The morphological function of tone/accent is examined in a number of Cushitic languages, with the objective of determining whether any comparative statement can be made validly at the group level. Three languages, the Somali dialect cluster, Afar, and Oromo, are the basis for the study. Patterns in case, gender, and the jussive form are analyzed. It is concluded that tone/accent does play an important role in the morphology of these languages, and that it is to some extent possible to reconstruct tone/accent as a morphological device for earlier stages in their history. At these earlier stages, it is likely that tone/accent did not function as a morphological device on its own, but formed an intrinsic part of inflectional affixes in addition to being associated with root categories at the lexical level. It is also seen as likely that the type of accentual system to be reconstructed for earlier languages should be the same as that which exists currently in many Cushitic languages, i.e., a simple two-term mora-counting system. (MSE)
THE RÔLE OF TONE IN SOME CUSHITIC LANGUAGES

David L. Appleyard

1 Introduction

It has for some time been recognised that tone plays a significant rôle in many Cushitic languages¹, yet because of the at times subtle nature of Cushitic tonal marking it has often been ignored in earlier work and even today is sometimes relegated to a few dismissive and apologetic lines, particularly in preliminary descriptions of languages. The reasons for this may be many, but by way of defence it has to be conceded that it is not always at first sight clear how tone and accent operate in individual Cushitic languages. Indeed, it is to

¹It will perhaps not be remiss to clarify from the beginning that I apply the term 'Cushitic' here only to what may be called the nuclear, or orthodox Cushitic languages as now generally accepted by the majority of scholars working in the field. For the purposes of this discussion I have restricted myself to the following languages and language groups: Beja (which alone forms the branch of North Cushitic — there is some dissent as to whether Beja should be included within the Cushitic family), Agaw (also called Central Cushitic), and East Cushitic (further divided principally into Lowland East Cushitic (LEC) which includes the languages of whose accentual systems we have the best descriptions: Afar, Oromo, Somali, etc., Highland East Cushitic (HEC) and Dullay (formerly also called Werrtoid). I have excluded so-called Southern Cushitic, the precise status of which is essentially still unclear, and Omotic, which is certainly to be distinguished from 'nuclear' Cushitic, most probably as a separate language family within Afroasiatic.

(c)David L Appleyard
some extent incorrect to speak of Cushitic languages as 'tone languages', at least in the sense that is generally understood. In most Cushitic languages, for instance, tone seems to operate in concert with stress in such a way that it might not at first seem apparent that one is dealing with a tonal system at all, but rather with a stress-based accentual system. It is, none the less, only comparatively recently that scholars have been able to provide an adequate analysis of tone and accent in Somali, by far and away the best described of all Cushitic languages and one major language where the tonal nature of the accent is particularly clear.

It is probably true, therefore, to say that most, if not all Cushitic languages can be identified as tonal accent languages, typically with a simple High - Non-high contrast on short vowels plus in addition the possibility of a High-fall tone on long vowels. Although it is not the intention here to provide an analysis of the nature of tone in Cushitic, as this has indeed already been done for a number of languages, it will be relevant for the understanding of the examples provided if a few words are said about the analysis of syllables. Thus, in most of the languages cited here the three-term realisation of the tonal accent on long vowels (Non-high VV, High VV, High-fall VV) can be directly related to the two-term system on short vowels (Non-high V, High V) by counting the morae: a double mora with a High on the first mora /VV/ is realised as a high-falling tone, [VV]; a double mora with a High on the second mora /VV/ is realised as a level (or slightly rising) tone, [VV]. In many languages stress is also associated with High tone, and some languages seem to show signs of moving towards a system of straightforward stress accent. Unlike in a number of other African languages, tone in Cushitic hardly ever serves to distinguish lexical items, but is closely bound up with the morphology, playing a significant role in both noun and verb morphology. In Beja, for instance, many morphological formatives

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2 Thus for Beja, Hudson 1973 and 1976, pp. 100-102, for Afar, Parker and Hayward 1985, pp 218-222, for Oromo (Boorman), Owens 1980, for Somali, Hyman 1981, to cite but a few

3 In the examples that follow I shall maintain the three-term system of marking, rather than the strictly more phonemic one.
TONE IN SOME CUSHITIC LANGUAGES

have an associated accent, although as in simple instances each word unit may have only one accent, within the morpheme-chain these are generally suppressed in favour of the 'dominant' accent. In a small number of cases, accent alone has a morphological function, as in the possessive pronoun suffixes, 1.sg. /'/, 3.sg. /'/: /?gaw-uu/' /?gawuu/ 'my house', /?gaw-uu-'/ /?igawuu 'his house'. Similarly, tone plays a rôle in plural marking in nouns, often alongside vowel length: [bikkáar] 'hut', [bikkar] 'huts'; [doobáat] 'bride', [dóobaat] 'brides'; [káam] 'camel', [káam] 'camels'; [déet] 'mother', [dëet] 'mothers'. In Somali, too, accent alone (High v. Non-high) frequently figures as a morphemic device, as in the often cited minimal pair:

(1)

nin baa libåax díléy
man EMPH lion he-killed[RESTR]

'a man killed a lion / it was a man who killed a lion'

(2)

nin baa libaax diley
man EMPH lion[SUBJ] he-killed[EXT]

'a lion killed a man / it was a man that a lion killed'

