

**Philological sciences****Филологические науки**

UDC 81

**The formation of Udi plurals**

Wolfgang Schulze

Faculty of Humanities of Matej Bel University, Slovakia  
40 Tajovského Str., 974 01 Banská Bystrica  
PhD (general linguistics), Full Professor  
E-mail: wolfgang.schulze@umb.sk

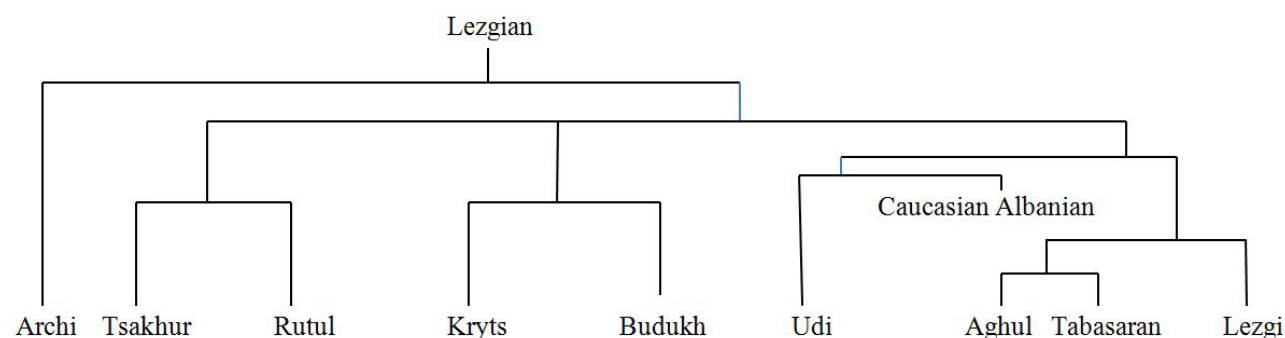
**Abstract.** The East Caucasian languages are marked for rather heterogeneous strategies to form plurals. Typically, we observe larger sets of allomorphs that reflect at least in parts older strategies of semantic-based nominal subcategorization. In addition, we have to refer to distributional criteria related to the phonotactics of the given nouns. The present paper offers a closer inspection of plural formation in Udi and Caucasian Albanian, a possible ancestor of Udi, both from a synchronic perspective and diachronic perspective.

**Keywords:** East Caucasian; morphology; plural formation; allomorphs.

**1. INTRODUCTION**

Udi is a minority language in Azerbaijan that belongs to the East Caucasian language family. More precisely, it can be classified as a member of the Southeast Caucasian (Lezgian) branch, having developed from an Eastern Samur variety of the proto-language. Udi is spoken by some 4.000 people, mainly in the village of Nij (*niʒ*) in Northwestern Azerbaijan. Some Udi speakers still live in the adjacent village of Vartashen (now Oguz), although the bulk of Vartashen Udis left the village in 1989/90 and fled to places in Northern Armenia, Russia, and Kazakhstan in the context of the Armenian-Azerbaijani conflict. Already in 1922, a group of Udis from Vartashen has migrated to Eastern Georgia and has founded the settlement Zinobiani/Oktomberi. Historical evidence suggests that before 1832, Udi had been spoken in a wider ensemble of villages and settlements, including Vardanlu, Mirzabeily, Sultan-Nukha, Dzhurlu, Malykh, Engikend, Ermanit, Mukhants, Oraban, Kungüz, Kutkashen (*Qəbələ*), Kormukh, Gish, and Bum. Today, the village of Nij is marked for a rather compact Udi population (plus two Azeri quarters). Of the 14 quarters (*mahalla*), namely Falçilli, Mançili, Ağdaläkli, Melikli, Ferimli, Malbel, Vezirli, Daläkli, Çirmählä, Daramählä, Darabağ, Gođibeyli, Yalgašli, and Abdall, only the last two are inhabited by Azeris. The situation in Vartashen had been rather different from this pattern: Toward the end of the 19th century, the majority of Vartashen inhabitants was formed by Udis and Armenians. Additionally, there had been Christian Tātīs, Jewish Tātīs, Lezgis, and Azeris. The number of Azeris gradually increased in the 20th century [1].

Udi's closest relative is Caucasian Albanian ([2], [3], [4] for details). However, we cannot claim that Udi is an immediate descendant from Caucasian Albanian [4]. Linguistic evidence from CA suggests that Udi is an off-spring of a dialectal variant of the language documented in the palimpsests (or even of a distinct language). Both CA and Udi are marked for innovations not common to both languages. From that it follows that both varieties (Caucasian Albanian and 'Early Udi' must have developed out of a common language that again was an early off-spring of Eastern Samur. Graphic (1) illustrates the position of Udi within the world of Lezgian languages schematically:



Graphic 1: *The Lezgian languages*

Udi is marked for various substrates and adstrates some of which do not show up in other languages as expressively as in Udi. This holds especially for the long-standing contact with Armenian and Northwest Iranian since Antiquities. In addition, Persian and Azeri have played a crucial role in the formation of Udi grammar and lexicon.

In my paper, I want to address of specific question of Udi grammar, namely that of number marking (see [5] for a general typology of number marking). This feature not only is a relevant parameter concerning the historical grammar of the East Caucasian languages less sufficiently described for quite many East Caucasian languages, but also an indicator of possibly underlying strategies of nominal categorization (especially, if number marking shows up as a set of allomorphic forms). In Udi, number marking is derivational rather than inflectional. It can modify the referential semantics of nominal stems both in a quantitative and qualitative respect. Number is morphological with most 'object-oriented' referential words, both basic and derived, but lexical with lexemes that cover the domain of communicative reference (personal pronouns). Prototypically speaking, Udi has only two numbers: Singular (unmarked) and plural (marked). Dual strategies can be identified with certain reduplicating nouns that refer to paired body parts. Except for one case, a singulative is not expressed morphologically, but lexically, using the numeral *sa* 'one' that precedes the noun in question.

