Modification of the Noun in Somali: Comparative Evidence from other Cushitic languages

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0. Introduction
Somali is a Cushitic SOV language. The noun phrase however is head initial: the modifiers of the noun appear to the right of the head noun. Given the generalizations of Greenberg (1966) this is typologically unexpected.

The aim of this article is to propose a structure for the Somali noun phrase. We first examine the properties of noun modification in Somali and then compare them with those of noun modification in other Cushitic languages. We will see that Somali is unique among the Cushitic languages we examined in that the modifiers occupy a single position.

1. Modification of the noun in Somali

We distinguish two types of modifiers: enclitic modifiers and autonomous modifiers.

1.1. Enclitic modification

Enclitic modification is expressed on the determiner, which is enclitic on the noun. Two types of enclitic modifiers are illustrated in (1) and (2).

(1) a. buúg-ga  ‘the book’  
    book-det(m) (definite article)

    b. buúg-gi  ‘the book’ (you know it, we have been talking about it)  
    book-det(m)+past (definite article+past)

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1 We would like to thank Bashir Keenadiid for his native speaker judgements and his patience in answering our questions. All misinterpretations are, naturally, our responsibility.
(2)  a. naág-tán  ‘this woman’
    woman-dem(f)

  b. naág-taás  ‘that woman’
    woman-dem(f)  (demonstrative suffixes)

1.2. Autonomous modification

Autonomous modification is modification by adjectives and relative clauses, which occupy their own position in the syntactic structure. Autonomous modifiers appear to the right of the noun they modify. Various examples of autonomous modifiers are given in (3).²

(3)  a. qálin-ka  [ cusúb ]
    pen-det(m)  new
    ‘the new pen’  (adjective)

  b. qálin-ka  [ yar-ka  ah ]
    pen-det(m)  small-det(m)  is
    ‘the pen that is small’  (ah-relative)

  c. gabádh-a  [ halkás maraysá ]
    girl-det(f)  over there walk
    ‘the girl that walks over there’  (subject relative)

  d. qálin-ka  [ aan arkó ]
    pen-det(m)  I see
    ‘the pen that I see’  (object relative)

  e. qálin-ka  [ gabádh-a ]
    pen-det(m)  girl-det(f)
    ‘the girl’s pen’  (genitive)

Autonomous modification has two main properties. First, any two modifiers of the noun have to be coordinated by oo/ee.³ So for instance, in (4) below, the noun qalín ‘pen’ is modified by two adjectives dheer ‘big’ and cusúb ‘new’, the adjectives have to be coordinated by oo.

(4)  a. * qálin-ka  dheer  cusúb
    pen-det(m)  big  new

² An exception is the prenominal genitive.
³ The coordinating particle oo alternates with ee in certain environments. For the examples given here, our informant uniformly preferred oo.
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b. OK qalinh-ka dheer oo cusub
pen-det(m) big oo new
‘the big new pen’ (two adjectives)

(5) a. * heesá-ha soomaaliy-éd cusúb
songs-det(m) Somali-ed new
b. OK heesá-ha soomaaliy-éd oo cusúb
songs-det(m) Somali-ed oo new
‘the new Somali songs’ (adjective+noun-ed)

The coordination is necessary not only for modification by adjectives but also for modification by adjectives that are more complex, e.g. relative clauses are illustrated in (8) and (9).

(6) a. * kóob-ka [bulúug-ga ah] cusúb
cup-det(m) [blue-det(m) is] new
b. OK kóob-ka bulúug-ga ah oo cusúb
cup-det(m) blue-det(m) is oo new
‘the new blue cup’ (adjective+ah-relative)

(7) a. * gábðhá-haas [qurúx-da badán] [halkáas marayã]
girls-those beauty-det(f) much over there walk
b. OK gábðhá-haas [qurúx-da badán] oo[halkáas marayã]
girls-those beauty-det(f) much oo over there walk
‘those very beautiful girls that are walking over there’ (adj.noun + subj.relative)

(8) a. * wíil-ka yar [halkáas ku cayaarayá]
boy-det(m) small there prep runs
b. OK wíil-ka yar oo [halkáas ku cayaarayá]
boy-det(m) small oo there prep runs
‘the little boy running there (far away)’ (adjective+subj.relative)

(9) a. * wíil-ka yar [aan arkó]
boy-det(m) small I see
b. OK wíil-ka yar oo [aan arkó]
boy-det(m) small oo I see
‘the small boy that I see’ (adjective+obj.relative)
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(10) qayb-tan yaab-kéeda [loo bogay] ee fiican share-dem.f surprise-hers one+with be satisfied EE good ‘this surprising and good way of sharing that one is satisfied with’
    (in Morin (1986, p.114)) (relative clause + adjective)

The case of modification by a genitive and a relative is illustrated in (11c).