Where in (1) libåax is marked as a non-subject, and the verb díléy is in the so-called restrictive form in agreement with the emphasised, or focalised NP nin baa, which here is the subject; in (2)

5The accentual system of Beja is complex and requires a distinction to be made between the underlying forms, which show the clear morphological rôle of the accent, and the surface forms, which at first sight may seem bewildering. See Hudson, op cit.
6In the examples that follow, the official orthography is used in Standard Somali and Afar examples, whilst elsewhere the usual transcription system is used as adopted by most linguists in the field. For Somali, the only symbols that need noting are c (= Ъ), x (= h), dh (=d'), in Afar q (= Ъ), c (= h), x (=d').
libaax, on the other hand, is marked as subject, and the verb diley is in the extensive form agreeing with it, whilst the focalised NP nin bàa is here the object. It is also possible to find such contrasting phrases in other languages, where tone plays a major part, as, for example, in Oromo (Booran dialect):

(3)

inni afáan booráná hin bèex
he|SUBJ| language booran|GEN| NEG he-knows|NEG|

‘he doesn’t know the Booran language’

(4)

inni afáan booráná hin bèex
he|SUBJ| language booran|GEN| PRED he-knows|AFF|

‘he knows the Booran language’

Where in (3) the particle hin is the negative marker followed by the negative imperfect tense of the verb, but in (4) hin is the emphatic, predicative particle used with the affirmative imperfect tense. In this case, the verb forms are indeed different, but only minimally so, being distinguished by the quality of the final, voiceless vowels; to that extent, it is the tonal pattern of the verbal complex which may be said to carry the greater contrastive weight. From non-standard Somali (Central dialect) the interesting minimal pair has been recorded: úsò dili ‘he killed it’: ûsó dili ‘it killed him’, where úsò is the 3rd masculine pronoun in the Subject and Non-subject forms, respectively. From amongst the HEC languages, where ‘stress is phonemic in at least four of the ...languages’\(^7\), examples such as Sidamo t’áñœ ‘he asked’ and t’áñœ ‘ask!’, or angó ‘he has drunk’ and ánó ‘let us drink’ may be cited, though it would appear that

\(^7\)Gragg 1976, p 248. Unfortunately, however, in his descriptive study of these languages Gragg does not continue to mark the accent after making this statement.
such minimal pairs are not the rule. Similarly, it would be possible to go on finding minimal, or near-minimal, pairs of this kind in other Cushitic languages.

In this paper, therefore, the morphological function of tone/accent will be examined in a number of Cushitic languages with a view to seeing if any parallels can be identified between languages and whether any comparative statement can be made that might have validity at group level. This kind of study is necessarily restricted by the fact that full descriptive studies of tone/accent have been carried out only for a small number of Cushitic languages, and we sadly as yet lack in-depth descriptive grammars of a large number of languages. The best described Cushitic language to date is without doubt Somali, chiefly Standard Somali which is based on the Northern Somali dialects. It is perhaps fortunate, therefore, that it appears that it is in Somali that tone plays an especially prominent role in the morphology. Interestingly, however, studies of other Somali dialects reveal that whilst tone is generally an important morphological device, the patterns themselves are not always identical with the 'standard' model. This in itself provides us with an initial means into developing some kind of comparative statement about tone/accent in the history of the Somali dialect cluster. Alongside Somali, there are also good grammars of Afar and Oromo (various dialects, but especially the southern dialects including Booran, and Eastern (Harar) Oromo, two other major LEC languages, which contain detailed information on the role of tone/accent. These three languages, therefore, form the nucleus of this study. However, as they belong to the same sub-family of Cushitic and can thus be expected to have features in common, not least in their employment of tone/accent in their morphological systems, if any kind of wider comparative statement is to be attempted, then other, non-LEC material must be looked at. Beja would be one of the most obvious

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8 For a preliminary general discussion of Somali dialectology and the comparison of Somali dialects see Lamberti 1986.

9 Unfortunately, the most recent descriptions of Western (Wellega) Oromo, the largest and other major dialect area, do not mark tone, see Gragg 1976 and 1982.
choices here, having been subjected to sound, if rather concise des-
criptive analysis including the accentual system. However, in many
respects the morphology of Beja is divergent from 'nuclear' Cushitic,
particularly in those areas where tone/accent seems to play such an
important rôle. A more promising area is Agaw. However, here, too,
there are problems; only two Agaw languages (Awngi and Bilin) ap-
ppear to have a tonal accent system comparable with LEC, whilst the
other languages that have been studied in recent years (Kemant and
Khantanga) may have moved, or be moving towards a predictable,
syllable-counting stress-based system, perhaps under the influence of
Ethiopian Semitic.\footnote{Indeed, not all LEC languages appear to have maintained the same kind of
system seen, for instance, in Somali.}

The morphological categories which in Somali, for instance, make
particular use of tone and which, therefore, may here provide the
starting point for examining comparable forms of other Cushitic lan-
guages are drawn from the grammar of both nouns and verbs: from
nominal morphology, both case marking (especially Subject v. Non-
subject, or Absolutive) and gender marking (masculine v. feminine),
and from verbal morphology the Jussive, or Optative, and related
forms. This, of course, does not mean to say that tone does not
play an important rôle in other morphological categories --- in So-
mali the whole question of subordinate verb forms, relative clauses
in particular, is closely allied with specific tonal patterns --- but for
comparative purposes, and allowing for the preliminary nature of this
survey, these three basic categories will serve the purpose. It also
needs to be said that the morphologies of most Cushitic languages are
far from simple, and often require such phenomena as focalisation,
NP and VP structure and complexity, and sentence prosody to be
taken into account even when analysing such fundamental categories
as case marking, for instance. The forms that will be examined here,
therefore, may to some extent be abstractions and form only part
of the picture. A not uncommon feature of nominal morphology in
many LEC languages, for example, is that only one member of a
complex NP is marked for case; so, contrast Somali:
TONE IN SOME CUSHITIC LANGUAGES

