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The Genitive in Somali

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1 Introduction

Somali is a Cushitic SOV language spoken in the region of the Horn of Africa. While the VP is head-final (see (1a)), the noun phrase is head initial (see (1b)) ².

(1) a. (Som) Gabadh-u buug-ga way akhri-day ${\rm girl\text{-}det}(f)\text{-}{\rm nom}\ {\rm book\text{-}det}(m)\ {\rm focus+3fs\ read\text{-}[past]/3fs}$

'The girl read a book.'

(SOV)

 b. god -ka libaax -a den -det(m) lion -det(m)
 'the lion's den'

(N » genitive)

As shown in (1b) the Somali genitive construction does not involve a prepositional element, the two nouns are simply juxtaposed.

The aim of this talk is to propose a structure for the Somali DP. We will examine the properties of the genitive construction paying particular attention to the following two domains:

- (2) a. definiteness specification: How are the members of a noun + genitive complex marked for definiteness? Can both nouns of a genitive be marked for definiteness independently of each other?
 - b. modification of the head noun and of the complement noun: What types of modifiers are compatible with the genitive construction? Can the complement noun in turn be modified by a genitive complement (recursivity)?

2 Definiteness specification

In the genitive construction both terms have to have the same definiteness marking. The definiteness matching is explicitly marked: both elements of a definite genitive construction carry the definite article.

 dhar naag dress woman
 'a dress of a (particular) woman'

(cf.Orwin [1995, p.66])

In particular, proper names cannot appear as genitive complements of an indefinite head noun ³:

(5) a. * Warsame wux-uu keenay buug Maryan. Warsame expl-he brought book Maryan hyp: 'Warsame brought a book of Maryan's.'

b. ok Warsáme wux-uu keenay buúg-gfi Maryan.
 Warsame expl-he brought book-det(m)+[past] Maryan 'Warsame brought Maryan's book.'

This phenomenon of coinciding definiteness is not exclusive to the genitive. It is also found with ah-relatives (see (6)) (cf. Lecarme [1996]) and with an alternative genitive construction, the prenominal genitive (see (7)(cf.Gebert [1981, p.69-70]):

(6) AH-RELATIVES

a. ok guri -ga buluúg -ga ah house -det(m) blue -det(m) is ' 'the blue house'

b. ok guri buluúg ah house blue is

'a blue house'

c. *: guri -ga buluúg ah house -det(m) blue is

d. *: guri buluúg -ga al house blue -det(m) is

¹We would like to thank Bashiir Keenadiid for his native speaker judgements and his patience in answering our questions. All misinterpretations are our responsibility.

²Given the generalisations of Greenberg 1966, this is typologically unexpected.

³The only way to express the sense corresponding to (5a) is by using a relative clause:

⁽⁴⁾ ok: búug yar oo Maryan leedahay book small coord Maryan owns it 'a small book and Maryan owns it'

(7) PRENOMINAL GENITIVE

- a. ok: macállin -ka guri -gíis -a teacher det(m) house -his -det 'the teacher's house'
- b. ok: macállin guri -gíis teacher house -his 'a teacher's house'
- c. *: macállin -ka guri -gíis teacher det(m) house -his
- d. *: macállin guri -gíis -a teacher house -his -det

3 Two types of modification

For the discussion of the modification pattern of genitive constructions, we will distinguish autonomous modification from enclitic modification.

3.1 Autonomous modification

The term autonomous modification is intended to cover modification by relative clauses and adjectives which occupy their own position in the syntactic structure, (see section (4)). Autonomous modifiers attach to the right of the modified noun⁴:

(8) 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 halkáas 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)

The postnominal genitive attaches immediately to the right of the head noun.

(9) qálin-ka gabádh-a pen-det(m) girl-det(f) 'the girl's pen'

(genitive)

3.2 Enclitic modification

Enclitic modification, on the other hand, is expressed on the determiner, which is enclitic on the noun.

