

FROM VERB TO CLITIC AND NOMINAL SUFFIX:
THE SOMALI *-e*, *-o* NOUNS¹

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In this paper I argue that Somali nouns ending in citation form in *-e* and *-o* contain underlying suffixes which historically developed from the clitics **-yah* (m.) and **-tah* (f.). The clitics themselves were reduced forms of the verb 'be' (*yahay* 'he is', *tahay* 'she is') and they followed the noun in a certain type of relative clause. Contemporary Somali still has similar constructions in which the reduced form of 'be' *ah* acts as a relativizer.

Due to the loss of the Cushitic feminine proto-suffix **Vt/tV* which was also one of the plural suffixes, the contrast between masculine and feminine, as well as between some singular and plural nouns, was considerably decreased. In order to mark these distinctions more overtly, the nouns followed by the clitics came to be used in other syntactic positions until they completely eliminated the non-cliticized nouns. And the original clitic has been reinterpreted as a nominal suffix.

The diachronic development sketched here helps to understand synchronic alternations of the noun vowels: phrase-final *-o/-e* vs. medial *-a*. It also explains why the underlying /k/ of masculine clitics is realized as [g] after all vowels (by a general rule of intervocalic voicing) but not after *-e* and *-o* nouns, in which case intervocalic *-h* appears.

0. The problem and earlier accounts

Somali nouns ending in the citation form in *-e* and *-o* represent a problem for the morphophonology of the language for two reasons. The first one is the final vowel alternations: *-e/-o* phrase-finally versus *-a* phrase-medially. The second problem is the apparent morphophonemic alternation of the initial consonant of masculine clitics: *-h-* after *-e*, *-o* nouns versus *-g-* after other vowel-final nouns. Before I present an outline of my proposal, I will illustrate these alternations in more detail.

Although in the citation form there is a contrast between *e*-final and *o*-final nouns, e.g. *bare* 'teacher', *dawo* 'medicine', the contrast is neutralized in phrase-medial position where *-a* appears: *bara...* 'teacher...', *dawa...* 'medicine...'. The *-a* appears also before clitics, such as definite articles, e.g. *baraha* 'the teacher', *dawada* 'the medicine'; demonstratives, e.g. *barahaas* 'that teacher', *dawadaas* 'that medicine', and possessive pronouns, e.g. *barahooda* 'their teacher', *dawadooda* 'their medicine'. The initial consonant of all these clitics is a separate morpheme: a gender marker of the noun. The underlying forms of the gender markers are /k/ for masculine, which is found on the surface after most consonant-final nouns, e.g. *wiil* 'boy' — *wiilka* 'the boy'; and /t/ for feminine, e.g. *sonkor* 'sugar' — *sonkorta* 'the sugar'. The /t/ of the feminine gender marker is always realized as [d] after vowel-final nouns, as in the examples given before, as well as after *i*-final nouns, as in *mindi* 'knife' — *mindida* 'the knife'. A simple rule of intervocalic voicing of stops easily accounts for the latter realization.

The surface realizations of the underlying /k/ differ depending on the environment of the noun-final segment. It is realized as Ø after a guttural consonant, e.g. /libaax+ka/ > *libaaxa* 'the lion'; /raah+ka/ > *raaha* 'the frog'. An accurate analysis may involve two stages here: assimilation and degemination, e.g. /raah+ka/ > *raahha* > *raaha* (cf. Bell 1953). For the sake of simplicity, however, I will refer to this rule as 'post-guttural *k*-deletion'. A problem appears if a noun ends in a vowel, in which case [g] or [h] occurs in the cliticized forms, and in each case intervocalically. Ignoring the backed/fronted vowel contrast,² which is irrelevant for the problem discussed here, vowel the inventory in Somali consists of five short vowels {i, u, e, o, a} and their long counterparts {ii, uu, ee, oo, aa}. Not all of these vowels may occur as a noun-final segment. Only nouns ending in *-i*, *-e*, *-o* and *-aa* are commonly found in Somali. Those ending in *-u* seem to be extremely rare: I found only one example of such a case. Other vowels do not occur noun-finally.

The *g*-variant of the clitic appears after nouns ending in *-i*, *-aa*, and *-u*; the *h*-variant appears after *e*- and *o*-final nouns:

(1)	<i>guri</i>	'house'	<i>guriga</i>	'the house'
	<i>heesaa</i>	'singer'	<i>heesaaga</i>	'the singer'
	<i>guu</i>	'main rains'	<i>guugaa</i>	'the main rains'
	<i>bare</i>	'teacher'	<i>baraha</i>	'the teacher'
	<i>kabo</i>	'shoes'	<i>kabaha</i>	'the shoes'

Most descriptions of Somali (e.g. Bell 1953, Andrzejewski 1964, Saeed 1985) simply state the complementary distribution of the two variants of the clitic according to the quality of the noun-final vowel. By doing so they reduce the problem to morphophonemic alternation

guri
guu
→
not u

of the masculine marker /k/, in which intervocalic [h] is derived after the mid vowels /e/ and /o/, and /g/ is derived after high and low vowels. It would be difficult to account for this alternation on phonological grounds. Although a rule changing the underlying intervocalic /k/ into [h] is by no means unusual, there is no explanatory reason for restricting such a rule to the post-mid-vowel environment.