(5)  
nin wùu i siiyey  
man[SUBJ] PRED+he me he-gave  
'a man gave it to me'

(6)  
ninkii wùu i siiyey  
man+the[SUBJ] PRED+he me he-gave  
'the man gave it to me'

(7)  
ninkani wùu i siiyey  
man+this[SUBJ] PRED+he me he-gave  
'this man gave it to me'

(8)  
ninkii gaadhígíi watay wùu i siiyey  
man+the car+the he-drove[SUBJ] PRED+he me he-gave  
'the man who drove the car gave it to me'

(9)  
nín iyo naagi wày i siiyeen  
man and woman[SUBJ] PRED+they me they-gave  
'a man and a woman gave it to me'

where in each sentence only the final constituent of the subject NP is marked for case and thus the noun nin 'man' only appears in the Subject case in (5), although it is the functional subject in all five
examples. Similarly, in the following example, though nin is still the underlying subject of the sentence, because it is focalised by the particle bàa it loses its overt marking:

(10)

\[
nin \quad \text{bàa} \quad \text{i} \quad \text{siyéy} \\
\text{man} \quad \text{FOC} \quad \text{me} \quad \text{he-gave[RESTR]}
\]

‘a man gave it to me’

2 Case

All of the major Cushitic languages possess a simple case system which differentiates a marked Subject case from an unmarked case, often conventionally called the Non-subject or Absolute case, which amongst other things may function as the direct object of a verb, the nominal predicate, and the object of postpositions, as well as being the citation form of the noun. The marked Subject case is a hallmark of Cushitic, though some languages (including Beja, and both Bilin and Awngi) have restructured this: in Bilin and Awngi it is the object case which is the marked form, for instance, though alone amongst the Agaw languages Kemant preserves traces of the older, typically Cushitic pattern.\(^\text{11}\) In addition, many languages show a difference between masculine and feminine nouns in Subject case marking.

In Somali, tone plays a prominent rôle in contrasting the Subject and Absolute cases, in most noun classes being the only mark:

\(^\text{11}\) See Sasse 1974, and Appleyard 1988, p. 583 and 585.
TONE IN SOME CUSHITIC LANGUAGES

(11)

<table>
<thead>
<tr>
<th>ABS</th>
<th>SUBJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>nin</td>
<td>nin</td>
</tr>
<tr>
<td>tuug</td>
<td>tuug</td>
</tr>
<tr>
<td>libaa:</td>
<td>libaa:</td>
</tr>
<tr>
<td>inan</td>
<td>inan</td>
</tr>
<tr>
<td>aabbe</td>
<td>aabbe</td>
</tr>
<tr>
<td>gabdho</td>
<td>gabdho</td>
</tr>
<tr>
<td>ey</td>
<td>ey</td>
</tr>
<tr>
<td>naagi</td>
<td>naagi</td>
</tr>
<tr>
<td>hooyo</td>
<td>hooyo</td>
</tr>
<tr>
<td>inan</td>
<td>inani</td>
</tr>
<tr>
<td>ey</td>
<td>eyi</td>
</tr>
</tbody>
</table>

The general rule is that there is lowering of a High tone in both masculine and feminine nouns, while the latter also add the affix -i to consonant-final stems. This same suffix -i also appears on the Subject case form of the demonstrative clitics (cf. nin kani 'this man' in (7), above) alongside a variant -u (nin kanu, naag tanu, naag tani 'this woman'), which in turn also occurs on the non-remote definite clitic (ninku [SUBJ] v. ninka [ABS] 'the man', naag tu [SUBJ] v. naag ta [ABS] 'the woman'). In the class of determiners, therefore, the suffix -i/-u is not restricted to the feminine gender.

The situation in other dialects of Somali has not been fully researched, but Saeed's observation that in Central Somali (Af-May) the Subject case is differentiated from the Non-subject by tone alone, involving the lowering of a High tone, would seem to indicate that there, at least, a similar situation obtains as in Standard (Northern) Somali.

Contrasting with the Somali evidence, in Afar only masculine nouns exhibit a separate Subject case, and then only those nouns that are vowel-final in the Absolute form.

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Subject case marking on nouns in Afar, therefore, consists of accented -i, which replaces the final vowel of vowel-final masculine nouns only.

