi   The associative marker

      IV-3-saw   IV-3-Ass IV-14-sharpness

      a sharp saw

    c. a-ma-zzi a-go-okya Relative clause   (Ashton 1954, p.386)

      IV-6-water IV-6-boil   hot

      water

Speed is rendered by the adjective '-angu' (fast) and the adverb 'mpola' (slowly). Difficulty, another semantic type which Dixon (2004) associates with large adjective classes in some languages, is expressed by the adjectival stem '-zibu' (difficult) and '-angu' (easy)

The semantic types are rendered in Luganda by adjectival stems, the associative marker

followed by a noun, relative clauses and the adverb 'mpola'. As summed up in Dixon (1982, p. 36-37): Most human propensity concepts are rendered by abstract nouns...but there are just three or four human propensity adjectives- -zira 'brave', -gezi 'clever', 'learned', -kambwe 'fierce', 'cruel'. Most of the main physical property concepts are expressed through adjectives; however, some are realized as nouns and some as verbs. For the speed type there is an adverb 'slowly' and the physical property adjective -angu 'light (not heavy)' also has the senses 'quick' and 'easy'.

Description in Luganda depends mainly on the constructions based on the associative marker because, as afore mentioned in 3.1, the number of these constructions is by far larger than that of both adjectival stems and relative clauses. In addition, not only do pure and participial adjectival stems express the four main semantic types, but they express as well other semantic types which are associated with languages comprising an open class of adjectives. Human propensity and physical property are rendered by the construction based on the associative marker which makes up for the limited number of adjectival stems and, in turn, enriches the language.

5. The degree of 'adjectivity' of Luganda adjectives

Aarts (2007, p. 97) proposes that a grammatical category shows "subsecutive gradience" among its elements, which is defined as:

> the phenomenon whereby a particular set of elements displays a categorical shading in prototypicality from a central core to a more peripheral boundary.

This gradience is clearly shown in the following English adjectives: 'happy', 'thin', 'alive' and 'utter' which, according to Aarts, show different degrees of 'adjectivity'. This degree of 'adjectivity' is determined by five properties:
1- Attributive position
2- Predicative position
3- Intensification
4- Gradedness
5- Un-prefixation

According to these properties, 'happy' has the highest degree of 'adjectivity' since it meets all the adjective properties. 'Utter', however, is the least adjectival, whereas 'thin' and 'alive' show a fair degree of adjectivity which s lower than 'happy' and higher than 'utter' (Aarts 2007). The question this section is posing in light of Aarts' adjective properties is: do Luganda adjectives differ in the degree of 'adjectivity'?

5.1. *Attributive and predicative positions*

In §1, I show that Luganda adjectives are used attributively and predicatively. All adjectival stems and the constructions based on the associative marker can be attributes of the noun and predicates depending only on the presence and omission of the initial vowel. Unlike English adjectives like 'utter', 'slight' and 'sheer', all Luganda adjectives are central, not peripheral adjectives, i.e. they can be used attributively and predicatively. However, relative clauses cannot be used predicatively. Compare both examples:

(9) a. a-ka-mbe a-ka-ta-sala   (Ashton 1954, p. 386)
         IV-12-knife Rel-12-Neg-cut
          a blunt knife
          b. akambe katasala (ennyama)
          the knife does not cut (meat)

In (9a) the relative clause 'akatasala' is an attribute of the noun, but in (9b) when the initial vowel is omitted the relative clause simply becomes a negative transitive verb.

5.2. *Intensification*

All adjective stems and relative clauses can be intensified using the intensifier 'nnyo' and 'ddala' (very) as in (10):
(10) a. e-bi-muli e-bi-rungi nnyo

IV-8-flower   IV-8-beautiful very
        very beautiful flowers
    b. o-lu-goye o-lu-longoofu ddala
        IV-11-cloth IV-11-clean very
        a very clean piece of cloth

    c. a-ma-ta a-go-okya nnyo
        IV-6-milk IV-6-boil very
        very hot milk

However, according to the corpus data, the constructions based on the associative marker cannot be intensified.

5.3. *Negation*

Adjective stems, the constructions based on the associative marker and relative clauses can be used in negative constructions as shown in (11):

(11) a. a-ba-wala si ba-gagga
        IV-2-girl   Neg 2-rich
        unwealthy girls
    b. a-ba-baka a-ba-tali   ba-tongole   (Ashton 1954, p. 386)
    IV-2-member IV-3SMpl-Neg-have 2-cause
    unofficial members
    c. o-mu-kyala si wa ki-sa
        IV-1-woman   Neg 1-Ass 7-
    kindness
     an unkind woman

In (11a), (11b) and (11c), the initial vowel is dropped from the adjectival stem, the associative marker and the following noun as negation is one of the licensors which omit the initial vowel from its hosts like nouns and adjectives.