Cardona 1981 proposes a different treatment of the problem. He argues that nouns ending in *-e* and *-o* contain underlying final /-h/. In isolation the /h/ normally is not realized on the surface, although Cardona mentions, following Abraham (1964:329), occasional pronunciations of *o*-final nouns as [-oh] or [-ah]. An additional argument given by Cardona is that the final vowel in these nouns is not followed by the expected glottal closure at the end of a vocalic segment in the final position. When a *k*-initial clitic is added, the *-h* of the noun is deleted in the same manner as it is deleted after all other gutturals by the rule mentioned here earlier. I am going to support Cardona's analysis with a number of additional arguments. However, it should be noted that accepting this proposal leads to the creation of a distributional gap: There would no longer be nouns ending in the underlying vowels /-e/ and /-o/, but only in /-eh/ and /-oh/. Another question which comes to mind is also distributional in nature: Why should there be so many nouns in Somali ending in *-h*? I will address these two questions in section 1, showing that the *-h* is not a part of the noun's root but a part of a suffix.

Some authors, e.g. Lamberti 1986b, Dolgopolskii 1973, postulate a historical change of Cushitic intervocalic **-k-* into Somali *-h-* after the non-high vowels *a*, *e*, and *o*. Below are some reconstructions:

<p>99</p> <p>→</p>	<p>(2) ah- < *Ak/*Akk 'to be' (Dolgopolskii 1973:244)</p> <p>bih- < *bAk 'to cry' "</p> <p>rah < *rak 'frog' (Lamberti 1986b:)</p>
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The occurrence of the *h*-form of the masculine clitics could then be treated as an instance of that historical general change. However, as has been pointed out, *-aa*-final nouns take the *g*-variant of the clitic and not the expected *-h-*. Moreover, examples such as *shég-* 'tell' (*shégay* 'I told' etc.) reconstructed as **shék-* (Heine 1978) or *-oog* 'fire' reconstructed as **wAk* (Dolgopolskii 1973) indicate that **k > h* change could not be regular in Somali. Some Somali dialects (e.g. Jiiddu, Lamberti 1986b) show a regular change of **k > h* in less restricted environments. It is likely that the few lexical items quoted in (2) penetrated into other Somali dialects as a result of interdialectal contacts and borrowing rather than directly developing from the proto-language through regular sound change. The scarcity of evidence which is at my disposal does not allow me to favor one of

these hypotheses against the other one. However, even if the historical change of $*k > h$ is accepted, it does not exclude or contradict the claim that the h-initial masculine clitics are derived from the underlying /-h/ of the nouns.³

In section 1 of this paper I will propose that the underlying final /-h/ in these nouns is a part of nominal suffixes, which developed from earlier clitics. The historical development of these clitics is outlined in section 2. Plural suffixes and relic forms found in different Somali dialects provide further evidence, which will be demonstrated in section 3. Finally, section 4 is devoted to the development of the suffixes' vowels which resulted in synchronic alternations.

1. Evidence for underlying /h/

Nouns with final *-e* and *-o* constitute a large portion of the Somali vocabulary, and it would be highly improbable to find so many lexical stems ending in *-h*. In fact there is good evidence to postulate that the majority, if not all, of these nouns are composed of a lexical stem and the suffixes *-o* and *-e*, respectively. The singular suffix *-o* is a feminine gender marker. The examples in (3a) demonstrate that the suffix is not strictly defined in semantic terms. Many nouns of foreign origin, especially Arabic as in (3b), which in the source language end in *-a*, have been reinterpreted in Somali as feminine nouns in *-o*. Synchronically they are no different from the (3a) nouns. While the singular suffix *-o* is unproductive, the plural *-o* is one of the most common plural suffixes. Notice that the plurals usually 'reverse' the gender of the singular, as shown in (3c):

- (3) a. xero (f.) 'corral' < xer (f.) 'herd' (Luling 1987)
 tiro (f.) 'calculation' < tir-i 'to count' "
 talo (f.) 'decision' < tal-i 'to decide' "
 sheko (f.) 'story' < sheg 'to tell' "
- b. dawo (f.) < Ar. dawa? (m.) 'medicine'
 muddo (f.) < Ar. mudda(t) (f.) 'period of time'
- c. kab (f.) - 'shoe' kabo (m.) - 'shoes'
 naag (f.) - 'woman' naago (m.) - 'women'
 saaxib (m.) - 'friend' saaxibbo (f.) - 'friends'
 sanad (m.) - 'year' sanaddo (f.) - 'years'

Among nouns ending in *-e*, two lexical suffixes can be distinguished: the agentive suffix *-e*, as in *bare* 'teacher' from *bar* 'to teach', and the 'ownership' suffix *-le*, as in *dukaanle* 'owner of the shop' from *dukaan* 'shop'. I will show later that the *-le* suffix historically developed as a composition of the associative *la* 'with' plus the agentive *-e*.