(10) a. buúg-ga book-det(m) 'the book'

(definite article)

b. buúg-gfi book-det(m)+[past] 'the book (you know it, we have been talking about it)' (definite article+[past])

(11) buúg-g-íisa book-(m)-his 'his book'

(possessive suffixes)

(12) a. naág-tán woman-dem.(f) 'this woman'

> b. naág-taás woman-dem.(f) 'that woman'

(demonstrative suffixes)

4 Autonomous modification of the genitive construction

4.1 Autonomous modification of the complement noun

The modification of the postnominal genitive by an autonomous modifier is compatible with the structure of the genitive construction:

(13) a. qálin-ka macállin-ka cusúb pen-det(m) teacher-det(m) new ok: 'the pen of the new teacher' ' *: 'the new pen of the teacher

(complement noun + adjective)

 b. qálin-ka gabádh-a qurúx-da badán pen-det(m) girl-det(f) beauty-det(f) much
 'the pen of the very beautiful girl'

(complement noun + adi noun)

⁴An exception is the prenominal genitive Warsame guri-giisa, '(lit) Warsame, his house'='Warsame's house'. We will come back to this construction later (section (6.1)).

 c. qálin-ka gabádh-a yar-ta ah pen-det(m) girl-det(f) small-det(f) is 'the pen of the girl, that is small'

(complement noun + ah-relative)

- e. qálin-ka gabádh-a aan arkó pen-det(m) girl-det(f) I see 'the pen of the girl that I see'

(complement noun + object relative)

In particular, the genitive complement may itself be modified by a genitive, i.e. the Somali genitive allows right recursion (see Lecarme (1989a))

(14) xaffis-ka hormúud-ka kulliyád-da office-det(m) dean-det(m) faculty-det(f) 'the office of the dean of the faculty', example from Lecarme (1989a:3)

To sum up, autonomous modification of the complement noun is directly compatible with the structure of the genitive construction, i.e. the following structure is wellformed:

(15) ok: [N [N MOD]]

Head noun Genitive Modifier

4.2 Autonomous modification of the head noun

An adjective following the postnominal genitive cannot modify the head noun:

(16) qálin-ka macállin-ka cusúb pen-det(m) teacher-det(m) new ok: 'the pen of the new teacher' *: 'the new pen of the teacher'

The headnoun of a genitive construction cannot be modified directly either (see Lecarme [1989a,b]):

- (17) a. * qálin-ka cusúb macállin-ka pen-det(m) new teacher-det(m) hyp: 'the new pen of the teacher'
 - b. * kóob-ka shaah-a ah macállin-ka cup-det(m) tea-det(m) is teacher-det(m) hyp: 'the tea cup of the teacher'

The meaning corresponding to a modification of the headnoun of a genitive construction is expressed by a conjunction of the modifier and the postnominal genitive with the conjunction oo or ee (see (18))⁵

- (18) a. qálin-ka macállin-ka oo cusúb pen-dt(m) teacher-det(m) oo new 'the new pen of the teacher' (complement noun + adjective)
 - b. ok kóob-ka macállin-ka oo shaah-a ah cup-det(m) teacher-det(m) oo tea-det(m) is
 'the tea cup of the teacher' (complement noun + ah-relative)
 - c. ok: waláal-ka Warsáme oo [halkáas kú cayaarayá]
 brother-det(m) Warsame oo there prep runs
 'Warsame's brother who is running there (far away)'

 (complement noun + subject relative)

Both linear orders of the genitive and the second modifier are possible, so the inverse

order modifier>>genitive is also good⁶:

- (20) a. ok: qálin-ka cusúb oo macállin-ka pen-det(m) new oo teacher-det(m) 'the new pen of the teacher', cf.(18a)
 - b. ok: kóob-ka shaah-a ah oo macállin-ka cup-det(m) tea-det(m) is oo teacher-det(m)
 'the tea cup of the teacher', cf.(18b)

The coordination of possessors with an autonomous modifier is a special case of multiple modification. In general any two modifiers of a noun have to be coordinated by oo: ⁷

- (21) a. * qálin-ka dhéer cusúb pen-det(m) big new
 - b. ok: qálin-ka dhéer oo cusúb pen-det(m) big oo new 'the big new pen'

(two adjectives)

(19) a. qálin-ka macállin-ka oo cusúb pen-det(m) teacher-det(m) oo new ok: the new pen of the TEACHER

(complement noun + adjective)

 padin-ka cusúb oo macállin-ka pen-det(m) new oo teacher-det(m) ok: the NEW pen of the teacher

(adjective + complement noun)

⁵The coordinating particle oo alternates with ee in certain environments. For the examples given here, our informant uniformly preferred oo.

