UNITY AND DIVERSITY OF NUBIAN LANGUAGES:

Toward a Standardized Writing System of Nubian Languages

Edited by
MUHAMMAD J HASHIM
AND
ABDEL RAHIM HAMID MUGADDAM
3
SOME OBSERVATIONS ON MIDOB PHONOLOGY

Abeer M Ali Beshir

INTRODUCTION
Midob (also spelt Meidob) is a language spoken near Jabal Meidob in Northern Darfur\(^1\). According to the classification of Greenberg (1963), Midob belongs to the Nubian language family which is a sub-branch of Eastern Sudanic, a branch of the Nilo-Saharan language phylum.

Earlier linguistic work on Midob has been done by MacMichael (1912) in which he published a Midob–English wordlist. This wordlist was examined by Westermann (1912/13). Comparing it to Nile Nubian (NN)\(^2\) he found that Midob is a Nubian language. In 1918 MacMichael presented a comparative word list, which included English–Midob–Birgid–Barabra,\(^3\) to support his ethnological claim that the Nile Nubian Barabra, and Darfur Nubian (DN) Midob and Birgid, are of the same origin. Zyhlarz (1928) sketches the grammatical systems of Midob and Birgid, and compares them to NN and Kordofan Nubian (KN), suggesting that the Nubian language group consists of three branches: a Northern branch (NN), a Southwestern branch (DN), and a Southern branch (KN) (Jakobi and Kummerle 1993: 118). In 1983, Thelwall published a phonology of Midob, plus grammatical notes and a basic vocabulary. Ten years later in 1993, Werner published his book Tiddal: A Study of Midob in which he provides a brief grammar and a larger Midob–English and English–Midob vocabulary.

---

1 Midob is also spoken in some settled communities in Khartoum state. The data in this article is taken from a number of informants living in Khartoum (Omdurman). Here I would like to thank Abbakar and Ishag (who speak Kaargedi), and Siddiq (who speaks Uurti).
2 The names of the different sub-branches of the Nubian language family mentioned in this article are abbreviated as follows:
   - NN: Nile Nubian, i.e. Kenzi-Dongolawi and Nobiin
   - DN: Darfur Nubian, i.e. Meidob and Birgid
   - KN: Kordofan Nubian, i.e. Ajang group
3 ‘Brabra’ is an outdated term of Nile Nubian.
There are two dialects of Midob: 4 Uurti, on which the work of both Thelwall and Werner is based, and Kaargedi (known also as Shalkoota). There are a few differences between the two dialects particularly in the pronunciation and the phoneme distribution, but they are still mutually intelligible. This paper intends to shed light on the phoneme distribution and some morphophonological alternations in the Kaargedi dialect, as none of the previous works has attempted to investigate any aspects of this dialect 5.

Following section one, which is my brief introduction, the paper is divided into five further parts, with section six reserved for the summary. Section two describes the consonant inventory of the two Midob dialects, followed by a description of the distribution of the Kaargedi consonants within word boundaries. Section three presents the vowels and the phonemic status of vowel length. Section four gives a brief account of the types of tones found in Kaargedi, and their lexical distinctions. Section five deals with the morphophonological alternations encountered in the formation of the genitive and diminutive noun phrases, and section six presents the summary.

**CONSONANT INVENTORY**

The consonant system of Midob is similar to that found in the NN languages 6. It consists of six places of articulation: bilabial, labiodental, alveolar, palatal, velar and glottal. With regard to the manner of articulation, Midob consonants are of two classes: the class of obstruents which is characterized by the presence of voiceless and voiced plosives and voiceless fricatives, and secondly, the class of sonorants which includes nasals, liquids and glides. Table 1 shows the consonants of Uurti as given in Thelwall (1983). Table 2 lists the consonants of Kaargedi.