## 2. MATERIALS AND METHODS

The data referred to in this brief presentation stem from various sources that deal with the grammar of Udi (e.g. [6], [7], [8], [9], [10], [11]) as well as from texts, own fieldwork notes, and lexical material ([12], [13]). Methodologically, I follow the standards of descriptive grammar and language typology (supplemented by some arguments stemming from Cognitive Linguistics).

## 3. DISCUSSION

### 3.1 Basic patterns of plural formation.

Plural marking in Udi is suffixal. It is characterized by a high degree of allomorphy. This feature is also present with most other Lezgian languages and should be related to plural marking techniques in Proto-Lezgian. In Udi, the plural allomorphs are conditioned lexically: The whole set of plural markers is distributed according to both semantic and formal characteristics of the nominal stem. However, the formation of a plural noun is not always predictable from a synchronic point of view. In many cases, the given allomorph reflects earlier criteria of selection. In addition, for some words more than one plural marker can be described. In composition, the final lexeme determines the choice of suffix.

In principle, Udi can be described as a set noun language. By this is meant that the basic term usually refers to a given set of elements, not to an individual element of this set (see [14] for this typology). This can be inferred, for instance, from the fact that plural markers usually lack (especially with non-human referents, when counted (e.g. *bip' əjel/xod/ze* 'four sheep/trees/stones' etc.). Also, personal agreement on the verb is usually in the singular in such instances (*me p'a' ze bi'bi-ne* 'these two stones are heavy' (lit: 'this two stone is heavy')).

From a diachronic perspective, some of the plural suffixes probably had a specific semantic connotation that was (in parts) correlated with nominal classification. However, analogical processes have considerably obscured the original classes that were perhaps marked for the

opposition [ $\pm$  animate] or [ $\pm$  human]. Today, we can describe three types of plural marking: a) basic, b) polymorph(em)ic, and c) collective. In the following sections, these three types are discussed in more details. Note that in case the loan nature of a term is relevant, only the immediate source (mainly Azeri) is given. (1) illustrates the set of plural markers documented for Udi:

(1)	Basic	Derived
	-ux ~ -ox ~ -xo	-ur-ux ~ -ur-xo
	-ur	-m-ux
	-r	-x-ox
		-q'-ox
		-r-x-ox
		-m-x-ox

Today, all plural morphemes are stress attracting. The suffix *-r* used with referentialized forms probably was stress neutral. Final *-x* normally undergoes voicing in inflected forms (see below). This process is coupled with the frequent loss of the preceding vowel *-u-* which regularly causes labialization of the subsequent vowel of the inflectional morpheme. The basic pattern is *-ux + V(C-) > -ġ-o(C-)*. Note that this pattern has already been rather stable in Caucasian Albanian. Nevertheless, the Caucasian Albanian paradigm of number marking seems to be marked for stronger semantic properties than it is the case in Modern Udi.

### 3.2 Monomorphemic plurals.

In Vartashen, monomorphemic plurals involve the two suffixes *-ux ~ -ox*, and *-ur ~ -r*. Today, *-ux* is the standard plural marker in Vartashen Udi. Its provenience is obscure. It is totally unknown in other Lezgian languages as well as in East Caucasian itself. Attempts to relate the suffix to the Svan plural marker  $\chi$  have failed. Instead, we should consider the possibility of relating the suffix to a local variant of the Armenian plural *-k<sup>c</sup>* that would have undergone spirantization (the representation of final aspirated *-k<sup>c</sup>* in Armenian loans by *-x* is incidentally documented for Udi). Yet, this assumption does not explain the preceding vowel that is alien to Armenian. Perhaps it is taken in analogy from the second basic plural marker *-ur* (see below).

More than a half of all Udi nouns used the suffix *-ux* to form their plural. Most of them are either polysyllabics or (secondary) monosyllabics (see below). Nouns ending in 'weak' *-a* often change this vowel to *-i* when the plural morpheme *-ux* is added (*k'aša* 'finger' > *k'ašix* etc.). The plural suffix *-ux* is restricted to the dialects of Vartashen, Upper Nij, and Okt'omberi. The other variants of Nij use the variant *-xo ~ -ox*, which has a broader distribution than the standard plural *-ux*, see below. In order to illustrate the default suffix in Vartashen, some examples are given in (2) (Vartashen Udi):

(2)	<i>abazak'</i>	>	<i>abazak'ux</i>	'thief'
	<i>adamar</i>	>	<i>adamarux</i>	'man, person'
	<i>älämät</i>	>	<i>älämätux</i>	'sign'
	<i>apči</i>	>	<i>apčix</i>	'liar'
	<i>aq' ~ arx</i>	>	<i>aq'ux ~ arxux</i>	'small pitch'
	<i>arum</i>	>	<i>arumux</i>	'wheat'
	<i>aslan</i>	>	<i>aslanux</i>	'lion'
	<i>a'il</i>	>	<i>a'ilux</i>	'child'
	<i>baba</i>	>	<i>babaux</i>	'father'
	<i>be'ġa'l</i>	>	<i>be'ġa'lux</i>	'overseer'
	<i>be'inś</i>	>	<i>be'inśux (~ be'inśurux)</i>	'priest'
	<i>biq'al</i>	>	<i>biq'alux</i>	'trapper'
	<i>c'ic'ik'</i>	>	<i>c'ic'ik'ux</i>	'chicken'
	<i>čälibiq'al</i>	>	<i>čälibiq'alux</i>	'fisherman'
	<i>čoban</i>	>	<i>čobanux</i>	'shepherd'
	<i>dizik'</i>	>	<i>dizik'ux</i>	'snake'

