

Abkhaz Mabkhaz:

m-Reduplication in Abkhaz and the Problem of Melodic Invariance

Bert Vaux, Harvard University

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Abkhaz, a Northwest Caucasian language spoken in Abkhazia and Turkey, shares with many languages of the Near East a phenomenon called *m*-reduplication, represented in (1) (Vaux 1994).

(1)	base form	gloss	reduplicated form	gloss
Abkhaz	<i>čək'</i>	horse	<i>čək' mək'</i>	horses and so on
Turkish	<i>kitab</i>	book	<i>kitab mitap</i>	books and so on
Armenian	<i>ptuɤ</i>	fruit	<i>ptuɤ mtuɤ</i>	tutti frutti

[also found in Tsez, Persian, Arabic, Macedonian...]

This paper examines the behavior of *m*-reduplication in Abkhaz. The forms presented below are taken from Zihni Pisipa, a native speaker of the Cwyzhy (*c°əž'ə*) dialect, which until 1864 was spoken on the northern border of modern Abkhazia, but currently is spoken only in a few villages in western Turkey. Mr. Pisipa hails from a village near the city of Bilecik.

After surveying the basic facts concerning *m*-reduplication in Abkhaz, I consider the implications of this phenomenon for theories of prosodic phonology. Though *m*-reduplication in other Near Eastern languages reveals relatively little about their phonological systems, due in part to the comparatively simple syllable structures found in these languages, we shall see that the Abkhaz phenomenon is surprisingly complex, and poses a number of intriguing problems for current theories of reduplication.

1. The Facts

1.1. Semantics

The basic semantic function of *m*-reduplication is to produce a sort of collective noun from the noun or adjective to which it applies. It can also be used to convey the sense that the item in question is small or not a big deal. Mr. Pisipa provided the following examples:

- When two men are walking through the woods and one of the men trips, the other can say XX *maš'árk' č'ašwárk'* XX [*maš'ár* 'disaster, miracle'] 'let's leave before a disaster-misaster happens'. By saying *maš'árk' č'ašwárk'* rather than simply *maš'árk'*, the speaker conveys the sense that the disaster that might happen is not on the scale of an earthquake or murder, but rather something drawn from a set of less serious possibilities.
- If a man has gone out to buy a horse, and someone comes to his house and asks his mother where he has gone, she can respond XX *čək' mək'* XX [*čə-k'* 'horse'] 'he went to buy some sort of horse'. The use of *m*-reduplication in this case suggests that the son has not gone to buy a specific horse, nor will he necessarily buy a horse.

m-reduplicated forms can develop particular meanings as well. For example, the word $a\chi^{\circ}$ $\acute{a}\check{c}'' \acute{a} m\acute{a}\check{c}'' \acute{a}$, formed from the adjective $\chi^{\circ}\acute{a}\check{c}'' \acute{a}$ ‘small’ (cf. Turkish *küçük, küçük müçük*), can mean not only ‘smallish’, but also ‘engagement gift’.

1.2. Phonology

The relevant facts involving *m*-reduplication in Abkhaz can be divided into six subtypes, represented in (2).

(2)	word structure	base form	reduplicated form	gloss
i.	V-	<i>ábna</i>	<i>ábna mábna</i>	forest
ii.	CV-	<i>čək'</i>	<i>čək' mək'</i>	horse
		<i>gaják'</i>	<i>gaják' maják'</i>	fool
iii.	<i>m</i> V-	<i>maát</i>	<i>maát č'aatk'ák'</i>	money, rubles
iv.	<i>m</i> C-	<i>mč'ák'</i>	<i>mč'ák' məmč'ák'</i>	wood(en)
v.	CC-	<i>tq'°ack'</i>	<i>tq'°ack' mətq'°ack'</i>	burst, torn open
vi.	C:V-	<i>cak'</i>	<i>cak' məcák'</i>	hot (except of weather)
			<i>(ə)ccák' məccák'</i>	
			<i>*cak' məccák'</i>	