---

4 Werner (1993: 14) spells Uurti as “Urti” and Kaargedi as “Kaageddi”.
5 In an unpublished dissertation submitted in partial fulfillment for the requirement of B.A. (honors) in linguistics, University of Khartoum, Ishag Hassan (who is a mother-tongue speaker of the Kaargedi dialect) compares the nominal suffixes in Meidob (based on the Kaargedi dialect) and Dongolawi.
6 Kordofan Nubian languages have quite different consonant systems characterized by a dental place of articulation, and the presence of retroflex consonants.
Table 1: Midob Òrtí phonemes

<table>
<thead>
<tr>
<th></th>
<th>Bilabial</th>
<th>Labiodental</th>
<th>Alveolar</th>
<th>Palatal</th>
<th>Velar</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plosives</td>
<td>p b</td>
<td>t d</td>
<td>c j</td>
<td>k g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fricatives</td>
<td>f</td>
<td>s</td>
<td>f j</td>
<td></td>
<td>h</td>
<td></td>
</tr>
<tr>
<td>Nasals</td>
<td>m</td>
<td>n</td>
<td>n j</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lateral</td>
<td>l</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liquids</td>
<td>r</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glides</td>
<td>w</td>
<td></td>
<td>y</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Midob Kaargedi phonemes

<table>
<thead>
<tr>
<th></th>
<th>Bilabial</th>
<th>Labiodental</th>
<th>Alveolar</th>
<th>Palatal</th>
<th>Velar</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plosives</td>
<td>p b</td>
<td>t d</td>
<td>c j</td>
<td>k g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fricatives</td>
<td>f</td>
<td>s</td>
<td>f j</td>
<td></td>
<td>h</td>
<td></td>
</tr>
<tr>
<td>Nasals</td>
<td>m</td>
<td>n</td>
<td>n j</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lateral</td>
<td>l</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liquids</td>
<td>r</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glides</td>
<td>w</td>
<td></td>
<td>y</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Having compared the consonant inventories of both Midob dialects, we can see that the voiced alveolar fricative [z] is missing in the Òrtí dialect. This may give rise to the question as to whether [z] in Kaargedi is a basic phoneme in this dialect, or whether it is a variant of its voiceless counterpart [s], which also exists in Òrtí. In a trial answering this question, the distribution of Kaargedi consonants and their phonemic status is examined, as shown in the following section.

**Distribution of Consonants**
The Kaargedi consonants are attested in the beginning of the word (word-initially), in the middle of the word (intervocally), in a sequence with
another consonant (resulting in a geminate or cluster) and at the end of the word (word-finally). Examples of each of the consonants in the respective positions are shown below.

**Distribution of Obstruents**

**Plosives**
The distribution of Kaargedi plosives is shown in Table 3 below. Note here that the gap of distribution is indicated by empty cells. A cell which contains only one example indicates lack of data.

**Table 3: The distribution of Kaargedi plosives**

<table>
<thead>
<tr>
<th></th>
<th>Word-initially</th>
<th>Inter-vocalically</th>
<th>In a consonant cluster</th>
<th>Word-finally</th>
</tr>
</thead>
<tbody>
<tr>
<td>[p]</td>
<td>pòól ‘dog’</td>
<td>pèpèjèdò ‘bat’</td>
<td>pòppá ‘blow’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>pòòjì ‘desert’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[b]</td>
<td>òbéér ‘cliff’</td>
<td></td>
<td>ìbbá ‘father’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>òbòbà ‘lion’</td>
<td></td>
<td>ìbbà ‘grandfather’</td>
<td></td>
</tr>
<tr>
<td>[t]</td>
<td>tòóri ‘old woman’</td>
<td>kùfrazàtí ‘breath’</td>
<td>òtti ‘leg’</td>
<td>timmít ‘giraffe’</td>
</tr>
<tr>
<td></td>
<td>tòòfì ‘traditional tray for food’</td>
<td>tòòtí ‘dancing,</td>
<td>kòrtì ‘wool mat’</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>playing’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[d]</td>
<td>tòdò ‘aim at’</td>
<td></td>
<td>ìddí ‘two’</td>
<td>sààd ‘stick’</td>
</tr>
<tr>
<td></td>
<td>údí ‘black’</td>
<td></td>
<td>ìddé ‘white’</td>
<td></td>
</tr>
<tr>
<td>[c]</td>
<td>çók ‘touch for check’</td>
<td>ààcì ‘water’</td>
<td>òcci ‘donkey’</td>
<td>òlic ‘you (pl) eat’</td>
</tr>
<tr>
<td></td>
<td>co ‘exclamation’</td>
<td>pàllicì ‘small</td>
<td>tècci ‘five’</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>goat’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[j]</td>
<td>pòòjì ‘desert’</td>
<td></td>
<td>òrjì ‘wood’</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>tàyjì ‘shelter’</td>
<td></td>
</tr>
<tr>
<td>[k]</td>
<td>kùndì ‘big water pot’</td>
<td>sùkàrdì ‘hitting’</td>
<td>sìrkì ‘government’</td>
<td>tùrùd ‘mist’</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------</td>
<td>------------------</td>
<td>-------------------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td>kòrààr ‘crow’</td>
<td></td>
<td>sùkkà ‘hit’</td>
<td></td>
</tr>
<tr>
<td>[g]</td>
<td>túgúr ‘turtle dove’</td>
<td>kààrgèdìd ‘Shalkota people’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>åggà ‘stay’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It appears from the distribution of Kaargedi plosives (voiced and voiceless), as shown above, that they have a clear contrastive opposition in the medial and double medial position. However, there is a gap in their distribution word-initially and word-finally. In the word-initial position, the voiced plosives [b, d, j, g] are not attested. So there is no phonemic contrast between voiced and voiceless plosives, that is, the phonemic contrast between them is neutralized in that position.