⁶The modifier that appears first is perceived as more important or new:

⁷Note that in Persian where multiple modifiers are also obligatorily linked (by the EZAFE-vowel), this does not result in a free ordering among the modifiers (see Ghomeshi (1997)).

- (22) a. *: heesá-ha soomaaliy-éed cusúb songs-det(m) Somali-eed new
 - b. ok: heesá-ha soomaaliy-éed oo cusúb songs-det(m) Somali-eed oo new
 'the new Somali songs'

(adjective + noun-eed)8

- (23) 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
 (adjective + ah-relative clause)
- (24) a. *: gabdhá-haas qurúx-da badán halkáas marayá girls-those beauty-det(f) much over there walk
 - b. ok: gabdhá-haas qurúx-da badán oo halkáas marayá
 girls-those beauty-det(f) much oo over there walk
 'those very beautiful girls that are walking over there'
 (adj. noun + subject relative)
- (25) a. *: wíil-ka yar [halkáas ku cayaarayá] boy-det(m) small there prep runs
 - b. ok: wiil-ka yar oo [halkáas ku cayaarayá]
 boy-det(m) small oo there prep runs
 'the little boy running there (far away)' (adjective + subject relative)
- (26) a. *: wiil-ka yar aan arkó boy-det(m) small I see
 - b. ok: will-ka yar oo aan arkó
 boy-det(m) small oo I see
 'the small boy that I see' (adjective + object relative clause)

The free order between the genitive and any further complement of the head noun is a particular case of a more general property of Somali. The order of any two coordinated modifiers is free, so we have e.g.:

(27) a. ok: wfil-ka [aan arkó] oo yar boy-det(m) I see coord small 'the small boy that I see', cf (26b) b. qayb-tan_i yaab-kéeda [loo bogay] ee fiican share_i-dem.f surprise-hers one+with be satisfied (with) coord good 'this surprising and good way of sharing that one is satisfied with' (in Morin [1986, p.114])

(relative clause » adjective)

The following table summarises the modification pattern of N+N genitive constructions that we have just discussed:

- (28) DIRECT MODIFICATION OF THE GENITIVE NOUN IS POSSIBLE
 - ok: [N [N MOD]]

 Head noun Genitive Modifier
- (29) DIRECT MODIFICATION OF THE HEAD NOUN IS IMPOSSIBLE
 - a. *: N_i N MOD_i
 Head noun Genitive Modifier
 - b. *: [N MOD] N

 Head noun Modifier Genitive
- (30) MODIFICATION OF THE HEAD NOUN TRIGGERS COORDINATION

ok: N_i N ee/oo MOD_i
Head noun Genitive coord Modifier

This is a particular case of a more general property:

(31) DOUBLE MODIFICATION A NOUN GENERALLY TRIGGERS COORDINATION ok: N_i MOD ee/oo MOD_i

Head noun Modifier coord Modifier

The order between modifiers is relatively free (see exs (27))

5 Enclitic modification

5.1 Enclitic modification of the complement noun

Enclitic modification of the genitive complement is compatible with the structure of the genitive construction:

(32) ok: afá-da ínan-kiis wife-det(f) son-his 'his son's wife'

(complement + possessive)

(33) ok: afá-da nín-kaas wife-det(f) man-that(m) 'that man's wife'

(complement + demonstrative)

⁸The forms ending in -eed have been treated as genitive forms. As we will show in section (A), these forms cannot be assimilated to noun forms. It seems that this suffix turns nouns into modifiers. However, since noun+eed forms do not take the tense marking characteristic of adjectives they cannot be fully assimilated to adjectives either. In what follows we will gloss this suffix neutrally by 'eed' rather than by 'genitive/adjective'.