<i>durut'</i>	>	<i>durut'ux</i>	'wooden material'
<i>eġel</i>	>	<i>eġelux</i>	'sheep'
<i>farišt'ä</i>	>	<i>farišt'iu</i>	'angle'
<i>günäh</i>	>	<i>günähux</i>	'sin'
<i>günähnut'</i>	>	<i>günähnut'ux</i>	'correct person'
<i>hampi</i>	>	<i>hampiux</i>	'elder'
<i>isp'at'ux</i>	>	<i>isp'at'ux</i>	'testimony'
<i>k'ok'oc'</i>	>	<i>k'ok'oc'ux</i>	'hen'
<i>meid</i>	>	<i>meidux</i>	'body, corpse'
<i>nana</i>	>	<i>nanaux</i>	'mother'
<i>ore'in</i>	>	<i>ore'inux</i>	'spring, source'
<i>p'uri</i>	>	<i>p'uriux</i>	'dead person'
<i>partal</i>	>	<i>partalux</i>	'coat'
<i>penec'</i>	>	<i>penec'ux</i>	'plough'
<i>pexambar</i>	>	<i>pexambarux</i>	'prophet'
<i>q'ačaj</i>	>	<i>q'ačajux</i>	'robber'
<i>q'ullug &amp; č'i</i>	>	<i>q'ullug &amp; č'iu</i>	'servant'
<i>q'umq'um</i>	>	<i>q'umq'umux</i>	'snail'
<i>šu(i)e</i>	>	<i>šu(i)ux</i>	'bear'
<i>xinär</i>	>	<i>xinärux</i>	'girl, daughter'
<i>zira</i>	>	<i>ziraux ~ ziriux</i>	'thyme'

Monosyllabic nouns that have the *-ux*-plural usually are reduced variants of older bisyllabic words, compare *aq'* 'small pitch' < Azeri *arık*, *dör* 'period of time' < \**dövär*, *koi* 'sleeve' < \**kolin*, *q'ač'* < *q'ač'i* 'what has been made narrow' > 'gorge' etc. Hence, it is reasonable to claim that *ux*-plurals are basically coupled with polysyllabic nouns. Note, however, that in Caucasian Albanian, this distributional pattern is less evident. Here, a small number of monosyllabic nouns add the *-ux*-plural, e.g. *il'* 'word' > *il'-owx*, *q'ar* 'tribe' (lit.: 'separated unit') > *q'ar-owx* etc.

The Nij variant *-xo ~ -ox* is more widespread than Vartashen *-ux*. In Nij, it sometimes occurs with nouns that show a complex plural in Vartashen, compare:

- (3) *araba* > N. *arabaox* (V. *arabamux*) 'chariot'  
*avans* > N. *avansxo* (V. *avansmux*) 'attack'  
*axt'a* > N. *axt'aiox* (V. *axt'amux*) 'castrated boar'  
*azar* > N. *azarxo* (V. *azarmux*) 'illness'  
*amdar* (N.) > *amdarxo* (V. *adamarux*) 'person'  
*dällägxana* > N. *dällägxanaox* (V. *dällägxanamux*) 'bath, hammam'  
*dizik* 'N. *dizik'xo* (V. *dizik'urux*) 'snake'

The two Nij variants *-ox* and *-xo* are undoubtedly related to Vartashen *-ux*. Nevertheless, it is difficult to describe this relationship more exactly. First, the varying vocalization (*-u-* vs. *-o-*) cannot be explained by the impact of surrounding sounds (i.e., by assimilation). There is a small number of Udi terms that uses the *u/o*-opposition to form lexical contrasts, compare:

- (3) *q'o'-ux* 'barks'  
*q'o'l-ox* 'trousers' (pl. tantum, metonymic use of *q'o'l* 'bark')  
*gor(gor)-ux* 'beanpoles'  
*gor-ox* 'poor, harmless, ill person' (pl. tantum, metaphoric < Caucasian Albanian *gorowx* 'sin(s)')  
*k'od(a)-ux* 'wooden shovels'  
*k'od-ox* 'temples' (pl. tantum, metonymic use of *k'oda* 'shovel')

In Vartashen, the *-o*-variants are most often met with collectives, see below. It thus seems reasonable to assume that the *-u/o*-opposition has once encoded some kind of yet obscured morphological contrast. On the other hand, it can also be claimed that the Nij plurals *-ox ~ -xo*

have resulted through analogy from the oblique cases that always show *-o-* in the vocalization of case suffixes, cf. the following excerpt of the case paradigm (*adamar/amdar* 'person'):

(4)		Vartashen		Nij
		SG	PL	SG
				PL
	Absolutive	<i>adamar</i>	<i>adamar-ux</i>	<i>amdar</i>
	Ergative	<i>adamar-en</i>	<i>adamar-ġ-on</i> < * <i>-ux-en</i>	<i>amdar-en</i>
	Genitive	<i>adamar-i</i>	<i>adamar-ġ-oy</i> < * <i>-ux-ay</i>	<i>amdar-i</i>
	Dative	<i>adamar-a</i>	<i>adamar-ġ-o</i> < * <i>-ux-a</i>	<i>amdar-a</i>
				<i>amda-xo</i>
				<i>amdar-xo-n</i>
				<i>amdar-x-o(y)</i>
				<i>amdar-x-o</i>

The distribution of *-ox* vs. *-xo* in Nij is normally controlled by the stem auslaut: Polysyllabic V-final nouns take *-ox*, polysyllabic C-final nouns take *-xo*, compare:

(5)	<i>araġač-xo</i>	'broken twigs of mulberry tree'
	<i>älžäy-xo</i>	'glove' (< * <i>älžäk-</i> , compare Azeri <i>alcək</i> )
	<i>bač'an-xo</i>	'backs'
	<i>be<sup>c</sup>dul-xo</i>	'shovels'
	<i>be<sup>c</sup>inś-xo</i>	'priests'
	<i>damp'ul-xo</i>	'plums'
	<i>apči-ox</i>	'liars'
	<i>araba-ox</i>	'chariots' (Azeri <i>araba</i> )
	<i>ärmi-ox</i>	'Armenians'
	<i>axt'a-ox</i>	'castrated boars' (Azeri <i>axta</i> )
	<i>bač'ana-ox</i>	'swallow'
	<i>baru(i)-ox</i>	'walls' (Azeri <i>barı</i> )
	<i>därzi-ox</i>	'cutters' (Azeri <i>dərzi</i> )
	<i>haburru-ox</i>	'bashful, prudish person' (Azeri <i>abırlı</i> )
	<i>k'öi-ox</i>	'big pots of clay' (Azeri <i>küp</i> ?)
	<i>mäzä-ox</i>	'snack' (Azeri <i>məzə</i> )
	<i>q'uda-ox</i>	'holy person' (Azeri <i>quda</i> )
	<i>zäli-ox</i>	'leeches' (Azeri <i>zəli</i> )

Nevertheless, the above mentioned distribution is not fully observed in Nij. Especially in Upper Nij, C-final nouns tends to have *-ox* instead of expected *-xo*. Incidentally, both *-ox* and *-xo* show up in exactly the same surroundings, compare *q'armaġ* 'small hook' Azeri *qarmaq* > *q'armaġ-ox* vs. *q'artmaġ* 'bark (of trees)' (Azeri *qartmaq*) > *q'artmaġ-xo*; *q'ač'aġ* 'highwayman' (Azeri *qaçaq*) has both plurals (*q'ač'aġ-ox* ~ *q'ač'aġ-xo*).

Obviously, the *-ox*-plural represents the older form that parallels Vartashen *-ux* (~ *-ox* with pluralia tantum). In consequence, the variant *-xo* should be interpreted as resulting from metathesis of *-ox* after a final consonant. The reason for this process has perhaps been the tendency to preserve the syllabic structure of the nominal stem, compare *zi.zam.xo* (*zizam-xo*) 'livers, spleens' instead of Vartashen *zi.za.mur* (*zizam-ur*). Note that the suffix *-xo* normally blocks the expected sonorization of *-x-* (> *-ġ-*). In consequence, *xo*-plurals have a rather reduced paradigm (see above (4)).

The two monomorphemic plurals *-ur* (~ *-or*) and *-r* represent the older (Lezgian) layer of plural marking in Udi (proto-Lezgian \*-*Vr*). The suffix *-ur* (~ *-or*) can be both stress attracting and stress neutral (many speakers prefer stress attraction). Most probably, the \*-*Vr*-plural was restricted to human beings (or animates) in proto-Lezgian. However, Modern Udi has completely lost this semantic condition – just as it is true for most other Lezgian languages (except Rutul). The *-ur*-plural is illustrated in (6):

(6)	<i>ayaq'</i>	<i>-ur</i> , N. <i>-xo</i>	'glass'
	<i>-al</i>	<i>-ur</i> , <i>-or</i> , N. <i>-xo</i>	Nomina agentis
	<i>alaf</i>	<i>-ur</i> , N. <i>-xo</i>	'hey, grass'
	<i>arčan</i>	<i>-ur</i> , N. <i>-xo</i>	'pine tree'

<i>badak'</i>	-ur, N. -xo	'wine jelly'
<i>balanq'o(i)</i>	-ur, -ux, N. -xo	'blackberry'
<i>bazuk'</i>	-ur	'elbow'
<i>bedasil</i>	-ur, N. -xo	'bastard' (Azeri <i>bədəsil</i> )
<i>belek'ož</i>	-ur, -urux	'shed'
<i>be'inś</i>	-ur, N. -xo	'priest'
<i>c'irik'</i>	-ur	'chicken'
<i>ča</i>	-ur, N. -ux	'cord'
<i>damp'ul</i>	-ur, N. -xo	'plum'
<i>elexe</i>	-ur, -urux	'salty water'
<i>ex</i>	-ur, -ux	'field before harvest'
<i>kalabul</i>	-ur, N. -xo	'lazy person'
<i>o'q'</i>	-ur, -ux	'river'
<i>pop</i>	-ur, -urux	'hair'
<i>purik'</i>	-ur	'blister'
<i>q'oč</i>	-ur, -urux	'male sheep' (Azeri <i>qoç</i> )
<i>qur</i>	-ur	'clod of earth' (Azeri <i>quru</i> )
<i>sun</i>	-ur	'elbow'
<i>tag</i> ⚡	-ur, -ux	'twig, branch' (Azeri <i>tagğ</i> )
<i>xe(-n)</i>	-ur	'water'
<i>zikil</i>	-ur, N. -xo	'wart' (Azeri <i>ziyil</i> )
<i>zorba</i>	-ur, -or, N. -orox	'powerful person'

The *-ur*-plural is often used with the *-ux*-plural to form a bimorphemic plural (*-urux* ~ *-orox*, see below). Its vowel is obviously influenced by the vocalization of the standard plural *-ux*. Normally, *-ur* is not used with V-final stems. In case the nominalizer *-o* is present, the plural morphemes loses its vowel (> *-r*). With referentialized forms, the default plural is *-r*, compare:

- (7) *ašbal-o-r* 'they who work'  
*bi-o-r* 'they who/which have (been) done'  
*bu-o-r* 'they who exist/live'  
*me-n-o-r* 'these' (proximal)  
*vi-o-r* '(things) which are yours (sg.)'