Apart from the alveolar plosives (voiced [d] and voiceless [t]) and the voiceless palatal [c], the remaining Kaargedi plosives never occur in the word-final position. The alveolar plosives seem to contrast also word-finally, but in the case of the palatals this contrast is neutralized, since only the voiceless palatal [c] appears in that position.

**Fricatives**

Fricatives have a very restricted distribution. No Kaargedi fricative may occur word-finally (the same is true for Uurti). In word-initial position only the voiceless alveolar /s/ and the glottal /h/ occur. However, the glottal fricative disappears intervocally in both dialects, and word-initially in most words in the Uurti dialect, eg. /habedì/ ‘bird’ becomes /abedì/. This is described by Werner (1993: 19) as ‘/h/ occasionally alternates with O’. In the two dialects of Midob, [h] is very restricted in its distribution since it appears only word-medially following another consonant. This sound seems to disappear after the liquids [l, r], but it leaves a phonetic effect on the liquids and causes them to become voiceless. So [l] and [r] are interpreted phonemically as /lh/, and /rh/.

The opposition between the Kaargedi alveolar fricatives is clear in
intervocalic position and in consonant clusters since all fricatives occur in these positions. The minimal contrast between the voiceless and voiced alveolar fricatives [s] and [z] is attested in a few words, for example, /èèzi/ ‘four’ and /èèsi/ ‘heat’. Armbruster (1960:37) provided an inventory of Nubian consonants including the voiceless and voiced /s/ and /z/. The existence of both voiceless and voiced fricative in NN leads to the assumption that Kaargedi is similar to NN in maintaining the two alveolar fricatives. However, the voiced counterpart [z] has developed in Uurti and changed into a voiced palatal [j]. This palatalization process often occurs when the voiced alveolar fricative is followed by a high vowel [i]. This is shown in the following words (1) and (2) below:

(1)

Kaargedi

<table>
<thead>
<tr>
<th>Term</th>
<th>Uurti</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>tìzzì</td>
<td>òìjìi</td>
<td>‘maternal uncle’</td>
</tr>
<tr>
<td>èèzi</td>
<td>èèjìi</td>
<td>‘four’</td>
</tr>
<tr>
<td>òìmìzì</td>
<td>òìmìjìi</td>
<td>‘ten’</td>
</tr>
<tr>
<td>pòzzì</td>
<td>pòjjìi</td>
<td>‘space area for greasing’</td>
</tr>
</tbody>
</table>

(2)

Few cases of palatalization are attested before [e] and [a]:

Kaargedi

<table>
<thead>
<tr>
<th>Term</th>
<th>Uurti</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>òòzzé</td>
<td>òòjjé</td>
<td>‘tough, thick’</td>
</tr>
<tr>
<td>òàzzà</td>
<td>òàjjà</td>
<td>‘place name’</td>
</tr>
</tbody>
</table>

Thus, we assume from the above examples that the opposition between the voiced alveolar fricatives [s] and [z] historically existed in the Midob language before it split into two dialects. However, after the split, one of the dialects (Kaargedi) has retained this opposition while the other (Uurti) retained the voiceless fricative [s] and developed the voiced counterpart [z] into a voiced palatal plosive [j]. Thus the voiced alveolar fricative [z] is missing in Uurti. The distribution of Kaargedi fricatives is shown in Table 2.