5.4. *Gradability*

Adjectival stems can be used in comparative and superlative degrees using the verb 'okusinga' (surpass) and the intensifier 'ddala'. As for the constructions based on the associative marker and relative clauses, they can be used in the superlative degree only:

(12) a. o-mu-yizi ono y' a-singa oyo o-bu-gezi
        IV-1-student 1-Dem Cop 3SMsg-surpass 1-Dem   IV-
        14-intelligence
        This student is more intelligent than that one
    b. omuyizi ono y'asinga bonna obugezi
        This is the most intelligent student
    c. o-mu-sumeeno gu-no gwe gu-singa o-ku-sala o-bw-ogi
        IV-3-saw   3-Dem Cop 3-surpass IV-15-cut   IV-14-sharpness
    This is the sharpest saw
    d. a-ma-zzi ga-singa o-kw-okya
        IV-6-water 6-surpass IV-15-boil   the
        hottest water

The adjectival stems in (12a) and (12b) are used in the comparative and superlative degrees respectively. However, the descriptions based on the associative marker and the relative clause in (12c) and (12d), as well as in the whole data of this research, indicate that both constructions only occur in the superlative degree.

After applying the adjective properties proposed by Aarts to Luganda adjectives, it can be concluded that Luganda adjectives are different in the degree of 'adjectivity'. Adjective stems are highly adjectival; they have more syntactic freedom than the constructions based on the associative marker and relative clauses. They accept the five properties which determine the degree of 'adjectivity'. The other two means of expressing description are less adjectival due to the fact that they do not accept the five adjective properties and therefore have a limited syntactic freedom in the noun phrase.

6. Stacked adjectives and AOR

This section studies in depth the stacking of adjectives in the noun phrase and adjectival ordering restrictions (AOR). It also highlights the two points of view concerning word order, namely hierarchy and the 'psychological' criteria. The order of adjectival stems, the constructions based on the associative marker and relative clauses is also discussed in light of heaviness and the end weight principle.

6.1. *The order of adjectives in the noun phrase*

In Universal Grammar, the order of adjectives in the noun phrase is governed by syntactic and semantic criteria. A number of linguists suggest a fixed order of adjectives in the noun phrase and argue that AOR can be accounted for by considering it part of UG. However, some linguists, including Dixon and Gary-John Scott, maintain that AOR are mainly determined by an ordering hierarchy, while other consider AOR as subject to 'psychological' criteria.

6.2. *AOR and ordering hierarchies*

Dixon (1982) proposes a fixed order of the semantic types of adjectives which follow this ordering hierarchy:

Value- Dimension- Physical Property- Speed- Human Propensity- Age- Colour

Scott (1998) considers AOR as part of UG and proposes the following refined ordering hierarchy:

DETERMINER> ORDINAL NUMBER> CARDINAL NUMBER> SUBJECTIVE COMMENT> EVIDENTIAL> SIZE> LENGTH>
HEIGHT>SPEED>DEPTH>WIDTH>WEIGHT>TEMPERATURE> WETNESS>AGE>SHAPE> COLOUR>NATIONALITY/ORIGIN> MATERIAL> COMPOUND ELEMENT> NP.

It is a detailed hierarchy wherein Dixon's seven semantic types are further split into sub-semantic types. In the linguistic literature, the notion of fixed order is supported by a number of linguists and is accepted as part of UG.

6.3. *The 'psychological' criteria*

AOR, as maintained by a number of linguists, can be accounted for using the 'psychological' criteria which Hetzron (1978, p. 178) explains as follows:

> the major rule is to place the more objective and undisputable
> qualifications closer to the noun, and the more subjective, opinion like
> ones farther away

To emphasize this 'rule', Hetzron accounts for the order of adjectives in (13) as follows:

(13) a long thin blade

> thickness requires more careful observation, and is hence more reliable as a
> judgement, than length, a dimension that is too easily perceivable and is
> therefore taken more lightly

The 'psychological' criteria are by all means the least convincing of all arguments accounting for AOR. Judging an object to be beautiful, long, thick or light is relative. It all depends on one's point of view and evaluation criteria.

AOR have been accounted for on semantic and 'psychological' grounds. According to the literature, it is taken for granted that adjectives in all languages follow a fixed order based on semantic or 'psychological' criteria. In the following section, stacking of Luganda adjectives and AOR are explored to find out if the notion of fixed order exists in Luganda.