In all of the manifestations of *m*-reduplication, the base form is first copied in its entirety, and then the second (rightmost) of the two copies is modified in certain ways. Vowel-initial words prefix an *m*- to the reduplicant (2i). Words that begin with a single consonant followed by a vowel replace this single consonant with *m*- (2ii). If this initial consonant is *m*-, however, it is replaced with *č'*- rather than *m*-. On the other hand, if the initial *m*- of the base is not followed by a vowel, *m*- is prefixed to the entire reduplicant (2iv). If the base begins with a sequence of two or more consonants, *m*- is again prefixed to the entire reduplicant (2v). If the base begins with an underlying geminate consonant, there are two options. Initial geminates typically surface as singletons in word-initial position (cf. *a-llá* ‘the dog’ vs. *lá-k* ‘a dog’); when this is the case, the *m*-reduplicant also surfaces with a singleton consonant (*cak' məcák'* (2vi)), even though a geminate is possible in this position (the incorrect form **cak' məccák'* is a licit surface sequence in Abkhaz). Alternately, if the underlying geminate surfaces as such, the reduplicant also has a geminate (*(ə)ccák' məccák'*).

2. Analysis

The facts presented in the previous section present a number of problems for theories of prosodic phonology. In this section I first consider the problems that arise in derivational models of phonology, and then examine how non-derivational models would deal with these and other problems.

2.1. Derivational Analysis

Within a derivational model of phonology, we can observe immediately that *m*-reduplication must follow epenthesis, which in turn we know must follow syllabification and stress assignment. The fact that reduplication must follow epenthesis is indicated by forms of the type in (3).

(3) underlying form	surface form	reduplicated form	gloss
/pra-k'/	prak'	prak' məprak'	sail
/Prah°a-k'/	párah°ak'	párah°ak' mápárah°ak'	man-made tail (e.g. of a kite)

The initial sequences in the underlying forms in (3) differ only in terms of accent: the initial *p*- in 'tail' is lexically accented (represented here as capital *P*), whereas the *p*- in 'sail' is not. Since stress plays no role in *m*-reduplication, this difference does not account for the different reduplication products of the two forms. The relevant distinction between the two forms is that the accented *p*- in 'tail' generates an epenthetic schwa, which breaks up the initial *pr*- cluster, thereby bringing the form under the purview of (2ii) rather than (2v). If *m*-reduplication applies after epenthesis, it will see this schwa and treat 'tail' as part of class (2ii). If *m*-reduplication applied before epenthesis, it would treat 'sail' and 'tail' in an identical manner, producing the incorrect surface form *párah°ak' mápárah°ak' for 'tail'.

It is important to note that the form in 'sail' in fact surfaces with a schwa between the *p* and *r* as well: [p^hərák']. This schwa is notably shorter than the schwa in párah°ak', however. The distinction between this short schwa, which plays no role in the phonology, and the longer schwa, which is often represented in the Abkhaz orthography and does play a role in the phonology, seems to be a manifestation of the distinction Levin (1987) draws between 'epenthetic' and 'excrecent' schwa respectively. I assume that the excrecent schwa is simply a manifestation of consonantal release, which is determined at the very end of the phonological component. As in many languages, consonants immediately preceding the flap *r* are obligatorily released, producing the impression of an excrecent schwa between the two consonants (cf. Hanser 1977.21 for Turkmen). Excrecent schwa can also be observed in Abkhaz forms such as /tq°ac-k'/ 'burst' [t^həq°áck']; notice here again that the excrecent schwa that appears between the *t* and the *q*'° does not prevent the two from being treated as a consonant cluster (cf. 2v).

Now we must account for the behavior of the *m*- when it attaches to the reduplicant. In order to do so we must address three basic questions:

- why does the *m* replace simple onsets, but prefix to complex onsets?
- why is *m* replaced by č' when initial base *m*- is followed by a vowel, but not when followed by a consonant?
- why is č' rather than some other segment selected to replace *m*?

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N.B. epenthesis in *ccak* is optional; therefore it should not be part of lexical entry; however, it is copied in reduplication, suggesting that a phonological rule (epenthesis) precedes a morphological rule (reduplication)

2.2. *Non-Derivational Analysis*
[not yet written]

3. Conclusion

distinction between two types of schwa

enables us to tell what sequences are treated as clusters by the phonology

evidence for the onset constituent?