In the genitive construction the genitive complement can be marked for tense independently of the head noun:

- (34) a. afá-da bará-ha wife-det(f) teacher-det(m) 'the teacher's wife'
 - b. afá-díi bará-ha wife-det(f)+[past] teacher-det(m)
 'the teacher's wife (you know her/we've been talking about her)'
 - c. afá-da barí-híi wife-det(f) teacher-det(m)+[past] 'the wife of the teacher (you know him/we've been talking about him)'
 - d. afá-díi barí-híi wife-det(f)+[past] teacher-det(m)+[past] 'the teacher's wife (you know both of them/we've been talking about both of them)' (complement+tense-marking)

5.2 Enclitic modification of the head noun

5.2.1 Possessive suffixes

As long as the possessive suffix on the head noun and the complement noun are not coreferential, possessive modification of the head noun is possible:

- (35) ok: buúg-gíisa heesá-ha book-his songs-det(m) 'his book of songs'
- (36) ok: masáwir-k-íisa Ayáan picture-(m)-his Ayaan 'his picture of Ayaan (female first name)'

5.2.2 Demonstrative suffixes

- (37) a. afá-dán bará-ha wife-dem.(f) teacher-det(m) 'the teacher's wife here'
 - b. afá-daás bará-ha wife-dem.(f) teacher-det(m)
 'the teacher's wife over there'

5.2.3 Tense marking on the determiner

In the genitive construction both DPs can be marked for tense on the determiner (see (34d)).

5.3 Summary

As we have seen in section (4.2), the head of the genitive construction does not admit direct modification by an autonomous modifier: the genitive and any further autonomous modifier have to be coordinated by oo.

The modifications of the noun expressed on the enclitic determiner, on the other hand, (demonstrative, tense, possessive) never triggers coordination by oo/ee.

6 The analysis

Before we go on to present our analysis of the Somali noun phrase, we will briefly discuss a construction that we have left aside so far, namely the prenominal genitive.

6.1 The prenominal genitive

In the prenominal genitive the genitive noun is coreferential with a possessive pronoun on the head noun.

(38) nin-ka; béer -tíisa; man;-det(m) garden -his; 'the man his garden = the man's garden'

Exactly this configuration is the only combination of enclitic and autonomous modification that is excluded for the N+N-type genitive construction (see (39a)), while disjoint reference is possible (see (39b)):

(39) a. *: béer -tíisa; nin-ka; garden -his; man;-det(m)

> b. ok: buúg-g-iis-a heesá-ha book-(m)-his-det songs-det(m)
> 'his book of songs'

Under the assumption that the post-nominal genitive is c-commanded by the head noun, this distribution can be attributed to a violation of Principle C of the binding theory: the postnominal genitive DP would be in the scope of the coreferential pronoun. We will therefore assume the following:

(40) The $N^0\!+\!D^0$ complex c-commands the postnominal modifiers.

6.2 The structure of the Somali noun phrase

We propose to analyse the N+D-complex as a complex head N^0+D^0 . This analysis is confirmed by the phonological behaviour of the N^0+D^0 complex; it behaves analogously to the V+I complex, an uncontroversial example of a complex head (see section (6.3)).

We will argue that the properties of the Somali genitive that have been presented

above can be accounted for if we assume a structure that provides a single position for the autonomous modifiers that is in the scope of the N+D-complex.

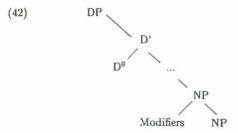
We propose that the structure of the Somali noun-phrase is essentially as follows:

$$(41) \qquad \qquad (N^0 + D^0)'$$

$$N^0 + D^0 \qquad \text{Modifiers}$$

Departing from Lecarme [1996] who proposes a hierarchical adjunction structure for the modifiers within the DP, we take the free linear order among modifiers to indicate that the modifiers of a noun occupy a single XP position.

The postnominal modifiers occupy an XP position that is c-commanded by the complex head $N^0 + D^0$. There is no relationship of selection between an N/DP and its modifiers (\longrightarrow no complement position). We will represent the modifiers as adjuncts to the NP. We then have to stipulate that multiple adjunction is barred.