Words that have undergone conversion to a nouns (especially *-al*-participles) take either the *-ux*- or the *-ur* ~ *-or*-plural: *čälibiq'al* 'fisherman' > *čälibiq'alux* ~ *čäli-biq'alor* 'fishermen', *zorba-ur* 'powerful men, rulers', *kala-o-r* 'the elder' etc.

The monophonematic *-(V)r*-plurals are normally confined to the absolutive case. In the oblique cases, the plural morpheme is replaced by the standard plural *-ux* > *-g* ⚡-:

- (8) *kala-o-r* 'the elders'  
*kala-t'ğ-on* 'the elders (REF:OBL-PL-ERG)'  
*kala-t'ğ-o(i)* 'the elders (REF:OBL-PL-GEN)'  
*kala-t'ğ-o* 'the elders (REF:OBL-PL-DAT)' etc.

With monosyllabic nouns, the *-ur*-plural is incidentally preserved in the oblique cases, but followed by the default morpheme *-g* ⚡-:

- (9) *o'q-ur* 'river-PL'  
*o'q-ur-ğ-on* 'river-PL-PL-ERG' etc.

### 3.3. Polymorphemic plurals.

Polymorphemic plurals are a well-known feature in many Lezgian languages. In Udi, there are two basic types: *-ur* + *-ux* and *-m* + *-ux*. The element *-m*- is the only segment that cannot be used alone. It always has to be followed by the standard morpheme *-ux*. Historically, the *-r*- and

the *-m*-plurals seem to have formed two distinct classes in Proto-Lezgian: Whereas *\*-r*-plurals were confined to human or animate referents, *\*-m*-plurals were used to encode inanimate plurals. It is tempting to relate this pattern to the paradigm of nominal class markers that are used mainly in attributive and verbal agreement ([15], [16]). The reconstructed pattern for these markers shows up as follows:

		SG	PL
10)			
	Human, male	<i>*w</i>	<i>*b</i>
	Human, female + related objects	<i>*y/r</i>	<i>*b</i>
I			
	Non-human, larger, more important	<i>*b</i>	<i>*d</i>
II			
	Non-human, smaller, less important	<i>*d</i>	<i>*d</i>
V			

In order to derive the *\*-r/m*-plurals from this paradigm, we would have to posit an early, reduced variant comparable to that of actual Botlikh (an Avar-Andian language):

(11)	Botlikh	SG	PL	Plural of nouns
	I	<i>w</i>	<i>r/l</i>	<i>*-r</i>
	II	<i>y</i>	<i>r/l</i>	<i>*-r</i>
	III	<i>b</i>	<i>b</i>	<i>*-m &lt; *-b</i>

However, comparative evidence suggests that the Botlikh paradigm is a quite recent development that cannot be referred to from a proto-language perspective. Also note that noun classification in East Caucasian normally is 'covert', meaning that class markers do not occur with their triggers ([15]). It is more likely to assume that the old *\*-r/m*-plurals have to be kept apart from the system of noun classification.

The original distribution of the *\*-r/m*-plurals, however, has become obscure in Udi. The list for *-ur*-plurals given above already included a number of inanimate nouns. Also note that the Caucasian Albanian plural allomorph *-bowr* (e.g. *iše-bowr* 'joint-brethren', *e-bowr* 'these' etc.) that is complete lost in Modern Udi, links the two morphemes together (*\*-b-ur*).

The rather small class of *-mux*-plurals is just as heterogeneous as the class of *-ur*-plurals. (12) lists some examples:

(12)	<i>aġa</i>	<i>-mux</i> , N. <i>-xo</i>	'lord' (Azeri <i>aġa</i> )
	<i>aġala</i>	<i>-mux</i> , N. <i>-ox</i>	'rain' (~ Azeri <i>aġıŝ</i> ) [PL: 'periods of rain']
	<i>aiaz</i>	<i>-mux</i> , N. <i>-xo</i>	'frost' (Azeri <i>ayaz</i> ) [PL: 'periods of frost']
	<i>ayt</i>	<i>-mux</i> , <i>-urux</i> , N. <i>-urux</i>	'word' (Azeri <i>ait</i> )
	<i>ayz</i>	<i>-mux</i> , N. <i>-mux</i>	'village'
	<i>a'il</i>	<i>-mux</i> , <i>-ux</i>	'child' (Persian/Arabic <i>ʿayyil</i> )
	<i>binä</i>	<i>-mux</i>	'fundament, building' (Azeri <i>bina</i> )
	<i>dällägxana</i>	<i>-mux</i> , <i>-ux</i> , N. <i>-xo</i>	'bath, hammam' (Azeri <i>dəlləgxana</i> )
	<i>ġar</i>	<i>-mux</i>	'boy, son'
	<i>yoldaš</i>	<i>-mux</i>	'friend' (Azeri <i>yoldaš</i> )
	<i>išq'ar</i>	<i>-mux</i>	'man'
	<i>kul</i>	<i>-mux</i>	'hand'
	<i>k'aša</i>	<i>-(i)mux</i> , <i>-(i)ux</i>	'finger'
	<i>o'cal</i>	<i>-mux</i>	'earth'
	<i>pul</i>	<i>-mux</i>	'eye'
	<i>tur</i>	<i>-mux</i>	'leg, foot'
	<i>viči</i>	<i>-mux</i>	'brother'

<i>xoyd</i>	-mux, -ux	'rice field'
<i>xunči</i>	-mux	'sister'

The list includes animates and inanimates, native words and borrowings. In fact, the use of *-mux* is not predictable (nevertheless, the high portion of body parts involved is remarkable). Occasionally, the segment *-m-* reflects rather a phonetic process than a semantically motivated structure: Nouns ending in *-i* or having a secondary *-i* that results from a 'weak' final *-a* often show both an *-i-ux* and an *-imux*-plural (e.g. *k'ása* 'finger' > *k'ásiux* ~ *k'ásimux*). Thus we might think of a sonantic element used to separate the two vowels (> *-m-* before *-u-*).