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 un 51 46(h)
 to work

Once final *-o* and *-el-le* receive the status of nominal suffixes, the assumption of an underlying /h/ for these suffixes does not revolutionize the Somali lexicon. I am going to assume for the moment the underlying representations of the suffixes as /-eh/ and /-oh/, respectively. The only context in which the /h/ occurs on the surface is when *k*-initial clitics are added. As mentioned earlier, the *k*-deletion rule applies, leaving the intervocalic [h]. The possible derivation, including an additional rule of cross-guttural vowel assimilation, is illustrated in (4):

(4)	underlying	bareh+k+iisa	kaboh+k+iisa
	<i>k</i> -deletion	barehiisa	kabohiisa
	assimilation	barihiisa	kabihhiisa
		'his teacher'	'his shoes'

In the citation form, the final /h/ of these nouns is deleted (*bare* 'teacher', *kabo* 'shoes'). It is also deleted in phrase-medial position, as shown below (note the optional change of noun-final vowel to *-a*, which will be discussed later):

→ (5) caano lo^hgaad (caana lo^hgaad) (Andrzejewski, 1956, p.18)
 'cow's milk' (caano 'milk')

These two environments for the *h*-deletion rule and the failure of its application within the clitic group (as in 4) suggest that the rule applies at the edge of a domain larger than the phonological word but smaller than the phrase. I will refer to this domain as the 'clitic group'.

A question may be posed concerning whether all nouns ending in surface *-e* and *-o* contain these underlying suffixes or whether perhaps there are among them 'truly' vowel-final nouns. Considering the final *h*-deletion rule, the only environment in which the two kinds of nouns might exhibit the contrast is the position within the clitic group. It is expected that the /e/- and /o/-final nouns would take the *g*-variant of the masculine clitic, analogously to other vowel-final nouns. However, such cases are not reported. Hence I conclude that there are no nouns in Somali which end in the underlying vowel /-o/ or /-e/.

Recall that among other nouns ending in vowels, only those in *-aa* and *-i* are common in Somali. The fact that other vowels do not occur as a noun-final segment suggests that these two terminations may have a status of suffixes. Caney (1984) characterizes the *-aa* as an archaic derivational affix which used to indicate the performer of the activity expressed by the verb (Caney 1984:303), as seen in (6) below:

(6)	heesaa	'singer'	<	hees	'to sing'
	gabayaa	'poet'	<	gabay	'to compose poems'

it is known!

In some of the nouns ending in *-i*, the vowel *-i* is a part of the causative suffix *-in/-is*, as in the example below:

- (7) badi=badin=badis < badi (from 'Dizionario')
'great quantity' 'to increase in number'

For the majority of *i*-final nouns, however, there is no synchronic evidence that *-i* constitutes a lexical suffix, although it could have functioned as such in the past.⁴ I leave this issue unresolved. Nevertheless my argument here is that nominal roots in Somali are basically consonant-final. Postulating the suffixes */-eh/* and */-oh/* (rather than noun-final */-e(h)/* and */-o(h)/*) complies with this general pattern without creating a distributional gap.

The next question to pursue is the final *h*-deletion rule. If this were a simple phonological rule, there would be no words in Somali ending in [h] in citation form. This is not the case, however. Although such words are rare and mostly monosyllabic (as in 8a), some polysyllabic words are also found (as in 8b):

- (8) a. rah - 'frog'
shaah - 'tea'
leh - 'who has'
sooh - 'weaving ropes'
kaah - 'bright light'
- b. soddoh - 'mother in law'
amaah - 'loan, credit'
kallah - 'to leave early in the morning'
babbah - 'nothing'

The existence of these *h*-final words seems to contradict the *h*-deletion rule. Fortunately there is one among them, namely the relative pronoun *leh* 'who has' which actually provides substantial evidence for the rule in question. This pronoun occurs as an independent word in certain types of relative clauses, as in (9):

- (9) nin dukaan leh (Saeed 1985:143)
man shop owning
'a man owning a shop'

Saeed notes that the same pronoun may be suffixed to the noun rendering the meaning of 'ownership'. He adds that in such a case it surfaces 'without the *h*' (Saeed 1985:143), that is as *-le*:

- (10) dukaan 'shop'
dukaanle 'the owner of a shop'