In Oromo, the form of the Subject case differs slightly from dialect to dialect. Because of its general conservative nature, let us look first at Booran. Here, masculine and feminine nouns are formally distinguished in the Subject case only, -i or -ni being added to masculine nouns according to stem shape, -ni to feminine nouns ending in a long vowel (or, in isolation, a glottalised vowel, and -ti being added to feminine nouns ending in a short vowel.13
In other dialects similar forms occur, the major difference from Booran being that the masculine Subject case affix elsewhere generally includes the consonant -n- (Waata, the southernmost Oromo dialect, has -(in on masculine short vowel-final nouns), and in Western (Wellega) and Central (Tulema) dialects the special feminine suffix tends to be replaced by the masculine -n- (Waata, again divergent, has -tin). As regards accent, the Subject case affix in most dialects would appear to have a High tone (or stress\(^{14}\)), except perhaps in the Central dialects. Here, however, the available data is not clear on the nature of the accentual system, but certainly Moreno’s data differ markedly from the other dialects:\(^{15}\) cf. námá : námni ‘man’; saré : sarén, saréni ‘dog’; intálá : intálti, intálli (< intál+ni) ‘girl’. Cf:

\(^{14}\) Stroumer 1987 consistently speaks of stress in his analysis of the three southern dialects, Booran, Orma, and Waata.

\(^{15}\) Moreno 1939 goes so far as to say [p. 30] ‘l’accento in galla è molto instabile, essendo soggetto a complesse azioni di enclisi e di ritmo e variazioni psicologiche.’ The transcription in the following examples is Moreno’s.
(14)

<table>
<thead>
<tr>
<th></th>
<th>ABS</th>
<th>SUBJ</th>
<th></th>
</tr>
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<tbody>
<tr>
<td>Harar</td>
<td>namá</td>
<td>namnii</td>
<td>'man'</td>
</tr>
<tr>
<td></td>
<td>sáree</td>
<td>sáréen</td>
<td>'dog'</td>
</tr>
<tr>
<td></td>
<td>intálá</td>
<td>intaltú</td>
<td>'girl'</td>
</tr>
<tr>
<td></td>
<td>bisáan</td>
<td>bisáan</td>
<td>'water'</td>
</tr>
<tr>
<td>Wellega</td>
<td>nám'</td>
<td>namni</td>
<td>'man'</td>
</tr>
<tr>
<td></td>
<td>sáree</td>
<td>sáréen(')</td>
<td>'dog'</td>
</tr>
<tr>
<td></td>
<td>intál'</td>
<td>intalti, intaltí</td>
<td>'girl'</td>
</tr>
<tr>
<td></td>
<td>bisáan(')</td>
<td>bisáan(')</td>
<td>'water'</td>
</tr>
<tr>
<td>Waata</td>
<td>nam'</td>
<td>namfin</td>
<td>'man'</td>
</tr>
<tr>
<td></td>
<td>séré</td>
<td>séréen</td>
<td>'dog'</td>
</tr>
<tr>
<td></td>
<td>histól'</td>
<td>históltín</td>
<td>'girl'</td>
</tr>
<tr>
<td></td>
<td>bisáan'</td>
<td>bisáan</td>
<td>'water'</td>
</tr>
</tbody>
</table>

From all this data we may abstract the following features of Subject case-marking held in common: somewhere in all three languages the vowel -i is involved and this, in Afar and Oromo, is usually marked with High tone. The consonant -n- in the Oromo forms, as well as the special feminine forms in -t-, are usually regarded as an Oromo innovation, though, with respect to the latter forms, it is not unusual in Cushitic for feminine nouns to be marked differently from masculine nouns in the Subject case (cf. Somali). At first sight, Somali seems to be aberrant in that it is only feminine nouns which receive -i, but as is evident from the determiner clitics this may be a later development. Indeed, Sasse\(^\text{16}\) has shown that the situation which now obtains in Somali (and its close relatives such as Rendille and Dasenech) has developed regularly out of a pattern much more reminiscent of other LEC languages. There seems to have been a general rule in Somali that original (Proto-LEC) short vowels were lost and long vowels shortened. Thus, the final -i on such as naagi derives from an older long vowel, probably from a class of feminine

\(^{16}\text{Sasse 1984, p. 115-116.}\)
nouns, widespread in other East Cushitic (LEC and HEC) languages, which end in a long vowel -ee (the Genitive case of feminine nouns like nåag still ends in -eed: naagéed<*naag-ée-ti). The Subject case naagi, therefore, derives from an older *naag-ii. The presence of -i on what are now consonant-final feminine nouns only may be explained by the conflation of two original classes of nouns. From comparative evidence, it appears that feminine nouns ending in short vowels did not mark the distinction between the Absolute and Subject cases, as is generally still the practice in Afar and in Sidamo, a HEC language. In order to mark the case distinction, then, Sasse suggests that the long-vowel stem pattern was transferred to the other class of feminine nouns. In masculine nouns ending in a short vowel, the loss of that vowel which originally marked the case distinction (Subject case *-i, as still in Afar) left tone as the only indication: *náma > Som. nín; *namí > Som. nin17. So, too, *íl(a)ma > Som. ínan; íl(a)mí > ínan "boy". The Somali innovation is in extending Subject case marking to the class of feminine nouns, at the same time applying the newly arising masculine pattern of low tones as well, thus naagi and not *naagi.

Subject case marking in Oromo also shows signs of considerable innovation, incorporating new consonantal markers in conjunction with the old, inherited PLEC *-i. The -n- of Booran sáréen1, etc., as well as Harar namí, besides Booran namí, is probably of demonstrative origin,18 as the feminine -t- certainly is. The question arises, though, whether Booran namí continues the original LEC directly, or represents a simplification of such as nam-ní, as is found in other dialects. Given the altogether conservative nature of Booran, I would suggest that it does, and that forms such as namí arose out of contamination with the long vowel-final class such as sárée: sáréen(1), etc., where it may be conjectured that the enclisis of -ni was de-

17The change of (new) final *-m to -n is well documented in Somali, cf. the reduplicated plural of nín, which is níman. Lamberti (1983, p 200) suggests that the change of original *a to í is predictable before *m, though it might be said that this root shows wide variation of vocalisation in LEC: Afar num, Oromo nam18.