The *-urux*-plural, however, has a clear distributional pattern: it is nearly always coupled with monosyllabic nouns (as opposed to *-ux*-plurals that are normally added to polysyllabic nouns). Examples for the dialect of Vartashen include: *ap* 'sweat', *ar* 'pea' (Azeri *armud*), *aš* 'thing', *a<sup>l</sup>* 'partridge', *a<sup>m</sup>* 'arm', *a<sup>q</sup>* 'slope', *band* 'little door' (Persian *band*), *bar* 'part', *ber* 'pillow', *bič* 'bastard' (Azeri *biç*), *bin* 'bride', *bot* 'cut', *bo<sup>q</sup>* 'pig', *bul* 'head', *buš* 'camel', *bə<sup>g</sup>* 'middle', *č'ağ* 'spoke', *č'ap* 'secret', *c'il* 'embers', *č'uğ* 'small water-beetle', *cac* 'thorn', *cil* 'seed' (Armenian *cil*), *čo(i)* 'face', *žam* 'pot' (Azeri *cam*), *dib* 'tree nursery', *dost* 'friend' (Azeri *dost*), *döv* 'ghost' (Azeri *dev*), *e<sup>k</sup>* 'horse', *e<sup>s</sup>* 'apple', *fi* 'wine', *fur* 'measles', *gi* 'day', *ğoğ* 'Caucasian wingnut', *ğu(i)* 'hare', *gez* 'vegetable garden, patch', *gic* 'line' (Armenian *gic*), *hand* 'field, steppe' (Persian *hand*), *yaq* 'way', *yas* 'grief' (Azeri *yas*), *yáš* 'year' (Azeri *yaş*), *il* 'plant, grass, herbs', *k'äj* 'water pipe', *k'ač* 'gorge, slope', *k'ož* 'house', *k'ul* 'earth, ground', *k'ur* 'rock', *ken* 'garlic', *kiz* 'felt' (Azeri *kiz*), *kos* 'large drum' (Azeri *qus*), *kul* 'hand', *kürk* 'fur' (Azeri *kürk*), *ma<sup>q</sup>* 'oak', *mec* 'nest', *mom* 'wax' (Azeri *mom*), *mux* 'fingernail, claw', *muz* 'tongue, language', *mu□q*, *-ux* 'stag, red deer', *nal* 'horseshoe' (Persian *na<sup>l</sup>*), *na<sup>v</sup>* 'gutter' (Azeri *nov*), *ol* 'central post in a house', *ox* 'comb', *p'i* 'blood', *put* 'pound' (Azeri *puđ*), *q'ač* 'pain', *q'al*, *-ux* 'whether', *q'a<sup>nc</sup>* 'horn', *q'ov* 'wick', *q'o<sup>l</sup>* 'bark', *q'urt* 'mother hen' (Azeri *qurt*), *q'uš* 'bird' (Azeri *quş*), *qaz* 'goose' (Azeri *qaz*), *šan* 'ground', *šet* 'bit', *šul* 'fox', *šum* 'bread', *t'ik* 'wine pipe', *t'ol* 'skin', *t'ul* 'wine grape', *top* 'iron wheel' (Azeri *top*), *tos* 'footstool', *tul* 'young animal', *tut* 'mulberry', *uk* 'heart', *ul* 'wulf', *us* 'bull', *uš* 'firewood', *u<sup>g</sup>* 'loft, roof', *va<sup>c</sup>* 'belief', *vel* 'goat', *xa* 'wool', *xač* 'cross', *xod* 'tree', *xup* 'pilaw', *zoq* 'young shoot' (Azeri *zog*), *zor* 'power', *že<sup>c</sup>* 'stone', *žol* 'cork', *žuk* 'spindle'.

Polysyllabic nouns that have an *-urux*-plural most often are compounds the second segment of which is a monosyllabic noun. Obviously, the *-urux*-plural came into use at a time when the compounds in question still were rather loose structures. The same is true for a number of loans from Azeri such as *q'arabaš* 'slave' < Azeri *qarabaş*, lit. 'black head' (*qara* + *baş*) and perhaps *araxis* 'peanut' < *ara-xis* (?). Analogically, the plural of reduplicated forms such as *k'a<sup>c</sup>k'a<sup>p</sup>* (*-urux*) 'knee(s)' is conditioned by the structure of the non-reduplicated root (*\*k'a□p*). However, note that some *-urux*-plurals remain obscure: For instance Udi *lek'er* 'dish, pot' borrowed from Greek *λεκάνη* 'bowl, dish' has an unexpected plural *lek'erurux* (~ *lek'erux*); *dizik* 'snake' (of unknown origin) also has *dizik'-urux* rather than *dizik'ux* (but compare Nij *dizik'xo*).