(11) a. qálin-ka macállín-ka oo cusúb pen-det(m) teacher-det(m) oo new ‘the new pen of the teacher’ (genitive + adjective)

b. kóob-ka macállín-ka oo [shaah-a ah] cup-det(m) teacher-det(m) oo tea-det(m) is ‘the tea cup of the teacher’ (genitive + ah-relative)

c. waláal-ka Warsáame oo [halkáas kú cayaarayá] brother-det(m) Warsame oo there prep. runs ‘Warsame’s brother who is running there (far away)’ (genitive + subj.relative)

The second property of noun modification in Somali is that the order of any two coordinated modifiers is free. Consider for instance modification by an adjective and an object relative. We see in (9b) that the order adj >> obj rel is good. Now as shown in (12b), the inverse order obj rel >> adj is also good.

(12) a. qálin-ka cusúb oo macállín-ka pen-det(m) new oo teacher-det(m) ‘the new pen of the teacher’, cf. (11a) (adjective + genitive)

b. wiil-ka [aan arkó] oo yar boy-det(m) I see oo small ‘the small boy that I see’, cf. (9b) (obj.relative + adjective)

Note that the modifier that appears first is perceived as more important or new.

(13) a. qálin-ka macállín-ka oo cusúb pen-det(m) teacher-det(m) oo new ok: ‘the new pen of the TEACHER’ (genitive+adjective)

b. qálin-ka cusúb oo macállín-ka pen-det(m) new oo teacher-det(m) ok: ‘the NEW pen of the teacher’ (adjective + genitive)
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Finally autonomous and enclitic modification do not interfere with each other: they coexist without triggering coordination.

(14) a. afá-dán bará-ha ‘the teacher’s wife here’
    wife-dem(f) teacher-det(m)

    b. afá-daás bará-ha ‘the teacher’s wife over there’
    wife-dem(f) teacher-det(m) (demonstrative + genitive)

Our observations concerning noun-modification in Somali can be summarised as follows:

(15) a. Enclitic and autonomous modification can coexist without triggering coordination.
    b. To combine two autonomous modifiers it is necessary to create a complex occupying a single position, more specifically a unique XP (coordination by oolee).
    c. The linear order among coordinated autonomous modifiers is free.

Faced with (15b), we have two options. The first one is to say that the modifiers occupy a single position in surface structure but are generated in hierarchically ordered projections within the DP, ie there is an underlying hierarchy of the modifiers, see Lecarme (1996). The second option is to assume that the modifiers are not generated hierarchically ordered positions. Since – according to the data we have considered here – the linear order among coordinated modifiers is free, we will pursue this second hypothesis.

2. Modification of the noun in other Cushitic languages

We will now look at the properties of noun modification in other Cushitic languages: Afar (Bliese 1977), Harar Oromo (Owens 1985), Iraqw (Mous 1993) and Beja (Almkvist 1881). All these languages have a basis SOV word-order, as Somali, but they differ from each other with respect to the order of the noun and its modifiers.

We will see that Somali is unique among these languages in that the modifiers of a noun occupy a unique syntactic position.

(16) Cushitic

<table>
<thead>
<tr>
<th>North</th>
<th>Central</th>
<th>South</th>
<th>East</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beja</td>
<td>Agaw...</td>
<td>Iraqw...</td>
<td>HEC:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LEC:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Afar, Oromo, Somali</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Sidamo...</td>
</tr>
</tbody>
</table>
2.1. Afar

As expected for an SOV language, the word order inside the noun phrase in Afar is Modifier Noun. Various examples of modified nouns are given in (17). In all cases, the modifier precedes the head N.

(17)  \[ \text{Modifier} \quad \text{Noun} \]

\begin{align*}
\text{a.} & \quad \text{woó dem} & 9ari \\ & & \text{house} \\
& & \text{(demonstrative)} \\
\text{b.} & \quad \text{nabá great} & \text{num} \\ & & \text{man} \\
& & \text{(adjective)} \\
\text{c.} & \quad \text{sagá-h cow-gen} & \text{iba} \\ & & \text{foot} \\
& & \text{(genitive)} \\
\text{d.} & \quad \text{tidhígílél it was broken} & \text{boddina} \\ & & \text{tooth} \\
& & \text{(relative)} \\
& & \text{(exs a.b.d from Hayward 1998:625, ex c from Bliese 1977:227)}
\end{align*}

The different types of modifiers follow a strict order: demonstrative >> adjective >> genitive (examples from Bliese 1977:225/285). \(^4\)