According to the analysis proposed here postnominal genitives occupy the same position as other modifiers (cf. Lindauer [1998] who analyses German s-genitives and possessive pronouns as adjectives.) There is no θ -relation between the underived noun and its genitive, cf. English:

(43) my grandmother's cake = she brought it, she made it, she is eating it, she invented the receipe ...

For deverbal nouns this analysis is probably not appropriate. Deverbal nouns contrast with underived nouns when combined simultaneously with a pre- and post-nominal genitive. In this configuration the post-nominal genitive of a deverbal noun is introduced by ee (see (44a)); this is not the case for underived nouns (see (44b)):

(44) a. DEVERBAL NOUN WITH TWO GENITIVES

magaalá-da burburín-t-eed-a ee ciídan-ka city-det(f) destruction-(f)-hers-det coord. rebels-det(m) 'the destruction of the city by the rebels' (ex (16c) in Lecarme [1989a]

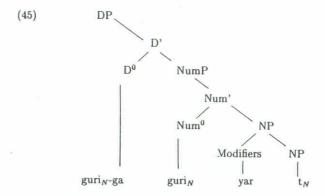
b. UNDERIVED NOUN WITH TWO GENITIVES

ardayád-dan búug-g-éed-a xisáab-ta

student(f)-this book-(m)-hers-det mathematics-det

'this student(f)'s book of mathematics' (ex (19b) in Lecarme [1996, p.12]

Since all nouns (including bare nouns) precede their modifiers, we have to assume that the noun occupies a position higher than the modifiers. Following Ritter [1991], Lecarme [1996] we assume a DP-internal NumP. To derive the correct word-order we have to assume that the bare noun raises to Num'. The possible positions for the head noun are illustrated below using the example guri-ga yar, 'house-DET small' and guri yar, 'house small':

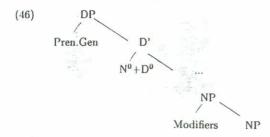


Lecarme (1996) assumes that the abstract Num⁰ head is a genitive case assigner for the DP or the possessive suffix on the head noun. On the basis of examples like (39b) we would like to suggest that the pronoun suffix does not require case (since otherwise the noun would have to assign two cases).

In Somali there is a further structural XP position below the N_0+D_0 complex; since the N_0+D_0 complex c-commands the phrasal modifiers, the DP has to contain an XP position for them⁹.

Let us now consider the prenominal genitive. One possibility would be to analyse the pre-nominal genitive as occupying the spec DP.

 $^{^9}$ This contrasts with the Persian NP as analysed by Ghomeshi [1997]. She claims that in Persian the noun does not project; it can only be modified by bare nouns (i.e. X^0) with the exception of the possessor that she analyses as occupying spec DP.



As pointed out by Serzisko (1984), however, the two elements of a possessive prenominal genitive construction can be split by a simple focus particle *ayaa* (without the pronominal suffix *aan*, that we see in example (48)):

- (47) a. Nín-ka guri-gíis-a ayaa gubtay. man-det(m) house-poss3m-det focus burnt 3ms 'The house of the man burnt down.'
 - b. Nin-ka ayaa guri-giis-u gubtay.
 man-det(m) focus house-poss3m-det burnt 3ms

(Serzisko 1984:136)

(48) *: Axmed baan walaal -kiis arkay
Axmed focus+1s brother -his saw, cf:
ok: Axmed walaal -kiis baan arkay
Axmed brother -his focus+1s saw
'I saw Axmed's brother.'

(Gebert [1981, pp.57-8])

The particle ayaa is a focusing particle characteristic of main clauses in Somali. This particle cannot interfere between the head noun and a post-nominal genitive (see Serzisko [1984, p.136]).

Since the prenominal genitive and the head noun can be separated by ayaa, we will assume that the prenominal genitive DP in example (47) is not inside the DP projection of the head noun.

We propose that the relationship between the prenominal genitive and the possessive pronoun in (47) is established by co-indexation.

(49) Nín-ka; ayaa [DP guri -gfis;-u man-det(m) focus house -poss3m-det

Possessive prenominal genitives can only be separated from their head noun by the particle *ayaa*. The prenominal genitive construction found with locative nouns differs from the possessive construction in that the prenominal genitive and the locative nominal can be arbitrarily far from each other.