Still, the restriction of *-urux*-plurals to monosyllabic nouns cannot be questioned. Diachronically speaking, we have to relate this distributional feature to the *-ur*-segment that is undoubtedly older than the *-urux*-plural. In other words: Monosyllabics originally formed their plural in *-ur*. This distributional pattern obviously merged with the semantic criteria mentioned above. The resulting polysyllabic structures such as *\*yaq'-ur* (*ya.q'ur*) 'ways' probably had a collective function that led to the reinterpretation of the *-ur*-marked forms as derived, bisyllabic nouns. These nouns then canonically received the default plural morpheme *-ux*. A restricted number of nouns (some of them denoting domesticated animals) still reflect this process, compare:

(13)		'hair'	'camel'	'man'	'horse'
	Singular	<i>pop</i>	<i>buš</i>	<i>iš(u)</i>	<i>e<sup>k</sup></i>
	Collective Plural	<i>pop-ur</i>	<i>buš-ur</i>	<i>iš-ur</i>	<i>e<sup>k</sup>-ur</i>
	Distributive Plural	<i>pop-urux</i>	<i>buš-urux</i>	<i>iš-urux</i>	<i>e<sup>k</sup>-urux</i>

A restricted number of words have extended the collective function to the *-urux*-plural, among them: *a□murux* 'arms, shoulders', *zadurux* 'things, affairs', *e□s□urux* 'apples', *burux* < *\*bu-rux* 'mountain' (cf. Caucasian Albanian *bu* 'mountain').



The two polymorphemic structures *-mxox* and *-rxox* have a rather limited distribution. Obviously, we have to deal with older *-mux* and *-urux*-plurals that were additionally marked by the default plural *-ux* ~ *-ox* (*\*-m-ux-ox* > *-mxox*, *\*-(u)r-ux-ox* > *-rxox*). Examples are *ga* 'place' > *ga-mxox* 'places', *ġi* 'day' > *ġi-mxox* (~ *ġi-rxox*) 'days' (but note *ġi-r-ux* 'fasten days'), *c'i* 'name' > *c'i-rxox* 'names', *o* 'grass' > *o-rxox* 'grasses', *fi* 'wine' > *fi-rxox*, *me* 'knife' > *me-rxox* (~ *me-n-ur*) 'knives', *že* 'stone' > *že-rxox* 'stones'. Perhaps, some of these forms reflect older C-final words that have undergone reanalysis of the final consonant. This is at least true for *fi* 'wine' < *\*fin-*, *me* 'knife' < *\*men-*, and *ġi* 'day' < *\*ġin-*. The final segment *\*-n* had then been changed to *-r-* before *-x-*. Old *\*-r* is probably preserved with *c'i-rxox* < *\*c'ir[-(u)x-ox]* < Proto-Lezgian *\*t.wər* 'name' and *že-rxox* 'stones' < *\*že'r-*. The plural of the noun *ga* is difficult to explain. The term undoubtedly stems from Persian *gāh* 'place' that, however, does not supply us with evidence for a final sonant. Nevertheless, a plural *ganmxox* is incidentally documented. On the one hand, this form illustrates that *ga* in fact could behave like *fi* 'wine', *ġi* 'day' etc. However, the additional presence of the segment *-m-* in *ganmxox* argues against the assumption that *-n-* is preserved in the plural *ga-mxox* < *\*\*gan-xox* (thus Evg. Jeiranišvili [8 :46]). Also, if *ga* stems from *\*\*gan-*, we should expect a plural *\*\*garxox* rather than *ga-mxox*, see above.

### 3.4. Collectives.

Udi has a number of referential forms that represent petrified plurals encoding an (older) collective meaning. Today, some of these nouns have turned into pluralia tantum, others have preserved their collective meaning to a certain extent. The following list documents some of the nouns:

(14)	<i>arux</i>	'fire'	<	<i>*c'ar-</i> 'flame, fire'
	<i>bixox</i>	'god(s)'	<	<i>*bixo</i> 'creator'
	<i>bo<sup>o</sup>xmo<sup>o</sup>x</i>	'nose'	<	<i>*bo<sup>o</sup>x</i> 'nostril'
	<i>burux</i>	'mountain'	<	<i>*bu</i> 'mountain' (Caucasian Albanian <i>bu</i> 'id.')
	<i>čubux</i>	'woman'	<	<i>*čub/w</i> , compare Nij <i>čujon</i> 'woman:PL:ERG'.
	<i>c□omox</i>	'face'	<	<i>čo</i> 'side'
	<i>elmux</i>	'soul'	<	<i>*hel</i> 'breath' (Caucasian Albanian <i>hel</i> 'soul')
	<i>ġirux</i>	'fasten day(s)'	<	<i>ġi</i> 'day'
	<i>gorox</i>	'poor man'	<	?
	<i>imux~ imox</i>	'ear(s)'	<	<i>*i(b)</i> 'ear'
	<i>k'odox</i>	'sleeve(s)'	<	<i>k'oda</i> 'shovel'
	<i>q'o<sup>o</sup>lox</i>	'trousers'	<	<i>q'o<sup>o</sup>I</i> 'bark'
	<i>ulux</i>	'tooth/teeth'	<	<i>*ul</i> 'tooth'
	<i>žomox</i>	'mouth, lips'	<	<i>*žo ~ *žu</i> 'lip'

Pluralia tantum and collective nouns are normally marked by standard plural morphemes, both mono- and biphonemic. In the oblique cases, they behave like standard plurals (*čubjon* 'woman:ERG' etc.). Secondary plurals are formed with the help of the plural morpheme *-ox*. In the resulting group *...-u/ox-ox*, the first vowel is dropped: *imux* 'ear' > *imxox*, *burux* 'mountain' > *burxox*, *čubux* 'woman' > *čubxox*, *ulux* 'tooth' > *ulxox* etc. Note that *čubux* 'woman' sometimes is used with a plural *čupq'ox* < *\*čubq'ox*. The origin of the segment *-q'o-*, however, is obscure (most likely, it is also present in the Vartashen 3PL clitic *-q'un*). In the oblique cases, the second *-x* is voiced just as with standard plurals (*čubxojon* 'women.ERG' etc.).