(18)  \[ \text{dem adj N} \]

\begin{align*}
\text{OK} & \quad \text{amá 9asá 9ari} \\ & \quad \text{this red clothing} \\
& & \text{saró sarté} \\
& & \text{I put on} \\
* & \quad \text{9asá amá} \\
& & \text{saró sarté} \\
& & \text{I put on} \\
& & \text{(* adj >> dem)}
\end{align*}

(19)  \[ \text{dem adj} \]

\begin{align*}
\text{OK} & \quad \text{wóo ni9fín} \\ & \quad \text{that hot milk} \\
& & \text{xán mádhagin} \\
& & \text{don’t touch} \\
* & \quad \text{ni9fín wóo} \\
& & \text{xán mádhagin} \\
& & \text{(* adj >> dem)}
\end{align*}

(20)  \[ \text{adj gen N} \]

\begin{align*}
\text{OK} & \quad \text{datá awk-í} \\ & \quad \text{black boy-gen} \\
& & \text{ko9só} \\
& & \text{ball} \\
& & \text{(adj.+genitive)}
\end{align*}

The examples in (18), (19), and (20), also show that multiple modification does not trigger coordination. These observations suggest that Afar has multiple slots for the different types of modifiers and that the modifiers occupy hierarchically ordered positions.

\(^4\) Relatives are more complicated: rel >dem>N and dem>rel>N are both OK. (Bliese 1977:25,26)
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2.2. Harar Oromo
In Harar Oromo, like in Somali, the word order inside the noun phrase is: Noun >> Modifier, as illustrated in (21) (examples from Owens 1985:87/103/107).

(21) a. namá gaarfí ‘good men’
    man good (adjective)

b. bif-nǐi sárée ‘the dog’s color’
    color-nom dog/gen (genitive)

c. gaalá xiyyán ‘my camel’
    camel my (possessive)

As in Afar, and unlike in Somali, however, the different types of modifiers appear in a fixed order: adjective >> genitive >> relative >> demonstrative, (Owens 1985:86).

(22) a. N adj gen
    xeesumminá gaarfí [ namiccá suní ]
    guests good man that/gen
    ‘that man’s good guests’ (Owens1985:104)

b. N adj relative dem
    makiináá diimtúu [ at bitte ] sán arke
    car red you buy2pst that saw
    ‘He saw that red car you bought’ (Owens 1985:132)

Again as in Afar, multiple modification of the noun does not trigger the insertion of any coordinating particle in Harar Oromo.

2.3. Iraqw
The word order inside the noun Iraqw noun phrase is: Noun >> Modifier.

(23) N adj
    a. hhaysáá tléer ‘a long tail’
        tail long

b. garmo6 úr ‘a big boy’
    boy big

We observe a strict ordering among different types of modifiers: genitive >> adjective (see (24) from Mous 1993:229), with relative clauses following all other modifiers (see (25) Mous 1993:231).
(24) \[ N \quad \text{gen} \quad \text{adj} \]
maká        gadá        ninakw  ‘small forest animals’
animals(cs)  forests(cs)  small(p)

(25) tsir’í tam ar wák ar aa dakúus i káhh
bird(f) even indep.f.cs one indep.f.cs 3perf miss.3ms past 3 be absent3fs
‘A bird, even one, that he missed, does not exist’

Again, Iraqw allows multiple modification of the noun without recourse to a
coordinating particle.

2.4. Beja
In Beja the word order inside the noun phrase is variable: an indefinite adjective
or a genitive precedes the head noun, (see (26)), while definite adjectives follow
the head noun (see (27a)).

(26) a. win kaam
    big camel
    ‘a big camel’ (Almkvist:§90)
(adjective)

    b. masankoo-ti biya
    harp-gen(f) string
    ‘a harpstring’
(genitive)

This distribution implies in particular, that definite genitives and definite
adjectives occupy different positions.

(27) a. \[ \text{detN} \quad \text{det adj} \]
uu-kaam uu-win
    det(m)-camel det(m)-big
    ‘the big camel’ (Almkvist §90)
(definite noun+definite adjective)

    b. \[ \text{det gen} \quad \text{det N} \]
oo-taki oo-gaw
    det(m)-man det(m)-house
    ‘the house of the man’
(definite genitive+definite noun)

In Beja, multiple modification does not trigger coordination.