(50) a. Cali ayaa nín-káas **xaffis-ka debe-dfis-a** kú arkay.

Ali focus man-dem office-det(m) outside-poss-det part. see 3m[past]

b. ok Xafiis-ka Cali ayaa nín-kaas debe-díis-a kú arkay.
 office-det(m) Ali focus man-dem outside-poss-det part. see 3m[past]
 'Ali saw this man outside the office.'
 (Serzisko [1984, p.131])

A deverbal noun can also be separated from its preverbal genitive:

(51) waa buug-ga aan is weydiinayo haddii aad akhrisay tarjamad-iisa FOC book-the I REFL ask if you(sg) read translation-its 'it is the book the translation of which I wonder if you read' (ex (10) in Lecarme [1989b])

We therefore have to distinguish possessive prenominal genitives from the prenominal genitives found with locative nouns and deverbal nouns. Following a proposal in Kihm [1998] we will postulate that the Somali DP can be embedded in a FocusP. The bare focus particle ayaa then instantiates the head of this projection:

(52) POSSESSIVE PRENOMINAL GENITIVE



This structure is then comparable to clitic left dislocation.

If the prenominal genitive is not possessive it is not contained in the extended DP; the relationship is established by co-indexation with the possessive pronoun exclusively:

(53) PRENOMINAL GENITIVE WITH LOCATIVE AND DEVERBAL NOUNS

xafiis-ka Cali ayaa nin-kaas[DP debe-dis-a] kú arkay.

office-det(m) Ali focus man-dem outside-poss-det part. see 3m[past]

Both - the prenominal genitive DP and the head noun - can be modified without triggering coordination of the postnominal modifiers by oo/ee:

- (54) MODIFICATION OF THE PRENOMINAL GENITIVE
 - a. [laba_i sam-ood] dhex-dood_i
 two_i furs in.between-them_i
 'in between two furs'

(numeral + ood-genitive)

- b. [hormúud_i-ka kulliyád-da] xafíis_i-ka
 Dean-det.m_i faculty-det.f office-his_i-det.m
 'the Dean of the faculty, his office'(example 4c. in Lecarme [1989a])
 - (noun + genitive)
- c. [nin_i-ka shalay dhintay] faras-kiisa_i man_i-det.m yesterday died horse-his_i 'the man who died yesterday, his horse' – the horse of the man who died yesterday (example taken from Serzisko [1984, p.132])

(noun + relative clause)

- (55) MODIFICATION OF THE HEAD NOUN
 - a. Cali, [aqoon-tíis, -a af-eed]
 Cali, knowledge-his-det language-eed
 'Cali's linguistic knowledge'(exemple 4b.Lecarme [1989b])

(noun + pron + eed-genitive)

b. qayb-tan_i yaab-kéed_i-a loo bogay share_i-dem.f surprise-hers-det one+with be satisfied (with) 'this surprising way of sharing that one is satisfied with' (Morin [1986]) (noun + pron + relative clause)

ardayád-dan [búug-g-éed-a xisáab-ta] student(f)-this book-(m)-hers-det mathematics-det 'this student(f)'s book of mathematics' (ex (19b) in Lecarme [1996, p.12])

(noun + pron + postverbal genitive)

The fact that no coordination appears suggests that the DP is not extracted from the modifier-position inside the DP. We will assume that the possessive prenominal genitives are base-generated in spec FocusP; for the other prenominal genitives we will assume that they are base-generated in an adjoined position in the clause.

6.3 The phonological behaviour of noun+enclitic aggregates

According to our analysis the N^0+D^0 complex is a complex head resulting from head adjunction. This analysis is supported by the fact that phonologically, the N^0+D^0 complex mirrors that of the V^0+I^0 complex, an uncontroversial example of a complex head.

In the Somali verbal system [t] is systematically linked to the 2s and 3fs forms:

As all the verb forms given in (56) show the same assimilation processes we will limit ourselves to the form in (56a) (2s/3fs of the full paradigm of the past tense).