6.4. *AOR in Luganda*

In 2.2 I show that word order in Luganda, and other Bantu languages, is quite flexible. It is mainly governed by pragmatic considerations. Consider the following examples:

(14) a. Kabaka o-mu-zira o-mu-to   y-a-fa
       1a-king IV-2-brave IV-2-young 3SMsg-past-die   the
      brave young king died
       b. Kabaka omuto omuzira yafa
           the young brave king died

c. o-mu-limi o-mu-nene o-mu-gezi a-genze
   IV-1-farmer IV-1-fat IV-1-clever 3SMsg-go   a
   fat, clever farmer has gone
d. omulimi omugezi omunene agenze
   a clever, fat farmer has gone

In (14a), the human propensity adjective 'omuzira' precedes the age adjective 'omuto', which is the unmarked order of adjectives according to the notion of fixed order and the ordering hierarchy. In (14c), the dimension adjective 'omunene' precedes the human propensity adjective 'omugezi', which also follows the order proposed by Dixon and Scott. In (14b) and (14d), the order of the adjectives changes and the sentences are still grammatical.

Stacked Luganda adjectives do not follow a fixed order based on semantic or even 'psychological' criteria. For pragmatic reasons, the adjective which is brought into focus is extraposed regardless of the notion of fixed order and ordering hierarchies. Therefore, fixed order cannot be considered as part of UG since it is not a characteristic of the syntactic system of a large number of languages such as Bantu languages.

6.4. *The order of adjectival modifiers in the noun phrase*

The order of noun modifiers in the noun phrase is explained in the light of dominance, heaviness and the end weight principle. Heaviness, which is introduced by Hawkins, is very much similar to Greenberg's concept of dominance. It is explained by Croft (2003, p. 70) as follows:

certain types of modifiers tend to be larger grammatical units, in terms of number of syllables, number of words and syntactic constituency (relative clauses vs. genitive phrases vs. single-word demonstratives and numerals), and could be ranked in order of heaviness as follows: (7) Rel< Gen< Adj< Dem, Num. Hawkins interprets (7) as a preference for heavier modifiers to follow the head noun, and lighter modifiers to precede

In Bantu languages, the order of noun modifiers in the noun phrase as presented by Rugemalira (2007) is:

Numeral, Ordinal, Associative, Quantifier, Adjective, Relative Clause.

According to Rugemalira, the associative marker precedes the adjectival stem. The data, however, does not include examples where the constructions based on the associative marker precede the adjectival stem. For example:

(15) a. Tw-e-taaga o-mu-limu o-mu-lungi o-gw' a-ma-goba o-gu-gasa
       2SMpl-Reflx-need IV-3-work IV-3-good IV-3-Ass IV-6-profit Rel-20-be of use
          we need a good, lucrative and useful work
    b. Abdullah ne Mukasa ba-sajja ba-wanvu ba ki-sa n'   a-ba-zannya
       N   Conj N   2-man   2-tall   2-Ass 7-kind Conj Rel-3SMpl-
    play
          Abdullah and Mukasa are tall, kind and athletic men

In (15a) and (15b) the adjectival stem precedes the constructions based on the associative marker which are followed by the relative clause.

Description conveyed by relative clauses in Luganda comes last in the noun phrase. According to Rugemalira (2007, pp. 147-8)

[t]here is considerable variation in the ordering of the items in the modifier position but no such freedom in any other position. It would appear that the relative clause normally comes last of all modifiers on account of its syntactic complexity, which lends support to the principle of end weight. However, the number of syllables of the relative clause in (15a) is equal to that of the adjective 'omulungi' and less than that of the associative 'ogw'amagoba' which flouts heaviness and the end weight principle and thus highlights the notion of unfixed order of noun modifiers in Luganda. Therefore, the order of adjectives in the noun phrase needs further exploration to account for the fact that relative clauses, even when they are not the 'heaviest' elements, follow the adjectival stems and the constructions based on the associative marker.

7. Conclusion

Description in Luganda is expressed by adjectival stems, constructions based on the associative marker and relative clauses. Pure and participial adjective stems are highly adjectival as they meet the five adjective properties suggested by Aarts. Luganda adjectives also follow the noun as the order NAdj is common among VO and OV languages. Although Luganda comprises a closed class of adjectives, eight semantic types, four of which are associated with large adjective classes in some languages, are mainly rendered by adjectival stems and the associative marker followed by an abstract noun. Furthermore, the order of Luganda adjectives in the noun phrase is flexible and is determined by pragmatic considerations which accounts for the lack of fixed order and ordering hierarchies.

Abbreviations

1, 2, 3, ...: class 1, 2, 3,..., Conj: conjunction, IV: initial vowel, OM: object marker pl: plural, Reflx: reflexive infix, Rel: relative pronoun, sg: singular, SM: subject marker

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