18Sasse 1984 p. 123.
veloped in order to differentiate the Subject case from the Absolute where it would have been difficult to add a vocalic ending. The Somali case discussed above, of course, presents a different solution, by substituting the quality of the case marker vowel. Forms such as Oromo nam-ñí, särée-n(′) and intal-tí are, therefore, structurally similar to determined forms in Somali, such as nín-ka ‘the man’, aábá-ha ‘the father’, náag-ta ‘the woman’, gabádh-dha ‘the girl’, etc.

Turning away from LEC, whilst in HEC, for instance, there are formatives involved in Subject case marking that are clearly related to what has been described above, because the available data does not include tone marking, it is not possible to say anything relevant to the study here. Similarly, Beja does not prove to be relevant because although we do have accentually marked data, the system of subject-object cases is quite different. So:

(15)

/ʔuu-ták ʔoo-yáas rih-y-á/
|ʔuu-ták ʔoo-yáas rhiya| the[SUBJ] + man the[OBJ] + dog he-saw

‘the man saw the dog’

(16)

/ʔu-yáas ʔoo-ták rih-y-á/
|ʔu-yáas ʔoo-ták rhiya| the[SUBJ] + dog the[OBJ] + man he-saw

‘the dog saw the man’

Case marking is here carried by the preposed article; indefinite masculine nouns ending in a vowel and without any further pronominal suffix are also marked in the Object case by a suffixed -b. All this is quite different from the East Cushitic situation and in any case does not seem to involve tone/accents at all.
In Agaw, there has also been some restructuring of Subject and Object case forms in both Bilin and Awngi, the two languages which appear to have maintained a full tonal accent system. Traces of the older system, reflecting the East Cushitic pattern, can be deduced, however. Whilst both languages have formed a new, marked Object case (in Bilin, masc. -s, fem. -t; in Awngi, both genders, -wa [surface and underlying]), the old Subject case in Awngi, and the old Absolute case in Bilin serve as the new unmarked form. So, whilst in Bilin masculine nouns in the new, unmarked Subject case end in a consonant (gədən, 'dog', dan 'brother', ləgən, 'house', əaqʷ, 'water', oəb, 'mouth', gʷädəgʷ, 'belly', qəl, 'eye'), or the vowel -a (gərwa 'man', gämäna 'lion', siwána 'beggar') corresponding to the Proto-LEC and indeed Proto-Cushitic short vowel-final and long vowel-final stems, Absolute case, in Awngi masculine nouns frequently end either in a consonant (gən 'dog', sən 'brother', oən 'house', gusəg 'belly', öll 'eye') or in the vowel -i (aq 'man', dəγʷər 'donkey', düri 'cock', yimənt 'beggar') corresponding to the same stem classes, but this time deriving from an old Subject case. It is only in Kemant that the original Subject-Object case contrast survives; here masculine nouns can be divided into two broad classes, as in other Agaw languages: consonant-final and vowel-final stems, respectively. Whilst consonant-final nouns like nən 'house', áxʷ 'water', gən 'dog', sən 'brother', etc., do not distinguish the Subject from the Absolute case, vowel-final masculine nouns in -a like fərzə 'horse', birə 'ox', dəγʷərə 'donkey', etc., change this to -i in the Subject case, and what is more, this -i is in most nouns of this class accented: fərzı, birı, dəγʷərı. It would not seem unreasonable, then, to relate this suffix -i with the LEC Subject case affix -i (specifically the long vowel-final stem form -i), including the High tone. In Agaw, as

10See Appleyard 1989, p. 585, for a discussion of these forms and the restructuring of this part of the case system.

21Sasse 1974, p 59, notes Subject case forms nəg(ə), əx 'ə ~ axʷə, in Appleyard 1975, p 319, and passim this final -ə appears as an optional addition to other consonant-final forms, nouns and verbs, a structural explanation for which is difficult to find.
in Afar, this suffix is restricted to masculine nouns, and feminine nouns do not distinguish the Subject from the Absolute case. This, too, may be taken as an archaic trait, and the developments seen in Oromo and Somali can be understood as innovations.

3 Gender

From example (11) above it can be seen that tone also plays a rôle in the differentiation of gender in the noun in Somali, as for example between inan 'boy' and inán 'girl'. Incidentally, as the plurals of nouns of five out of the seven declensional classes in Somali also involve a reversal of gender, masculine singulars becoming feminine in the plural, and vice versa, tone may additionally play a rôle in number marking. Indeed, in one class this is done by tone alone, as in éy 'dog' : éy 'dogs' in (11). Because of the close involvement between gender and number in Somali, as in other Cushitic languages, it is better, however, not to regard this as a separate category of the use of tone in the morphology, but as a manifestation of the general gender system.