---

7 Jakobi (2006) studied the loss of syllable-final proto-Nubian consonants in some Nubian languages, including Meidob. One of her findings is the regular shift of Proto-Nubian s > Midob j which is attested, for instance, in kem.sì > ee.jì ‘four’. The data which Jakobi uses is from the Uurti dialect. In the Kaargedi dialect, however, the corresponding shift is s > z as attested in kem.sì > ee.zì ‘four’ because of the voicing assimilation, from the preceding lost nasal.
Table 4: The distribution of Kaargedi fricatives

<table>
<thead>
<tr>
<th>Word-initially</th>
<th>Intervocally</th>
<th>In consonant cluster</th>
<th>Word-finally</th>
</tr>
</thead>
<tbody>
<tr>
<td>[f]</td>
<td>tèfèrù ‘help’</td>
<td>kùfràtì ‘breath’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>sááfà ‘sharpen’</td>
<td>tùffèdì ‘bread’</td>
<td></td>
</tr>
<tr>
<td>[s]</td>
<td>sòòr ‘party’</td>
<td>pèèsì ‘deer’</td>
<td>tèssì ‘fat’</td>
</tr>
<tr>
<td></td>
<td>sòbbá ‘wedding’</td>
<td>pèsi ‘young brother’</td>
<td>tàssè ‘long’</td>
</tr>
<tr>
<td>[z]</td>
<td>èèzì ‘four’</td>
<td>ùzzì ‘fire’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>uzugedi ‘fighter’</td>
<td>pazza ‘place name’</td>
<td></td>
</tr>
<tr>
<td>[ʃ]</td>
<td>èèʃì ‘sister’</td>
<td>pàʃʃé ‘easy’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>kàáʃì ‘outer space’</td>
<td>‘pìʃʃá’ ‘wipe’</td>
<td></td>
</tr>
<tr>
<td>[h]</td>
<td>habidi ‘bird’</td>
<td>òrhì ‘cliff’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>hàrú ‘ant eater’</td>
<td>tedhem ‘I remembered’</td>
<td></td>
</tr>
</tbody>
</table>

Distribution of Sonorants

Nasals

Nasals commonly occur in the middle and double medial position. Mostly, palatal and velar nasal are attested word-initially in ideophones. In final position the velar and palatal nasal are not attested, but [n] and [m] do occur, particularly [m] as part of the perfective marker –am on verbs.
<table>
<thead>
<tr>
<th></th>
<th>Word-initially</th>
<th>Intervocally</th>
<th>In consonant cluster</th>
<th>Word-finally</th>
</tr>
</thead>
<tbody>
<tr>
<td>[m]</td>
<td>maam ‘no’</td>
<td>pɔjjímànɔtì ‘lion’</td>
<td>kórmì ‘wooden basin’</td>
<td>îirhàm ‘they came’</td>
</tr>
<tr>
<td></td>
<td>màám</td>
<td>tàrtìmà ‘seeds’</td>
<td>kòmmù ‘gourd’</td>
<td>‘iîthmì ‘I remembered’</td>
</tr>
<tr>
<td></td>
<td>mààmàyì ‘upper throat’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[n]</td>
<td>nànè ‘yours’</td>
<td>tàànì ‘monkey’</td>
<td>kànnússì ‘grand son’</td>
<td>òn ‘he’</td>
</tr>
<tr>
<td></td>
<td>nèn ‘this’</td>
<td>ucínícì boì</td>
<td>kàndì ‘k.f fruit’</td>
<td></td>
</tr>
<tr>
<td>[ŋ]</td>
<td>nírrî ‘scratch in quarelling’</td>
<td>tòðnì ‘hare’</td>
<td>àñnà ‘aunt’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>nàŋ ‘insect bite’</td>
<td>ëépë ‘many’</td>
<td>òñnì ‘forehead’</td>
<td></td>
</tr>
<tr>
<td>[ŋ]</td>
<td>ñook ‘animal sound’</td>
<td>tàñàzì ‘thigh’</td>
<td>àñnà ‘we’ incl</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ñèr ‘dog sound’</td>
<td>pàñàtë ‘desert’</td>
<td>tàñnà ‘prepare’</td>
<td></td>
</tr>
</tbody>
</table>

**Liquids and Glides**

As shown in Table 6, liquids and glides in Kaargedi (also in Uurti), never occur in word-initial position\(^8\). But they are attested in other word positions. Because of the non-occurrence of liquids in initial position, those loan words from Arabic whose initial consonant is a glide, put a vowel in front of the glide, for example, ‘iyaay ‘proper name’ ùwàádì ‘valley, proper-name’. Evidence for the phonemic opposition between Kaargedi consonants is illustrated in the following minimal and sub-minimal pairs (3) below.