(28) uu-san-ii-ta meek tuu-win-t
    det(m)-brother gen-pos1.s donkey det-big-det(f)
    ‘my brother’s big she-donkey’
    (genitive + N + definite adjective)

2.5. Properties of noun modification in the languages examined
The properties of noun modification in the languages we examined are summa-
ized in table (29).
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(29)                      Somali  Afar  HOromo  Iraqw  Beja
SOV order                 yes     yes     yes     yes     yes
Word order inside the NP:
  N modifier                yes     no      yes     yes     yes/no
Mod. occupy a single
  syntactic position:
    a. free order of mod.     yes     no      no      no      no
    b. multiple mod. --> coordination yes     no      no      no      no

This brief excursion into the noun modification in other Cushitic languages shows that Somali is unique in that the modifiers occupy a single position: all other languages have multiple slots for different types of modifiers, as can be seen from the strict ordering among them in Afar, Harar Oromo and Iraqw. In Beja definite adjectives and genitives even occupy different syntactic positions (pre- and post-nominal respectively).

The cross-linguistic data also show that the properties of Somali noun modification cannot be reduced to variation in terms of headedness: Harar Oomo and Iraqw show the same fundamental word order properties (SOV, N>>modifier) while at the same time these languages distinguish several syntactic positions for the different types of noun modifiers.

3. The structure of the Somali noun phrase

To account for the properties of Somali noun modification we need to assume a structure that provides a single surface position for autonomous modifiers. This position hosts co-ordinations of NPs, relative clauses and adjectives, suggesting that it is a position for maximal projections.

If we now assume that the modifiers occupy a DP-*internal* position, we may think of three possibilities.

The first possibility is that the modifiers occupy a complement position under N as in (30).

(30)  

```
  DP
     \   /  
      D' ...
     /   \  
    D    ...
     \  /  
      NP
     /  \  
    N'  Mod
```

35
This structure is problematic, however, since it is traditionally assumed that there is a relationship of selection between a head and its complement, and there is no such selectional relationship between a N and its adjecival or relative clause modifiers.

A second possibility consists in a structure where the modifier complex is analysed as an adjunct to NP as in (31).

(31) \[
\begin{array}{c}
\text{DP} \\
\downarrow \\
\text{D'} \\
\downarrow \\
\text{D} \\
\downarrow \\
\text{NP} \\
\text{Mod} \quad \text{NP}
\end{array}
\]

Since adjunction can in principle be iterated, this line of analysis has to postulate a separate ban on multiple adjunction within the Somali DP to account for the fact that the modifiers occupy a single structural position.

A third possibility consists in a structure where the modifier complex occupies a specifier position. This would derive the uniqueness of the modifier position.

(32) \[
\begin{array}{c}
\text{DP} \\
\downarrow \\
\text{D'} \\
\downarrow \\
\text{D} \\
\downarrow \\
\text{XP} \\
\downarrow \\
\text{Spec} \quad \text{NP} \\
\text{Mod}
\end{array}
\]

Under the assumption that Spec is to the left of the head, modifiers cannot be in SpecDP because modifiers are on the right of the N+D complex they modify. This Spec has to be the Spec of an intermediate projection XP; so we would have to assume an additional functional projection (XP) for which we have no supplementary evidence.

We have no empirical argument to decide for or against these three options. Faced with the problems they raise, however, we would like to propose a different hypothesis.
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(33) a. Modifiers are not inside the DP projection of the head noun, in Somali the DP is limited to the noun with its enclitic determiners.

b. The Somali noun combines with its modifiers in a verbless clausal structure.

This hypothesis accounts for the two remarkable properties of the modification of the noun in Somali: First, modifiers have to be coordinated by the same particle that coordinates clauses that do not contain a focus marker.

In Somali there are three coordinating particles, they coordinate types of constituents. In (34a), iyo coordinates noun phrases. Independent propositions are coordinated by –na suffixed on the first constituent of the second sentence (34d). Finally oolee coordinates incomplete verbal projections (34b and 34c); the second clause does not contain a focus marker.

(34) a. [ shabéél ] iyo [ wéér ]
    leopard coord. hyena
    ‘a leopard and a hyena’ (Saced 1998:106)

b. [ wáy kú sôo noqołay ] oo [ iísbatay ]
    foc3f to part returned coord. bought
    ‘She came back (to it) and bought it’ (Saced 1998:104)

c. [ nin-kí wuú soo booday ] oo [ yiri ]:
    man-det foc part jumped coord said
    ‘The man made a big leap and said: “...”’ (from a story)

d. [ Axmed wúu yími ] [ wúu-na ] ilá hadlay ]
    A. he came he- coord with me talked
    ‘Axmed came and he talked with me’ (Saced 1998:105)

Second, under hypothesis (33), the freedom in the order of the modifiers is natural since it is plausible that coordinated clausal modifiers appear in a free order.

4. Conclusion
We proposed that the Somali noun phrase is embedded in a predication structure. This view suggests that the autonomous modifiers are predicates, in a structure comparable in part to ‘this book is green’ or ‘this book is John’s’ in English. The Somali structure containing the noun differs from the English examples in that it does not include a finite verb.
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