(57) 2/3fs + assimilation of [t]10

The voicing observed here is not a simple voice spread since not all voiced consonants trigger voicing of [t] to [d]. The phonological behaviour of consonant+[t] clusters in noun+determiner complexes is exactly parallel:

(58) det(f) + assimilation of [t]

A)	$w/y/V + [t] \rightarrow mindi + ta$	w/y/V + d	· (4) - 1 - 10 1
			'the knife'
	shaqo + ta	shaqada	'the work'
	$e\acute{y} + ta$	eýda	'the she-dog'
В)	gutturals $+ [t] \rightarrow$	c/q/x/h/kh + d	
	lo' + ta	lo'da	'the cattle'
	lix + ta	lixda	'the six'
C)	$d + [t] \rightarrow$	d + d	
	shandad + ta	shandadda	'suitcase'
D)	$dh + [t] \rightarrow$	dh + dh	
	gabadh +ta	gabadha	'the girl'
E)	$l+[t] \rightarrow$	sh	
	hal + ta	hasha	'the she-camel'
F)	other Cs + $[t] \rightarrow$	no change	
	galab + ta	galabta	'the afternoon'
	naag + ta	naagta	'the woman'

¹⁰The retroflex [dh] does not appear as a surface geminate. It can be phonologically identified as a geminate since in Somali intervocalic [dh] is realised as a tapped [r]. The fact that the [dh] surfaces in D) indicates that it is not in intervocalic position but a geminate consonant.

7 The syntax of the noun phrase in other Cushitic languages

In the following we will compare the properties of the Somali noun phrase shown above with the syntax of noun modification in Afar (Bliese 1977), Beja (Almkvist 1881), Iraqw (Mous1993), and Harar Oromo (Owens 1985).

7.1 The positions of noun modifiers

Somali is unique among the Cushitic languages reviewed here in that the modifiers of a noun occupy a unique syntactic position.

Like Somali all the languages in question have SOV order. The word order inside the noun phrase, however, is different for the four languages considered here. Somali is the only language that allots the modifiers a single structural position. That the other languages have multiple slots for the different types of modifiers can be seen from the strict ordering among different types of modifiers in Afar (Af), Harar Oromo (HOr) and Iraqw(Iqw):

(59) Afar

	dem	adj sagá-h	gen 'iba	N
amá	casá	cow-gen	foot saró	'a cow's foot' (Bliese 1977:277)
that wóo	red	amoyt-í	clothing ba:rrá	'that red dress' (Bliese 1977:25)
that	datá	leader-gen awk-í	wife ko9só	'that leader's wife'(Bliese 1977:179)
	black	boy-gen	ball	'the boy's black ball'(Bliese 1977:285) not:'the black boy's ball'

(60) Harar Oromo

```
N adj gen
namá gaaríi
men good 'good men', (Owens 1985:87)
xeesummiccá gaaríi namiccá suní
guests good man that 'that man's good guests'
(Owens 1985:104)
```

(61) Iraqw

```
N gen adj
maká gadá ninakw
animals(n)(CS)forests(n)(CS)small(p)'small forest animals'
(Mous 1993:229)
```

Relative clauses follow all other modifiers (Mous 1993:231):

```
(Iqw) tsir'i tam ar wák ar aa dakúus i káhh.
bird(f) even Indep.f.CS one indep.f.CS S.3:perf miss:3ms:past S.3 be.absent3fs
```

'A bird, even one, that he missed, does not exist.'

In Beja (Bej) definite genitives and adjectives are clearly distinguished: they occupy different syntactic positions.

(62) Beja

```
det-gen det-N

ó:-tak-i ó:-gaw
the-man-genthe-house det-N det-adj

ú:-kam ú:-win the-camel the-big 'the big camel'
```

7.2 Adjacency

In Harar Oromo the head may be separated from the genitive by an adjective or a numeral (Owens 1985:104):

```
(63) Harar Oromo [N adj] [N-gen]
(HOr) xeesummiccá gaaríi namiccá suní
guest good man that/gen
'that man's good guests ' (Owens 1985:104)
```

In Iraqw, modification of the genitive construction always follows the genitive: like in Hebrew, the adjective can be construed either with the genitive or with the head noun:

(64) (Irq) maká gadá ninakw animals(n)(CS) forests(n)(CS) small(p) 'small forest animals' (Mous 1993:229)

8 Conclusion

The analysis proposed here accounts for the properties of the Somali postnominal genitive construction as follows:

- The DP contains a single position for modifying maximal projections XP. To combine different modifiers it is necessary to create a unique XP (coordination by oo/ee).
- The postnominal genitive complement occupies the same position as the other modifiers.
- Enclitic and autonomous modification can coexist without triggering coordination since enclitic modifiers are heads and do not occupy the phrasal modifying position of the autonomous modifiers.
- 4. The linear order among the autonomous modifiers is (relatively) free since the modifiers form a complex by coordination.