---

\(^8\) The non-occurrence of liquids in word-initial position is a general feature of the Nubian languages.
(3)

/p/ /pàppà/ ‘blow’
/t, t/ /kàddì/ ‘tooth’
/c/ /táccì/ ‘outside space’
/k/ /sìrkì/ ‘government’
/s/ /pàðì/ ‘male sheep’
/s/ /èèzì/ ‘four’
/s/ /sùwè/ ‘hot’
/m/ /tààiì/ ‘upper arm’
/j/ /àŋŋà/ ‘aunt’
/r/ /òr/ ‘head’
/y/ /tóyyí/ ‘money’
/b/ /òbbà/ ‘grand father’
/d/ /kòttè/ ‘bitter’
/j/ /tájjì/ ‘shelter’
/g/ /sìrgì/ ‘king’
/s/ /páási/ ‘spring’
/z/ /èèsì/ ‘heat’
/h/ /hàwì/ ‘dry tree leaves’
/n/ /tàànì/ ‘monkey’
/ŋ/ /àŋŋà/ ‘they’
/l/ /òl/ ‘well’
/l/ /tóllé/ ‘deep’

Table 6: The distribution of Kaargedi liquids and glides

<table>
<thead>
<tr>
<th></th>
<th>Word-initially</th>
<th>Intervocally</th>
<th>In consonant clusters</th>
<th>Word-finally</th>
</tr>
</thead>
<tbody>
<tr>
<td>/l/</td>
<td>–</td>
<td>tǎólì ‘water bag’</td>
<td>tèllì ‘God’</td>
<td>ól ‘well’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>kàsélé ‘red’</td>
<td>àllì ‘porridge;</td>
<td>pàél ‘dog’</td>
</tr>
<tr>
<td>/r/</td>
<td>–</td>
<td>kòrəaàr ‘little sheep’</td>
<td>sìrdì ‘water pot’</td>
<td>àràr ‘male sheep’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>pàràndì ‘kind of fruit’</td>
<td>pàrhhì ‘one’</td>
<td>kòr ‘male calf’</td>
</tr>
<tr>
<td>/w/</td>
<td>–</td>
<td>hàwì ‘dry leaves’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>sùwè ‘hot’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/y/</td>
<td>–</td>
<td></td>
<td>óyyì ‘sauce’</td>
<td>óy ‘1sg subject pronoun’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>tóyyí ‘money’</td>
<td></td>
</tr>
</tbody>
</table>
Consonant Length

All Kaargedi consonants can be geminated. However gemination seems to be phonemic only with some sounds, so far. Also, this research has shown that geminated consonants usually follow a short vowel, but this is not predictable. Examples are shown in example 4, below:

- a. ṣôṣi ‘water’  uﬀi ‘boy’
- b. kéélé ‘red’  kállé ‘tall’
- c. èèzi ‘four’  ûzzi ‘fire’

Consonant gemination in Kaargedi results sometimes from a morphophonemic rule. This will be discussed in examples 12 and 13.

Vowels

The vowel system of Kaargedi (also Uurti) consists of six vowels, the front vowels /i,e/, central vowels /ə,a/, and the back vowels /u,o/. Each of these vowels can be short or long. See the vowel inventory in example 5.

(5)

<table>
<thead>
<tr>
<th></th>
<th>front</th>
<th>central</th>
<th>back</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
<td>i</td>
<td>ə</td>
<td>u</td>
</tr>
<tr>
<td>mid</td>
<td>e</td>
<td>ə</td>
<td>o</td>
</tr>
<tr>
<td>low</td>
<td></td>
<td>a</td>
<td></td>
</tr>
</tbody>
</table>

The syllable of a Kaargedi word can be open or closed. All Kaargedi vowels participate in the respective syllable types. Monosyllabic words can have short and long vowels as shown below.