Taking into account the semantic value of *leh* ('who has') and *-le* ('owner') there is no doubt that the suffixal *-le* is a reduced form of the independent pronoun *leh*. Therefore it can be argued that when

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what shows this?*

leh is cliticized to the noun, the final *-h* is deleted, not by a general phonological rule but as the result of an idiosyncratic clitic reduction process. (On clitic reduction in general see Hock 1986(1991):86.) It will be important for my further argumentation to observe that the pronoun *leh* '(who) has' is morphologically composed of the associative particle *la* 'with' and the verb *ah* '(who) is'.⁵ In the following section, I will postulate that the suffixes *-o* and *-e* contain the same morpheme *-ah* '(who) is'. Consequently, the final *h*-deletion in these nouns is by no means different from the *h*-deletion in the clitic *leh*. The rule is lexically restricted to one item: the morpheme *-ah*.

2. Historical development of the *-o* and *-e* suffixes

I am going to propose that the *-o* and *-e* suffixes historically developed from the clitics **-yah* (m.) and **-tah* (f.) which had their origin in the personal forms of the verb *-ah-* 'to be'. The same verb in its contracted form *ah* (see e.g. Saeed 1985) is the relative marker, used to form periphrastic adjectival constructions, as in the example below:

- (11) Nin hodon ah ayuu noqday (Saeed 1985:169)
 man richman is FOC-he became
 'He became a rich man'

Bell 1953 treats the above *ah* as an adjective requiring a complementary noun:

- (12) nin Somali ah - 'a Somali man' (Bell 1953:78)
 daar bir ah - 'an iron house' (daar 'house'; bir 'iron')
 warqad ah - 'made of paper'
 qorya ah - 'made of wood'

It is plausible that the same relative marker became a clitic in the way *-le* is used as a clitic of *leh*. Originally the cliticized forms carried the meaning of relativizers, too. I will show momentarily that they still occur in this function in contemporary Somali. At a later time *-o* was reinterpreted as gender or number marker, whereas *-e* with its 'agentive' function still shows close semantic relation with the relativizer 'who is'.

I assume that the original forms of the relativizers were the third person present habitual tense forms of the verb 'be'. In contemporary Somali the singular third person forms of 'be' are *yahay* (m.) and *tahay* (f.) in the full form, and I assume the same as historical reconstruction. In the plural, contemporary Somali has *yihiiin* (3 m.) and *tihiiin* (3 f.), respectively. I argue that in these forms the root vowel *-a-* underwent anticipatory assimilation to the *-i-* of the inflectional suffix, that is, originally they were **yahiin* (m.) and **tahiin* (f.). Note that all other forms of 'be' show similar assimilation

*-to exist as f.
 underwent to -e*

across the *-h-*, e.g. the negative habitual: *ihī* (1 sg.), *ihid* (2 sg.), *ihin* (2 pl.), *ihidin* (3 pl.) vs. *aha* (3 sg.). I assume that these assimilations took place later than the processes to be dealt with here. Thus the plural relativizers are reconstructed as: **yahiin* (3 m.) and **tahiin* (3 f.). The first clitic reduction which affected the relativizers was the loss of the inflectional suffixes leading to *yah* and *tah*, respectively. The independent relativizers *tah* and *yah* were further reduced to *ah*, in which form they occur in contemporary Somali, as has been shown in (11) and (12). The cliticized relative *-tah* and *-(y)ah* can be seen in relic forms in (13), in which the final *-h* has not been lost yet.

- (13) *ninka bukah naag buktah* (Abraham 1964:35)
 man the sick woman sick
 'the sick man' 'a sick woman'

The next stage of the clitics' reduction was the dropping of the final *-h*. In most Somali dialects the final *-h* is deleted everywhere except for the position before demonstratives and other clitics, as mentioned in section 1. Warsama and Abraham (1951) note that in some dialects the nominal final *-o* is pronounced as *-oh* phrase-medially. It might be suggested that these dialects represent an earlier stage when the *h*-deletion applied at the phrasal level, whereas in other dialects the domain of the rule application was narrowed to the clitic group. The *h*-deletion led to the subsequent change of vowel raising in phrase final position, which will be discussed in detail in section 4. Given this change, the contemporary agentive suffixes *-e* (m.) and *-to* (f.), exemplified in (14), can be viewed as direct continuators of the earlier relative clitics.