A restricted number of nouns show a segment *-ar* already referred to already above. It is possible that we have to deal with another type of pluralia tantum related to the plural marker *\*-Vr* (> *-ur*). However, we cannot always identify the assumed basic noun stem, both from a formal and a semantic point of view. (15) lists those nouns in *-ar* that most probably belong to this class:

(15)	<i>adamar</i>	'man, person'	<	<i>*adam</i> 'man, person'
	<i>axar</i>	'frozen meat'	<	<i>*ax-</i> (?)
	<i>civar</i>	'rain'	<	<i>*ci-v-</i> 'down' (?)
	<i>ġar</i>	'boy, son'	<	?

<i>išq'ar</i>	'man'	< <i>is□(u) + -q'□-</i> 'man' (?)
<i>maq'ar</i>	'who brings the bride'	< * <i>maq'</i> (?) [or loan?]
<i>mašar</i>	'saw'	< * <i>maš-</i> (?) [or loan?]
<i>nišq'ar</i>	'sacrifice'	< * <i>niš-</i> + <i>-q'□-</i> (?)
<i>ništ'ar</i>	'razor'	< * <i>ništ'-</i> (?)
<i>xinär</i>	'girl, daughter'	< * <i>xin-</i> 'younger female being'

#### 4. Results

The brief overview on plural formation in Udi illustrates that historically, Udi has started from a paradigm that has its matches in other (South-) East Caucasian languages. This concerns the two elements *-r* and *-m* the second of which has become petrified in Udi. The *-r*-plural has survived as an independent marker especially in the system of demonstrative pronouns and nomina agentis derived from nominalized verbal participles. The Proto-Lezgian pattern that related \**-r* to human beings and \**-m* to non-humans, however, got lost in Early Udi. Instead, *-r*- plurals tended to form derived nouns (collectives) from monosyllabic nouns the plural of which was later reinforced by the new Udi plural marker *-ux* (> *-urux*). The same holds for older plurals in *-m* (> *-mux*). The origin of the new plural *-ux*, however, remains unclear. The fact that it is already present in Caucasian Albanian suggests that it has developed as an innovation after the ancestor of Caucasian Albanian/Early Udi has separated from the Eastern Samur proto-language. One possible candidate as a donor language would have been a local variety of Old Armenian in case *-ux* can be explained as a fricative version of the Old Armenian plural marker *-k<sup>c</sup>*.

#### References:

1. Бежанов М. Краткие сведения о селе Варташен и его жителях (СМОМПК. Вып. XIV). Тифлис, 1892.
2. Gippert, J. and Schulze, W. (2007) Some remarks on the Caucasian Albanian Palimpsests *Iran and the Caucasus*. Vol. 2. P. 201-211.
3. Gippert J. The Caucasian Albanian Palimpsests of Mt. Sinai. 2 vols / J. Gippert, W. Schulze, Z. Aleksidze, J.-P. Mahé. Turnhout: Brépols, 2009.
4. Schulze W. Some notes on the relation between Caucasian Albanian and Udi / W. Schulze // S. Makhmudova et al. (eds.). Proceeding of the Conference "Problems of Caucasian Languages". Makhchkala: RAN Dagh. Fil, 2013 (in press).
5. Greville G. CC. Number (Cambridge Textbooks in Linguistics): Cambridge: CUP, 2001.
6. Schiefner A. Versuch über die Sprache der Uden. St. Petersburg: Imp. Akad. (Mémoires series VII, vol. VI, no. 8), 1863.
7. Дирр А. Грамматика удинского языка (СМОМПК. Вып. XXXIII). Тифлис, 1904. P. 1-101.
8. Žeiranišvili, E. Udiuri ena. Gramat'ik'a, krestomat'ia, leksik'oni. Tbilisi: Tbil. univ. gamomcemloba, 1971.
9. Pančviže, V. Udiuri enis gramat'ik'uli analizi. Tbilisi: Mecniereba, 1974.
10. Schulze W. Die Sprache der Udden in Nord-Azerbaidžan. Wiesbaden: Harrassowitz, 1982.
11. Schulze W. A Functional Grammar of Udi. (forthcoming).
12. Gukasjan V. Udindcä-azärbajdzhanca-rusça lüghät. Bakı: Elm, 1974.
13. Mobili R. Udi-azerbaycanin-urusin əyitluğ. Bakı: Qrifli nəşr, 2010.
14. Rijkhoff J. The Noun Phrase (Oxford Studies In Typology And Linguistic Theory). New edition. Oxford: Oxford University Press, 2006.
15. Schulze, W. (1988) Noun Classification and Ergative Construction in East Caucasian Languages *Studia Caucasologica*. Vol. 1. P. 251-274.
16. Schulze W. Zur Entwicklungsdynamik morphologischer Subsysteme. Die ostkaukasischen Klassenzeichen // C. Paris (ed.). *Caucasologie et mythologie comparée*. Paris: Peeters, 1992. P. 335-362.

УДК 81

**Образование множественного числа в удинском языке**

Вольфганг Шульце

Факультет гуманитарных наук, Университет им. Матейя Бела, Словакия

974 01, г. Банска Быстрица, ул. Таёвского 40

Кандидат филологических наук (общее языкознание), профессор

E-mail: wolfgang.schulze@umb.sk

**Аннотация.** Восточно-кавказские языки типичны гетерогенной системой номинального обозначения множественного числа. Характеризуется массивным алломорфом, который основан, по крайней мере частично, на исторической семантической категоризации соответствующих существительных. Существуют также фонотактические критерии отбора множественных алломорф. В статье эти аспекты иллюстрированы, классифицированы и проанализированы с исторической точки зрения на примере двух восточно-кавказских языков (удинского и его раннехристианского предшественника кавказско-албанского языка).

**Ключевые слова:** восточно-кавказские языки; морфология; образование множественного числа; алломорфы.