(6)

- kôr ‘male calf’
- sôôr ‘party’

With regard to the number of vowels in the inventory, Midob, including Kaargedi and Uurti, is not similar to other Nubian languages, such as Nobiin and Kenzi/Dongolawi. Werner (1993: 21) noted that these languages have a five-vowel system (/i, e, a, o, u/) whereas Midob (Uurti) has an additional
mid central vowel, (ə). Werner claims that this central vowel is a later development in Midob. It corresponds to each of the five other vowels found in NN. The central vowel in the present description of Kaargedi, as well as in Uurti, is an independent phoneme and has a contrastive opposition with the rest of the vowels, as illustrated by minimal and sub-minimal pairs in example 7.

\[
\begin{array}{ll}
/\text{i/ə/} & \text{iddì ‘woman’} \\
/\text{e/ə/} & \text{seèd ‘back’} \\
/\text{a/ə/} & \text{táá ‘raod’} \\
/\text{u/ə/} & \text{úzzì ‘fire’} \\
/\text{o/ə/} & \text{pòòd ‘water pool’}
\end{array}
\]

\[
\begin{array}{ll}
/\text{əddì ‘two’} & /\text{sòòd ‘stick’} \\
/\text{tèò ‘cow’} & /\text{èzzì ‘hand’} \\
/\text{pòòd ‘between’}
\end{array}
\]

Research has shown that the central vowel in the speech of the Uurti speaker is sometimes, especially when it is short, phonetically realized as a high back vowel [u] whereas this realization is not noticeable in the speech of the Kaargedi dialect. Evidence of phonemic contrast between the other vowels is also attested.

\[
\begin{array}{ll}
/\text{a/o/} & \text{pàzza ‘seasonal festivals’} \\
/\text{pààdì ‘water stream’} & /\text{pòzzé ‘thick’} \\
/\text{pèccì ‘kid of goat’}
\end{array}
\]

\[
\begin{array}{ll}
/\text{kaàr ‘tree’} & /\text{èësa ‘name of place’} \\
/\text{kiùr ‘drum’} & /\text{kaàr ‘tree’} \\
/\text{izzi ‘smell’} & /\text{ùzzì ‘fire’} \\
/\text{eèr ‘neck’} & /\text{òòr ‘mountain’} \\
/\text{kòòd ‘blood money’}
\end{array}
\]

Vowel length in Kaargedi (also in Uurti) is contrastive. Evidence for the opposition between short and long vowels is shown by the following minimal and sub-minimal pairs.

\[
\begin{array}{ll}
/\text{i,ii/} & \text{ír ‘person’} \\
/\text{éssì ‘wind’}
\end{array}
\]

\[
\begin{array}{ll}
/\text{ír ‘come’} & /\text{èësi ‘heat’}
\end{array}
\]
\[/ə/\text{̟ə}/\hspace{1em} \ddot{a} \text{‘house’} \hspace{1em} \ddot{a} \ddot{a} \text{‘big valley’} \\
/a/\text{̟a}/\hspace{1em} \ddot{p} \text{‘one’} \hspace{1em} \ddot{p} \ddot{a} \ddot{r} \ddot{d} \text{‘thin’} \\
/o/\text{̟o}/\hspace{1em} \ddot{o} \text{‘head’} \hspace{1em} \ddot{o} \ddot{r} \text{‘mountain’} \\
/u,\text{uu}/\hspace{1em} \ddot{u} \ddot{d} \text{‘black’} \hspace{1em} \ddot{u} \ddot{d} \ddot{d} \text{‘belt used for animals’}\]

**TONE**

Thelwall (1983) and Werner (1993) state two level tones, high and low, for the Uurti dialect of Midob. Kaargedi, as the initial description suggests, also has two level tones, high and low. The tone bearing unit is the syllable. Monosyllabic words (with a short or long vowel), can bear either of the two tones, as shown by the following example.

(10) a. íf ‘person’
    b. tif ‘drink’
    c. ðd ‘house’
    d. tøød ‘grave’

Disyllabic words can have the following tonal combinations:

- HH údí ‘black’
- HL géélè ‘red’
- LL ùùrì ‘brown’
- LH àddé ‘white’

**Lexical Tone**

The high and low tones are lexically contrastive in both dialects. Evidence for the phonemic status of Kaargedi tones is shown in example 11.