- (14) /qor/ 'to write' (Puglielli 1984:22)
 qore (m.)/qorto (f.) 'the one who writes; writer'
 /afuuf/ 'to blow (the fire)'
 afuufe (m.)/afuufte (f.) 'the one who blows (the fire)'
 /duul/ 'to fly'
 duule (m.)/duulto (f.) 'the one who flies; pilot'
 /qosol/ 'to laugh'
 qosole (m.)/qososho (f.) 'the one who laughs'
 /gurat/ 'to move, migrate (e.g. with cattle)'
 gurte (m.)/gurato (f.) 'the one who migrates (with animals)'
 /fiirsat/ 'to look for'
 fiirsade (m.)/fiirsato (f.) 'the one who looks for'

Note in (14) the operation of other rules of Somali: *l+t > sh* (*duul+to > duusho*); syncope (*qosole > qosle*); intervocalic voicing of stops (*fiirsat+e > fiirsade*) with the simultaneous bleeding of this rule, if the intervocalic stop results from cluster simplification or degemination (*fiirsat+e > fiirsato* / **fiirsado*). Note also that all the

nouns are given in the form in which they occur phrase-finally; in phrase-medial position the final vowel *-e* or *-o* is optionally realized as *-a*.

As noted by Puglielli (1984), in some cases the 'agentive' suffix does not indicate a performer of an action but an object, as in *cunto* 'food' < *cun* 'to eat', or an instrument, as in *fure* 'key' < *fur* 'to open'. All these slightly different semantic functions of the suffixes *-e* and *-to* are derivable from the meaning of the earlier relativizer 'who/what is'. The problem unresolved until now is the plural suffix *-o*.

As far as the form of the suffix is concerned, I will show in section 4 that the variants *-yo* and *-to*, which go back to the clitics **-yah* and **-tah*, respectively. Yet, it is not immediately obvious why the relative clitic could be reinterpreted as a plural marker. In order to answer this question, I suggest that this kind of reinterpretation is due to the previous loss of an earlier plural marker whose function was taken over by the relative clitic. I hypothesize that the lost plural marker is the feminine proto-suffix **-tV/Vt*. Many Cushitic, as well as Semitic languages, have preserved this suffix in the function of the feminine gender marker. In a number of languages the same suffix is also utilized as a plural marker of masculine nouns (cf. Hetzron 1980). However, in Somali and in other Sam languages, we do not find overt traces of the feminine proto-suffix.⁶ Perhaps the very few minimal pairs, such as Somali *boqor* 'king' vs. *boqorad* 'queen' and *bidde* 'male slave' vs. *biddad* 'female slave', are relic forms keeping the ancient proto-suffix. But it is more likely that the feminine forms of these nouns were made up by analogy to numerous Arabic loan-words borrowed into Somali together with the feminine suffix *-at* > Som. *-ad*.

boqor
boqorad
bidde
biddad

Although the feminine proto-suffix is segmentally lost in Somali, its previous appearance can be predicted on the basis of the tonal patterns of certain nouns. There are a few cases of minimal pairs of words in which the tonal pattern is the only indicator of the noun's gender, with masculine nouns being high-low and feminine nouns being low-high, as in the examples in (15a) below. In addition, there are nouns in which number distinction is marked by the same tonal pattern, as in (15b).

- | | | | | |
|---------|-------|---------------|-------|------------|
| (15) a. | ínan | 'boy' | inán | 'girl' |
| | órgi | 'he-goat' | orgí | 'she-goat' |
| b. | díbi | 'bull' | dibí | 'bulls' |
| | Cárab | 'Arab person' | Caráb | 'Arabs' |

I argue, following Oomen 1981 and Hyman 1981, that the tonal contrasts in these cases resulted from the loss of the feminine plural

suffix. This complies with Oomen's hypothesis that originally all nouns had penultimate accent, realized as high tone (Oomen 1981:44). After the loss of the mora-bearing proto-suffix the high tone was preserved on the final vowel (final mora of long vowels). The loss of the feminine proto-suffix considerably decreased the contrast between masculine and feminine nouns, as well as the contrast between those singular and plural nouns which had the feminine proto-suffix as a plural marker. In order to express the contrast more overtly and preserve the marked status of feminine and plural nouns, the relative clitic was drawn on as a suffix denoting their gender or number marking. The suffixed nouns came to be used in other than relative clause syntactic positions, until they completely replaced the non-suffixed feminine and plural nouns. The cases cited in (15), then, represent relic forms, reflecting the stage when the ancient suffix had already been lost and the new suffix did not yet develop. It is somewhat puzzling why they did not undergo the process described here. Perhaps the answer lies in the fact that the class of these nouns is limited to a small number of nouns denoting humans and animals, whose gender is naturally assigned.

It is remarkable that in closely related Rendille and Boni, the same clitic, which I refer to as 'relative marker', occurs in the function of focus marker.⁸ According to Heine and Reh (1984), the focus marker *-e* historically developed from the copula **-ahi* 'is', used in cleft constructions, and according to them, that development already took place in the Proto-Sam period. Somali did not preserve **ah* in either of these two functions,⁹ compare Rendille (16), with the clitic *-e*, to Somali (17), with the new focus marker *baa*.

(16) Inam-e yimi. (Heine & Reh, 1984:165)
 boy-FOC came 'The boy came.'