(17)

<table>
<thead>
<tr>
<th>Masc</th>
<th>Fem</th>
</tr>
</thead>
<tbody>
<tr>
<td>inan</td>
<td>inán</td>
</tr>
<tr>
<td>náyl</td>
<td>náyl</td>
</tr>
<tr>
<td>matáan</td>
<td>matáan</td>
</tr>
<tr>
<td>mádax</td>
<td>madáx</td>
</tr>
<tr>
<td>áwr</td>
<td>áwr</td>
</tr>
</tbody>
</table>

In Standard Somali all masculine nouns (excluding some suffixed plural forms) have the accent on the penultimate mora, whilst feminine nouns ending in a consonant have the accent on the last mora and those ending in the vowel -o (but not other vowels) are accented on the penultimate mora (this again excludes some plural forms). In reduced final long vowels See Appleyard, forthcoming.
either gender monosyllables can of course only be accented in the same way. So:

(18)

<table>
<thead>
<tr>
<th>Masc</th>
<th>Fem</th>
</tr>
</thead>
<tbody>
<tr>
<td>{ínàn} ínán</td>
<td>'boy'</td>
</tr>
<tr>
<td>{nàil} nàyl</td>
<td>'lamb'</td>
</tr>
<tr>
<td>{ním} ním</td>
<td>'man'</td>
</tr>
<tr>
<td>{áábbe} áábbe</td>
<td>'father'</td>
</tr>
<tr>
<td>{áf} áf</td>
<td>'mouth'</td>
</tr>
<tr>
<td></td>
<td>{ínàn} ínán</td>
</tr>
<tr>
<td></td>
<td>{nàil} náyi</td>
</tr>
<tr>
<td></td>
<td>{nàág} náag</td>
</tr>
<tr>
<td></td>
<td>{hoo yóo} hóoyo</td>
</tr>
<tr>
<td></td>
<td>{ká b} káb</td>
</tr>
</tbody>
</table>

Comparative evidence from other Somali dialects, notably Af-Jiddu (spoken in southern Somalia) reveals that Northern Somali (including Standard Somali) has undergone an accent shift,\(^\text{22}\) firstly in feminine nouns from the final mora to the penultimate with the later regular loss of an old short final vowel, and secondly, as a result of the first shift, in masculine nouns from the penultimate to the antepenultimate mora again with the reduction of the final syllable (-V > Ø; -VV > -V). The operation of the first shift becomes clear when we, for example, compare the word for 'bird': Af-Jiddu šibbiró, North Somali shimbir, both from *kimbiró (cf. Rendille čimbir, Afar kimbiró); or 'ear': Af-Jiddu d’égó, North Somali dhég, both from *d’ágí (cf. Afar xag ‘cheek’, Burji d’ága ‘ear’). The operation of the second shift may be illustrated by comparing such as Af-Jiddu gáal (i.e. ga ál) ‘camel’ and North Somali gáal (i.e. gá ál) both from *gaál.

In Afar, too the position of the accent plays a rôle in the differentiation of genders, though here there is the additional factor that whilst amongst simple (non-deverbal) nouns, those that are consonant-final are masculine, of those that are vowel-final, masculines are accented on the penultimate vowel and feminines typically on the last vowel. So:

\(^{22}\)See Lamberti 1986, pp 182-4. Some of the details of Lamberti's argument are perhaps not clear, but the principle is undoubtedly correct.
The accented vowel-final feminines are reminiscent of Lamberti’s reconstructions for Proto-Somali as described above, cf. Afar kimbiró ‘bird’, etc.

In Oromo (Booran), too, there is often some accentual difference between masculine and feminine nouns, though here the distinction is not as clear as in Somali and Afar. Amongst monosyllabic roots (i.e. not counting the final voiceless vowel as in námá ‘man’) 92% of masculine nouns have High tone, whilst 75% of feminines do not. Amongst disyllabic roots, masculine nouns generally have ultimate accent and feminines penultimate accent; amongst nouns ending in a long vowel (-VV, realised as -V? in isolation) the situation is not quite so clear, though feminines do tend to place the accent on the penultimate syllable.

In other dialects the situation is even less clear and seems to differ at times markedly from what has been described for Booran. Thus, in Harar Oromo, the gender of a noun cannot be predicted at all from its accentual patterning; contrast, for instance, Harar intálá ‘girl’ and námá ‘man’ with the Booran data, above. Here there are only certain tonal patterns permitted, only the penultimate or final

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\^\(^{23}\)See Owens 1980, p 160
syllable of a root can have High tone and all nouns must have at least one High tone. In Wellega Oromo, too, the rules for accent placement would appear to be associated with the syllabic shape of the root.

It is difficult to see how this picture can be reconciled with that found in Somali and Afar. Even in a conservative dialect like Booran the evidence of such as arráb⁴ and íntal⁵ seems to contradict this evidence directly. Nonetheless, it is certainly of some significance that in Booran tone/accent does play some rôle in distinguishing the two genders and it would not be remiss, I think, to hypothesise that in Proto-LEC, too, tone had a rôle to play in this morphological function. In other LEC languages, such as Konso, or Arbore, or even in other East Cushitic languages or language groups, such as Dullay, or HEC (Sidamo), where tone does play some part in morphological marking, if at times rarely on its own, it does not appear that it is specifically involved in gender marking. A word of caution, however, needs to be repeated here: much work still has to be done on the accentual systems of Cushitic languages in general, particularly outside the field of the better-known languages. The place of tone is therefore not yet properly understood for the grammars of many languages that, in the event, may have an important part to play in the history of Cushitic suprasegmentals and the reconstruction of the proto-system.