(11) a. súwé ‘hot’ \hspace{1em} sùwè ‘net’
    b. tɛssí ‘iron’ \hspace{1em} tɛssì ‘oil, fat’
    c. àŋŋa ‘we, inclusive’ \hspace{1em} àŋŋà ‘they’
    d. ártì ‘kind of fruit’ \hspace{1em} àrtì ‘breast’
    e. ûffà ‘light fire’ \hspace{1em} ûffà ‘step on’
g. ḏd ‘house’

h. ěr ‘man, person’

ḏḏd ‘seasonal stream’

ḏr ‘head’

Generally, lexical tones, when they occur in complex forms, sometimes change, for example ḏl ‘well’ + n + ěál ‘mouth’ > ḏḷḷáál ‘opening of the well’

The gemination of l in ḏḷḷááł indicates the assimilation rule of the ḏ + n (the genitive marker). See section with example 14.

**Grammatical Tone**

Grammatical tones have been observed in some instances of number formation. This is also the case in Uurti (Werner, 1993). However the available data in Kaargedi is not sufficient to identify types of grammatical tones. This needs more data collection and investigation.

**Morphophonemic Alternations**

Morphophonological alternations are very common in Midob. A number of these alternations have been observed in different grammatical structures. In the following section we will look at the different types of morphophonological processes that occur in the genitive and diminutive noun phrases. All examples are from Kaargedi dialect.

**Genitive Phrase**

The genitive in Kaargedi (also in Uurti) is marked by -n- which always comes between the head noun and the modifying noun. There are a number of morphophonological alternations encountered when the genitive noun phrase is constructed, which consists of the dependant noun (=possessor), the genitive marker -n- and the head noun (=possessed). These alternations are highly conditioned by the phonological environment, that is, the final sound of the dependant noun and the first sound of the head noun, as shown by the patterns discussed below.

**Progressive Assimilation plus Gemination**

*Pattern:* Plosive+n+C/V

When the dependant noun preceding the genitive marker -n- ends with a plosive and the head noun begins with a consonant or vowel, two processes take place. First, the final plosive of the dependant noun assimilates to the following nasal (the genitive marker), then it assimilates to the initial
consonant of the modifying noun, and together they form a geminate consonant. See examples 12 and 13, below.

(12)  
a. tìmmìt ‘giraffe’ + n + sèd ‘back’ > tìmmìssèèd ‘the back of the giraffe’  
b. támmit ‘elephant’ + n + súur ‘herd’ > támmissúur ‘the herd of the elephants’

In the case of the second noun having an initial vowel, the final plosive of the first noun assimilates to the genitive nasal, and together they form a geminated nasal.

(13)  
a. tùrùd ‘mist’ + n + ùd ‘day’ > tùrùnnùd ‘the day of the mist’  
b. àd ‘house’ + n + òr ‘head’ > ònnòr ‘the head of the house’

**Regressive Assimilation plus Gemination**

**Pattern:** liquid + n + V  
If the dependant noun ends in a liquid, and the head noun has an initial vowel, the genitive nasal assimilates regressively to the preceding liquid, and together they form a geminated liquid. See the examples in example 14 below.

(14)  
a. kàär ‘tree’ + n + òr ‘house’ > kààrròr ‘the head of the tree’  
b. pòòl ‘dog’ + n + ààl ‘mouth’ > pòòlláál ‘the mouth of the dog’

**Deletion plus Voicing**

**Pattern:** liquid + n + plosive  
If the final consonant of the dependant noun is a liquid, and the initial consonant of the head noun is a voiceless plosive, the genitive nasal is deleted, but its feature [ + voiced] is adopted by the plosive so that it becomes voiced. Examples are shown in 15.

(15)  
a. kàär ‘tree’ + n + pòndáàr ‘flower’ > kààrbondáàr ‘flower of the tree’  
b. òl ‘well’ + n + túgúr ‘turtle dove’ > òldúgúr ‘the turtle dove of the well’  
c. pél ‘goat’ + n + kàòfì ‘horn’ > pèlgàòfì ‘the horn of the goat’
Observation has shown that the voicing rule doesn’t occur when the initial consonant of the second noun is a sound other than a plosive. See the examples in 16 below.