(17) Inan baa yimi.
 boy FOC came 'A boy came.'

Taking into account the Rendille and Boni data, the following scenario of development can be proposed. In the Proto-Sam period, the verb *-ah-* 'be' underwent grammaticalization, becoming a relative clause marker. A certain type of relative clause, as in the example (12), is still found in Somali. The same *-ah-* was used in another type of relative clause, i.e. a cleft construction. This particular usage of *-ah-* led to its reinterpretation as a focus marker. In Somali, the clitic lost its function of focus marker, which was taken over by *baa* and *waa*, and, for the reasons mentioned above, was reinterpreted as a gender/plural marker.

The path of development proposed here for Somali has cross-linguistic parallels, where a word first becomes a clitic, then a suffix, and where finally the suffix is hardly recognizable as a separate

not documented

Verb
entire
already

morpheme. Semantic shifts accompanying such developments are not unusual, either. Slavic adjectives provide a good example of such a case. As Vaillant (1958) points out,⁷ the relative **yo-* in Balto-Slavic became a clitic marking definiteness and was postposed in this new function to adjectives and other qualifiers of the nominal phrase, as in Old Slavic in (18):

- (18) *novo vino* - 'new wine' (Vaillant 1958:428)
novo-je vino - 'the new wine'

In the related language Lithuanian, the function of the definite determiner is still present, but in Slavic the clitic fused with the nominal desinences and is actually no longer analyzable as a separate morpheme. The use of the definite form was gradually expanded until the non-definite short forms were almost completely lost. For example, in Polish the short forms are preserved in very few adjectives and are further limited to the nominative case singular of the masculine gender, e.g. *zdrow* 'healthy', which is the continuation of the non-determined form and is found in certain pragmatic contexts, versus the more typical *zdrowy*, which is the old determined form. Most adjectives occur exclusively in the long form and even those in which the contrast prevailed morphologically do not contrast semantically. The earlier function of the definite determiner has been completely forgotten.

3. Relics of **-y-* and **-t-* in the plural

The *-y-* of the cliticized masculine *-yah* and the *-t-* of the feminine *-tah* are often lost, and the plural suffix occurs as *-o* (underlying */-ah/*). However traces of *-y-* and *-t-* are found in the plural suffixes of many Somali dialects.

The *-t-* of the feminine clitic is regularly preserved in the plural formation in Digil dialects. Lamberti (1986a) notes that in Digil, 'plural nouns are formed by means of the suffixes *-ə, -yə* and mainly *-tə* (in Jiddu *-dhə*)' (Lamberti 1986a:26). Thus the plural of *min* 'house' is Tunni/Garre *mintə*, Dabarre *minətə*, Jiddu *mindhə*. See the further examples from Lamberti 1986b:47:

- | | | | |
|----------|----------|--------|-------------|
| (19) | singular | plural | |
| Tunni: | deb | debto | 'fire' |
| Dabarre: | dib | dibetə | " |
| Jiddu: | buu? | buuqtə | 'copy-book' |

One might expect that the plurals with the *-t-* in the plural suffix will be of the feminine gender and the others of the masculine gender. This is not the case, however, since numerous dialects generalized the gender of the plurals. As Lamberti indicates, in the Ashraf dialects all nouns ending in a vowel are feminine and all plurals are feminine; in May all plurals are masculine (Lamberti

1986a:26). He does not state so explicitly for the Digil dialects, but it seems from his data that Digil generalized the gender of the plurals as masculine, similarly to May.

Many, if not all Somali dialects, including the Northern dialect, have an 'irregular' plural of *il* 'eye' as *indo* 'eyes'. As Cardona (1981) points out, this root is related to Semitic *'yn* 'eye'. The change in the singular, *n > l*, is irregular, but not very unusual for Somali in which sonorants exhibit significant instability and often undergo sporadic dissimilation or exchange (cf. Cardona 1981:22). Thus, assuming that the root of this word is *-in-*, the *-do* in plural can be safely assumed to be a plural suffix — another instance of the old **-tah*.

A reflex of the masculine **-y-* of the suffix **-yah* is found in plurals of polysyllabic masculine nouns, grouped by Bell (1953) as nouns of class 2, corresponding to Saeed's (1985) declension 2 type. Both authors give similar descriptions of these plurals stating that the plural suffix is realized either as *-yo* (mostly after gutturals) or as *-o* with the additional feature of geminating the final consonant, if it is *b, d, dh, l, or r*. This type of gemination or *y*-insertion is not found in the plurals of feminine nouns (Saeed's declension 1; Bell's class 3) which simply add *-o* to the noun stem, i.e. the singular form. Bell, following Andrzejewski's suggestions, points out that these features differentiate the two nominal classes (Bell 1953:15). It is conceivable that the masculine declension plural suffix contains underlying */-y-/* which is assimilated to the preceding consonant in specified phonological environments creating the geminates. Notice that the nouns of this declension are masculine in the singular, and it is understandable that they were followed by the masculine form of the relativizer i.e. **yah*, respecting the grammatical agreement still present in Somali. On the other hand, the plural *-o* suffixed to the feminine nouns is developed from the feminine form **tah*. As mentioned before, the original **-t-* was lost and at the synchronic level, the plural suffix is vowel-initial. However, there is no direct correlation between the gender of the suffix and the gender of the suffixed (i.e. plural) noun. As pointed out earlier, the gender of the plurals may be generalized or assigned by the principle of polarization, that is: Plurals are of the opposite gender to the counterpart singulars, as shown before in (3).