Outside of East Cushitic, in Beja and Agaw, again tone/accent does not play a rôle in gender distinction. In Beja, feminine and masculine nouns are chiefly distinguished by syntactic features such as concord, though feminine NPs will always contain at least one occurrence of the marker -t-, though not necessarily attached to the (head) noun itself²⁴. In direct, contrasting pairs this affix alone distinguishes genders and the accentual pattern is not affected. No system of contrasting accentual pattern can be observed in other nouns either. So:

Similarly, in Agaw, there is no distinctive accentual pattern for masculine and feminine nouns. In Awngi, feminine derivatives of masculine nouns keep the accentual pattern of the root, marking the feminine ending with High tone (-á) if the masculine ending is marked (-á), otherwise with low tone. So:

(22)

MASC | FEM
---|---
yàas ‘dog’ | yàas-t ‘bitch’
ták ‘man’ | tak-át ‘woman’
báaba ‘father’ | dée-t ‘mother’

Feminine nouns without corresponding masculine forms may be accented either on the root, the affix, neither, or both: cíya ‘bride’, bazrá ‘mare’, γuna ‘woman’, bêqlá ‘mule’.

Whilst it may, therefore, be possible to reconstruct a rôle for tone in gender marking in Proto-LEC, at least, if not in East Cushitic as a whole, the evidence would not seem to allow the reconstruction of such a rôle at the Proto-Cushitic level.
The last morphological category that I intend to examine here concerns one of the principal modal categories of the verbal system. For reasons of clarity of exposition I shall refer to this form as the Jussive, though its manifestations in the various languages may go under different names. Clearly formally connected with what is in many languages actually the form that expresses a request (i.e. Jussive, Optative, sensu stricto) is a paradigm which is sometimes called the Subjunctive, which is involved in certain types of subordinate clause (Somali) and focalisation constructions (Konso), and in Somali, too, and Oromo in the imperfective negative construction. The formal hallmark of this paradigm is the inflectional vowel o or u26. In Somali the Jussive (Optative) and Subjunctive functions have different accentual patterns, which in turn contrast with those of the declarative, indicative paradigms.

(23)

<table>
<thead>
<tr>
<th>OPTATIVE</th>
<th>SUBJUNCTIVE</th>
<th>NEG. PRES.</th>
<th>AFF. PRES.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>an kéeno</td>
<td>keenó</td>
<td>má keenó</td>
</tr>
<tr>
<td>2</td>
<td>ad kéento</td>
<td>keentó</td>
<td>má keentó</td>
</tr>
<tr>
<td>3m</td>
<td>há keeno</td>
<td>keenó</td>
<td>má keenó</td>
</tr>
<tr>
<td>3f</td>
<td>há keento</td>
<td>keentó</td>
<td>má keentó</td>
</tr>
<tr>
<td>1p</td>
<td>annu kéenno</td>
<td>keenó</td>
<td>má keennó</td>
</tr>
<tr>
<td>2p</td>
<td>ad kéentee</td>
<td>keentáan</td>
<td>má keentáan</td>
</tr>
<tr>
<td>3p</td>
<td>há keeneen</td>
<td>keenáan</td>
<td>má keenáan</td>
</tr>
</tbody>
</table>

Lamberti proposes that the accent on the final syllable (the penultimate mora of long vowel endings, 2p and 3p) is a common Proto-Somali feature for the Negative Present/Imperfective, though he seems to be incorrect in stating that the Subjunctive form, though

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26I shall deal here only with suffix-inflecting verbs of the common Cushitic type where the lexical verb stem essentially has suffixed to it the markers of person and tense/mood in that order.
segmentally identical, has no accent.\textsuperscript{26} Inasmuch as it affects the argument here about the distinctive morphological rôle of tone, contrasting the Jussive from the Indicative paradigms, it should be noted that Lamberti also reconstructs the latter with final accent on the basis of non-Northern dialect forms. He ascribes the absence of High tone in the non-periphrastic indicative tenses, such as keenaa, to the operation of the distinctive Northern Somali focus system, and sees in the ‘restrictive paradigm’ (see example (1) diléy, the corresponding Present tense form would be dilá with High tone on the final vowel) the direct descendent in accentual terms, at least, of the ‘Altsomali’ form. However, whereas Lamberti suggests a form such as seenó (Af-May), corresponding to Standard keenaa, Saeed\textsuperscript{27} records seenó; clearly the situation is complex and needs more work. Interestingly, though, in the Central (Af-May) dialect, too, as noted by Saeed, there is a limited accentual contrast between the non-periphrastic indicatives, Present seenó, Past seeni, and the first singular of the Jussive (Optative) seenóy, but not in the other persons (the Negative Present is appended for reference):

\begin{tabular}{llll}

& OPTATIVE & AFF. PRES. & NEG. PRES. \\

Af-May & & & \\
1 & seenóy & seenó & ma seenó \\
3m & seenoy & seenó & ma seenó \\
3f & seentoy & seentó & ma seentó \\
1p & seennoy & seennó & ma seennó \\
3p & seeniæ & seenaæ & ma seenaæ \\

\end{tabular}

In Afar the paradigm with the function of Jussive (Optative) may be derived from the East Cushitic -u/-o paradigm, though with the addition of a further element -y, reminiscent of the Central Somali form. The simple paradigm survives only in a limited construction type as the sentential complement of certain other verbs.\textsuperscript{28} Both