(16)

a. kààr ‘tree’ + n + sëéd ‘back’ > kààrsëéd ‘the back of the tree’

b. pààl ‘dog’ + n + súúr ‘herd’ > pààlsúúr ‘the herd of the dogs’

**FINAL PLOSIVE & GENITIVE NASAL DELETION**

*Pattern: Plosive + n + S*

Another deletion process occurs when the first noun (monosyllabic) ends with a plosive and the second noun has an initial /s/. In this case, the final plosive and the genitive nasal are deleted. See the examples in 17.

(17)

a. kùùd ‘bull’ + n + sùúr ‘herd’ > kùùsùúr ‘the herd of the bulls’

b. tèèd ‘grave’ + n + sëëd ‘back’ > tèèsëëd ‘the back of the grave’

c. sòò ‘seasonal stream’ + n + sóòì ‘cliff’ > sòòsòì ‘the cliff of the stream’

d. pàád ‘low land’ + n + sóòrì ‘farm’ > pàássòrì ‘the farm of the low land’

**HOMORGANIC ASSIMILATION + VOICING**

*Pattern: C/V + n + plosive*

A nasal is always articulated at the same place of articulation as the following plosive. A voiceless plosive automatically becomes voiced after a nasal, according to the voicing rule. For examples see 18.

(18)

a. d + n + p
  kòòd ‘blood money’ + -n- + pà ‘owner’ > kòòmbá ‘the owner of the blood money’

b. d + n + t
  àd ‘house’ + n + tèè ‘stomach’ > àndèè ‘the house of the cow’

c. t + n + k
  ámmát ‘elephant’ + -n- + kùúd ‘tooth’ > ámmángúúdí ‘ivory’

---

9 Voicing in Meidob seems to be a general rule for voiceless plosives after sonorants, e.g.

p>b on ‘my’ + pesi ‘little brother’ > ombesi ‘my little brother’

t>d ùlli ‘stone’ + tèssé ‘green’ > ùllidèsé ‘green stone’

k>g nèn ‘this’ + kùùd ‘bull’ > nèngòòd ‘this bull’
It has been noticed that the genitive marker sometimes appears as -n- and then none of the above mentioned processes take place. This is the case when the first noun ends in a vowel and the second noun has an initial vowel. The pattern is: Vowel + n + Vowel, as shown in 19.

(19)  
a. picci ‘lamb’ + n + òr ‘head’ > piccinòr ‘the head of the lamb’  
b. tàà ‘cow’ + n + àål ‘mouth’ > tàànnàál ‘the mouth of the cow’

**Diminutive Form**

The noun in Kaargedi can have a diminutive form marked by the suffix -nìfi. In Uurti it is formed by the variant -nìci. The initial nasal of the diminutive marker alternates in terms of the final sound of the preceding noun. In this respect progressive and regressive assimilation plus gemination occur. See the following patterns and the examples.

**PROGRESSIVE ASSIMILATION PLUS GEMINATION**

Pattern: Plosive+n

The final plosive of the noun assimilates progressively to the diminutive nasal, and they form together a geminated nasal. See the example below.

(20)  
a. tìmmìt ‘giraffe’ + nìfi’ > tìmmìnnìfi ‘small giraffe’  
b. òd ‘house’ + nìfi’ > ònnìfi ‘small house’

**Regressive Assimilation plus Gemination**

Pattern: liquid + n

The diminutive nasal assimilates regressively to the final liquid of the noun and they form together a geminated liquid.

(21)  
a. kààr ‘tree’ + nìfi’ > kààrrìfi ‘small tree’  
b. òl ‘well’ + nìfi’ > òlliìfi ‘small well’

The final vowel of the noun in the diminutive form is optionally deleted before the diminutive marker. This is attested mostly in fast speech. The following phrases are freely used.

(22)  
a. úll(i) ‘stone’ + nìfi ‘diminutive’ úllinìfi / úllnìfi ‘small stone’  
b. êèf(i) ‘sister’ + nìfi ‘diminutive’ êèfinìfi / êèfniìfi ‘little sister’
CONCLUSION

Midob has two dialects, Uurti and Kaargedi. Apart from a few differences concerning pronunciations and phonemes distribution, these two dialects are mutually intelligible. As almost all the published work done so far was based on the Uurti dialect and no attempts have been made to shed light on the other dialect, Kaargedi, the present paper has been an undertaking to describe the phoneme patterns of Kaargedi, and compare them with those in Uurti. In addition, this paper investigates some morphophonological patterns occurring in the formation of the genitive noun phrases and the diminutive.

References