4. Final vowel raising and other changes

The *h*-deletion, discussed in section 3, caused a consecutive phonological change, namely the raising of the final *-a* to *-o*. The *-y-* of the masculine suffix caused further fronting of *-o* to *-e*. These changes led to synchronic allophony: *-e* and *-o* phrase-finally vs. *-a* phrase-medially. Recall that the phrasal allophone *-a* occurs also before clitics, as in the examples in (20), (21), and (22). Notice the

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but the
are not essential

operation of an additional rule of cross-guttural vowel assimilation, limited to the cases when the trigger is a high vowel.

- (20) aabbaheed 'her father' (from: Saeed 1985:157)
 aabbahayo 'our (ex.) father'
 aabbahood 'their father'
 but:
 aabbihiisa 'his father'
- (21) kabo 'shoes'
 kabaheyga 'my shoes'
 kabahenna 'our shoes'
 kabahooda 'their shoes'
 but:
 kabihiisa 'his shoes'
- (22) dawo 'medicine'
 dawadeyda 'my medicine'
 dawadeyna 'our medicine'
 dawadooda 'their medicine'
 note:
 dawadiisa 'his medicine'

I am going to propose that the rule of vowel raising was sensitive to the CV structure and took place when the low vowel was followed by an empty C slot before a pause. An independent argument for such an account comes from considering other Somali data.

The imperative in Somali is regularly realized as a zero suffix in the singular and *-a* suffix in the plural, e.g. (all examples from Saeed 1985:78) *keen* 'bring - sg.' : *keena* 'bring - pl.'; *kari* 'cook - sg.' : *kariya* 'cook - pl.'; *samee* 'make - sg.' : *sameeya* 'make - pl.' (the intervocalic *y*-insertion after a front vowel is an independently motivated rule). Verbs with the lexical 'autobenefactive' suffix *-at-* show an apparent irregularity in their singular, e.g. *joogso* 'stop - sg.' : *joogsada* 'stop - pl.'; *qabo* 'seize - sg.' : *qabta* 'seize - pl.' (underlying /qabata/ subject to syncope > *qabta*). The expected regular imperative singular of these verbs could be **joogsad*, **qabad*, respectively (with final voicing of *-t*). It is not impossible to derive the correct surface imperatives from the underlying regular forms by assuming morphophonemic deletion of the *-t* (> *-d*) of the autobenefactive suffix in word-final position. Then the *-a* (followed by an empty C slot) is raised to *-o* in the same way as suggested for the feminine nouns with the underlying *-ah* suffix. Notice that underlying final *-a* (e.g. *keena* mentioned earlier) does not undergo the raising rule. Raising does not take place in final *-aC* sequences, either, if the consonant is realized on the surface. There are a number of Somali words ending in such a sequence and it is

-a are pronounced in Somali with final *-e*, e.g. *Muse* < Ar. *Musa*, contrary to common nouns (cf. 6c) and women's names, which show *-o*, e.g. *Sahro* < Ar. *Zahra*. The fact that in masculine plural the *-y* was not deleted and is still present underlyingly can be related to the difference in accentuation of singular and plural nouns. Following Hyman (1981) and assuming that the high tone is the manifestation of accent, plural nouns in *-o-* are accented on the final mora, as in *sanaddó* 'years', whereas singular masculine nouns in *-e* are accented on the penultimate mora, as in *báre* 'teacher'. Therefore it is plausible to argue that the *-y-* of the **-yah* suffix remained in the onset of accented syllables (i.e. in plurals), but underwent the weakening process shown in (24b) when it was in the onset of unaccented syllables (i.e. in singulars).

5. Conclusion

The hypothesis of the historical origin and development of Somali nouns ending in *-o* and *-e* explains their somewhat bizarre synchronic behavior. In addition, the case presented here is an illustrative example of strong interrelation between phonology and morphology and syntax. Only when these intertwining correlations are taken into account, can an apparent irregularity be explained in a coherent fashion.

NOTES

¹ An earlier version of this paper was read at the 20th North American Conference on Afroasiatic Linguistics (April 1992) at Harvard University, Cambridge, Mass.