For the the Somali prenominal genitive construction we have proposed that:

- The position of the prenominal genitive DP depends on the type of relation it entertains with the head noun: possessive prenominal genitives occupy a left peripheral position (FocusP) in the nounphrase complex, other prenominal genitives can be arbitrarily far from the head noun.
- 2. The prenominal genitive is not extracted from inside the DP.

A brief excursion into the modification in other Cushitic languages shows that the modifier-like behaviour of Somali postnominal genitives cannot be reduced to cross-linguistic variation in terms of headedness and enclitic determiners. Harar Oromo shows the same fundamental word order properties (SOV, N>>genitive) and enclitic determiners, while at the same time this language distinguishes several syntactic positions for the different types of noun modifiers and even allows direct modification of the head noun.

References

- H. Almkvist. Die Bischari-Sprache Bd.1. Uppsala, 1881.
- L. Bliese. A Generative Grammar of Afar. PhD thesis, University of Texas at Austin, 1977.
- L. Gebert. Il sintagma nominale. In A. Puglielli, editor, Sintassi della lingua somala, pages 47-132. Ministero degli affari esteri - dipartimento per la cooperazione allo sviluppo comitato tecnico linguistico per l'iniversita nazionale Somala, 1981.
- J. Ghomeshi. Non-projecting nouns and the EZAFE-construction in Persian. Natural Language and Linguistic Theory, 15:729-788, 1997.
- J. H. Greenberg. Some universals of grammar with particular reference to the order of meaningful elements. In J. H. Greenberg, editor, *Universals of Language*, pages 73-113. MIT Press, Cambridge, MA, 1966.
- A. Kihm. Wolof genitive constructions and the construct state. Manuscript, 1998. CNRS-LACITO.
- J. Lecarme. Genitive constructions in Somali: the notion of internal complement for nominals. 20th International Conference on African Linguistics, 1989a.
- J. Lecarme. Genitive constructions, noun complement structure and syntactic parameters in Somali. 2nd International Symposium on Cushitic and Omotic Languages, 1989b.
- J. Lecarme. Tense in the nominal system: the Somali DP. In J. Lecarme, J. Lowenstamm, and U. Shlonsky, editors, Studies in Afroasiatic Grammar, pages 1-20. Sophia Antipolis, 1996.
- T. Lindauer. Attributive genitive constructions in German. In A. Alexiadou and C. Wilder, editors, Possessors, predicates and movement in the Determiner Phrase, pages 109-140. John Benjamins, Amsterdam/Philademphia, 1998.
- D. Morin, editor. Contes de Djibouti. Fleuve et Flamme, textes bilingues. CILF edicef, Paris, 1986.
- M. Mous. A grammar of Iraqw. Buske, Hamburg, 1993.
- M. Orwin. Colloquial Somali. Routledge, London, 1995.
- J. Owens. A grammar of Harar Oromo. Buske, Hamburg, 1985.
- E. Ritter. Two functional categories in noun phrases: evidence from Modern Hebrew. In S. Rothstein, editor, Perspectives on Phrase Structure: Heads and Licensing, volume 25 of Syntax and Semantics, pages 37-62. Academic Press, New York, 1991.
- J. I. Saeed. Somali Reference Grammar. Dunwoody Press, Kensington, Maryland, 1993.
- J. I. Saeed. Somali. The London Oriental and African Library. John Benjamins, Amsterdam/Philadelphia, 1998.
- F. Serzisko. Der Ausdruck der Possessivität im Somali. Gunter Narr. Tübingen, 1984.