\textsuperscript{26}Lamberti 1986, p. 187.
\textsuperscript{27}Saeed 1982, p 99
\textsuperscript{28}So, Parker and Hayward 1985, p. 286, ‘the U-Form’, Bliese 1981, p 144, who
forms are marked by penultimate accent, whereas the Indicative has no structural accent:

(25)

<table>
<thead>
<tr>
<th>Jussive</th>
<th>Subjunctive</th>
<th>Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 fákay</td>
<td>fáku</td>
<td>fakah</td>
</tr>
<tr>
<td>2 fáktay</td>
<td>fáktu</td>
<td>faktah</td>
</tr>
<tr>
<td>3m fákay</td>
<td>fáku</td>
<td>fakah</td>
</tr>
<tr>
<td>3f fáktay</td>
<td>fáktu</td>
<td>faktah</td>
</tr>
<tr>
<td>1p fákny</td>
<td>fáknu</td>
<td>faknah</td>
</tr>
<tr>
<td>2p faktónay</td>
<td>faktónu</td>
<td>faktaanah</td>
</tr>
<tr>
<td>3p fakóonay</td>
<td>fakóonu</td>
<td>fakaanah</td>
</tr>
</tbody>
</table>

In Oromo (Booran) the reflex of the East Cushitic -o paradigm occurs as the Jussive and the Negative Present (Imperfective), both of which have fixed High tone on the first syllable of the verb root, whilst in simple declarative sentences the Indicative tenses are without High tone.

calls this form the 'Subjunctive', says that it also occurs in purpose clauses with the dative postposition -h added. Parker and Hayward treat this as a separate paradigm, the 'Purposive'.

20Bliese 1981, p. 141, suggests that this derives from *fáko+y and that the 'unstressed o is raised to u word finally' in the subjunctive. A further derivative of the -o form exists as the 'Consultative' (Bliese) or 'Requestive' (Parker and Hayward), but as this occurs only in a structure that is subject to sentence prosody, it cannot be used to illustrate the rôle of tone/accent in the morphological category under review. fákó 'should I open?'
Similar forms and patterns occur in other dialects of Oromo:
cf. Harar Oromo ha déem" 'let him go', inní (hi)n déem" 'he is not
going', but inní déem* 'he is going'. In Konso, which is most closely
related to Oromo, slightly different patterns occur, but again with
distinctive accentual marking on the Jussive (here more reminiscent
of the Somali forms with the first and third persons distinguished)
and the Negative Present (predicate topic forms), both continuing
the old -o inflection.

From the above Somali, Afar and Oromo-Konso data it would
be possible to reconstruct a Proto-LEC accentual pattern for the
3rd person Jussive with High tone on the initial syllable of the root,
allowing for the transference of tone to the prefixed preverbal in
Standard Somali (há) and Konso (â). This form is differentiated from the 'Subjunctive' in the same languages where the vowel of the inflexion carries the High tone, which may represent an archaic trait. Again, however, because of the incomplete nature of the data available across the field of East Cushitic, let alone Cushitic as a whole, it is not possible to say for sure what represents innovation and what is an archaic retention.

Unfortunately, the argument cannot be readily solved by having recourse to non-LEC languages, either Beja or Agaw, for instance, because it is uncertain to what extent the -o paradigm is retained or exists in them. The Jussive (Optative) forms in both language groups appear to be of quite a different origin: Beja bá-tam-I 'may I eat', also tam-ii-ây 'if I were to eat' and tam-I ?andi 'I intend to eat', all of which are built on the Past tense form. In Agaw, the various Jussive forms are also for the most part constructed on the Perfective-aspect base by means of various extensions, most commonly -n: Bilin gäb-o-n 'let him refuse', Khamtanga k'äb-n-á 'let him cut', Kemant was-i-n 'let him hear', but Awngi des-o-s 'let him study'. The Awngi form is at least consistently marked with High tone on the inflexion regardless of the accentual pattern of the stem class.

5 Concluding remarks

In this brief survey of a few Cushitic languages it can be seen that tone/accent does play an important rôle in the morphology, and more importantly that it is to some extent possible to reconstruct tone/accent as a morphological device for earlier stages, particularly

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30 This is essentially Black's argument, 1974, pp. 124-5, where he contrasts a Proto-LEC Jussive (3m) *d'al-o with the Subjunctive *d'al-ô.

31 Zaborski 1975, p. 164, considers this a common Cushitic form, but it is uncertain to what extent such paradigms as the Agaw (Bilin) Subjunctive gäbrô 'he (begins to) refuse' (but the cognate Kemant form is a Jussive was-du 'let him hear') or Gerund gab-o 'he having refused' are reflexions of this form.
for Proto-LEC, but probably also by extension for Proto-Cushitic as well. At these earlier stages of reconstruction, it is likely that tone/accent did not function as a morphological device on its own, as may appear at present in such languages as Somali, but formed an intrinsic part of inflexional affixes in addition, perhaps, to being associated at the lexical level with root categories. It is likely also that the type of accentual system to be reconstructed for Proto-LEC or Proto-Cushitic should be the same as that which exists currently in many Cushitic languages, namely a simple two-term (High : Non-high) mora-counting system.

REFERENCES


TONE IN SOME CUSHITIC LANGUAGES