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² For the Somali backed/fronted vowel contrast and rules of harmony see Armstrong 1934, Andrzejewski 1955 and 1956, and Farnetani 1981. The fronted vowels, which can be analyzed as [+ATR] are phonologically marked. Vowel harmony involves spreading of the [+ATR] feature within the word and larger domains. For example *dawo* 'medicine' contains [-ATR] vowels, but *dawadiisa* 'his medicine'

contains [+ATR] vowels, due to the spreading of [+ATR] from the suffix *-iisa* 'his'. Since the contrast [-ATR]/[+ATR] is by no means related to all the facts discussed here and constitutes by itself a highly complex issue, in order to avoid long and unnecessary explanations I will ignore the contrast and throughout this paper will be using quasi-phonetic transcription with the same notation for both: [+ATR] and [-ATR] vowels, in keeping with the standard Somali orthography. For consonants, Somali orthography has also been used, with 'x' standing for [h] and 'c' for [ʕ].

³ Oomen 1981 proposes for Rendille, a language very closely related to Somali, that the plural *-o* suffix developed from the feminine proto-suffix **-at/*-et*. This hypothesis is very appealing since it creates a bridge between the Sam languages and other Cushitic or more generally, Afro-Asiatic, which often in one form or another retained the feminine nominal proto-suffix **-t/-Vt/-tV*. However, Oomen's argumentation is problematic in certain aspects and perhaps, in light of the Somali evidence, should be rethought.

According to Oomen, the same hypothetical proto-suffix **-at/*-et* underwent a number of different changes and became either zero (in the citation form of feminine nouns) or an *-e* suffix in the subject position of non-determined nouns or an *-i* suffix in the subject position of determined nouns, or finally an *-ood* suffix (notice the unexplained lengthening) in the genitive case. Oomen does not explain how the same proto-form could have so many different reflexes and why. Another problem is the semantic shifts: from the feminine gender marker to subject marker in one case and the genitive marker in another case. In addition, Oomen proposes that the masculine plural suffix *-aC*, in which *C* is a copy of the stem final consonant, developed from the same **-at*. Her crucial argument for this is that when these nouns are suffixed with the *h*-initial determiners they show intervocalic geminate *-ss-*, eg. *sam* 'nose'; *samam* 'noses'; *samassa* 'the noses' < /samat+ha/ with the natural rule *-t+h-* > *-ss-*. However, the *-h-* of the plural determiners historically developed from **k* and this must have been a comparatively recent change since Somali still has *-k-*. If the determined plurals represented some ancient stage in Rendille, we would rather expect them to contain the older *-k-* form of the suffix and not the newly developed *-h-*. But in such a case it is not possible to derive the *-ss-* from */-t+k-/*. It is quite plausible that the masculine plural suffix *aC* was originally **-ay*. Then in the isolated form the final glide was strengthened and acquired the features of the preceding consonant (**samay* > *samam*), whereas in determined form the **-k-* was palatalized to [s] and eventually the [y] assimilated to it (**samay+ka* > *samaysa* > *samassa*). Oomen also proposes that the plural suffix *-Ce* developed from the feminine **-te* which,

according to her, could be a variant of **-at/*-et*. Here again, the underlying form of the suffix can be /ye/ (parallel to Somali /yo/ < **-yah*). That is, instead of Oomen's /xoxom+te/ > *xoxomme* 'clubs' there could be /xoxom+ye/ > *xoxomme*. An additional argument for the underlying /-y-/ comes from vowel-final nouns which take [-nye] in the suffix: *dulbe* 'roofmate' : pl. *dulbenye*. The intervocalic change of /y/ to palatal [ny] seems to be more natural than the assumption that the [ny] resulted from /t/.

⁴ Puglielli 1984 gives two examples in which *(-il-ey)* could be remnants of singulative suffixes: *askari* 'military sg.', *askar* 'military collect'; *haweeny* 'woman', *haween* 'women'. Note, however, that the first example is an Arabic borrowing: Ar. *ʕaskarii* 'military sg.', *ʕaskar* 'troops'.

⁵ Abraham 1964 notes that the inflection of Somali *lah/leh* 'have' and *ah* 'be' strongly suggests that the former is morphologically composed of *la* 'with' and *ah* 'be'. The semantic interpretation of 'be with' as 'have' is straightforward, and many languages express possession in such a way (e.g. Arabic, Swahili).

⁶ I disagree here with Oomen 1981, cf. footnote 3.

⁷ All the discussion in this paragraph is taken from Vaillant 1958 except for the Polish example which is my own. Reference to Vaillant has been suggested to me by H. H. Hock.

⁸ I thank Bernd Heine (p.c.) for drawing my attention to these data.

⁹ At least in the data at my disposal.

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*doesn't work fundamentally
 because it is not "who is opening"*