The background image shows a wide-angle aerial shot of a deep mountain valley. The valley floor is a mix of green fields and a winding blue river. A small, scattered town with numerous houses is nestled in the valley. The surrounding mountains are steep and covered in dense green forests, with patches of snow or ice visible at higher elevations. The sky above is a clear blue with some wispy white clouds.

LAGB 2008

ARCHI LANGUAGE TUTORIAL

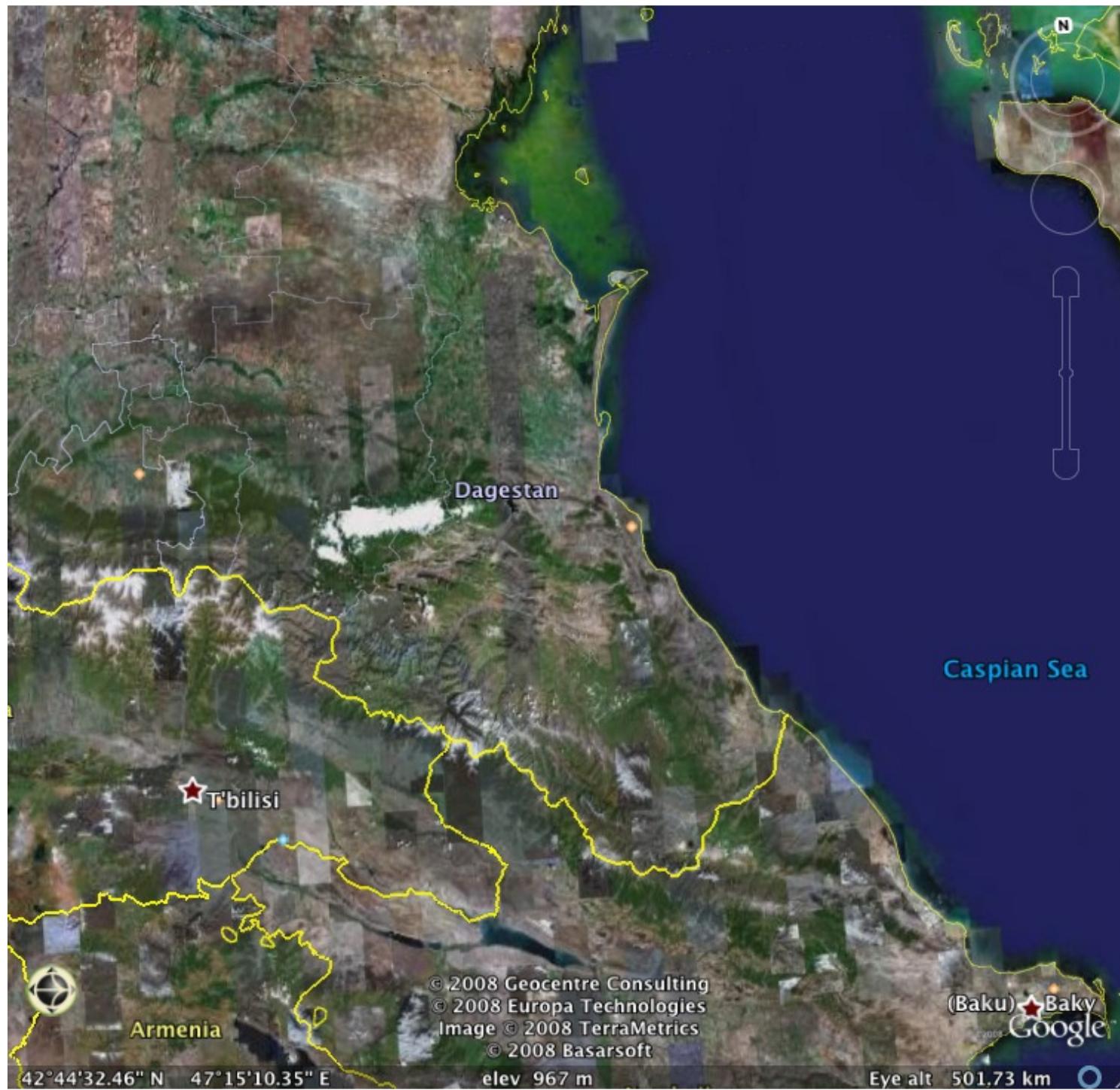
*Marina Chumakina
Greville G. Corbett
Dunstan Brown*

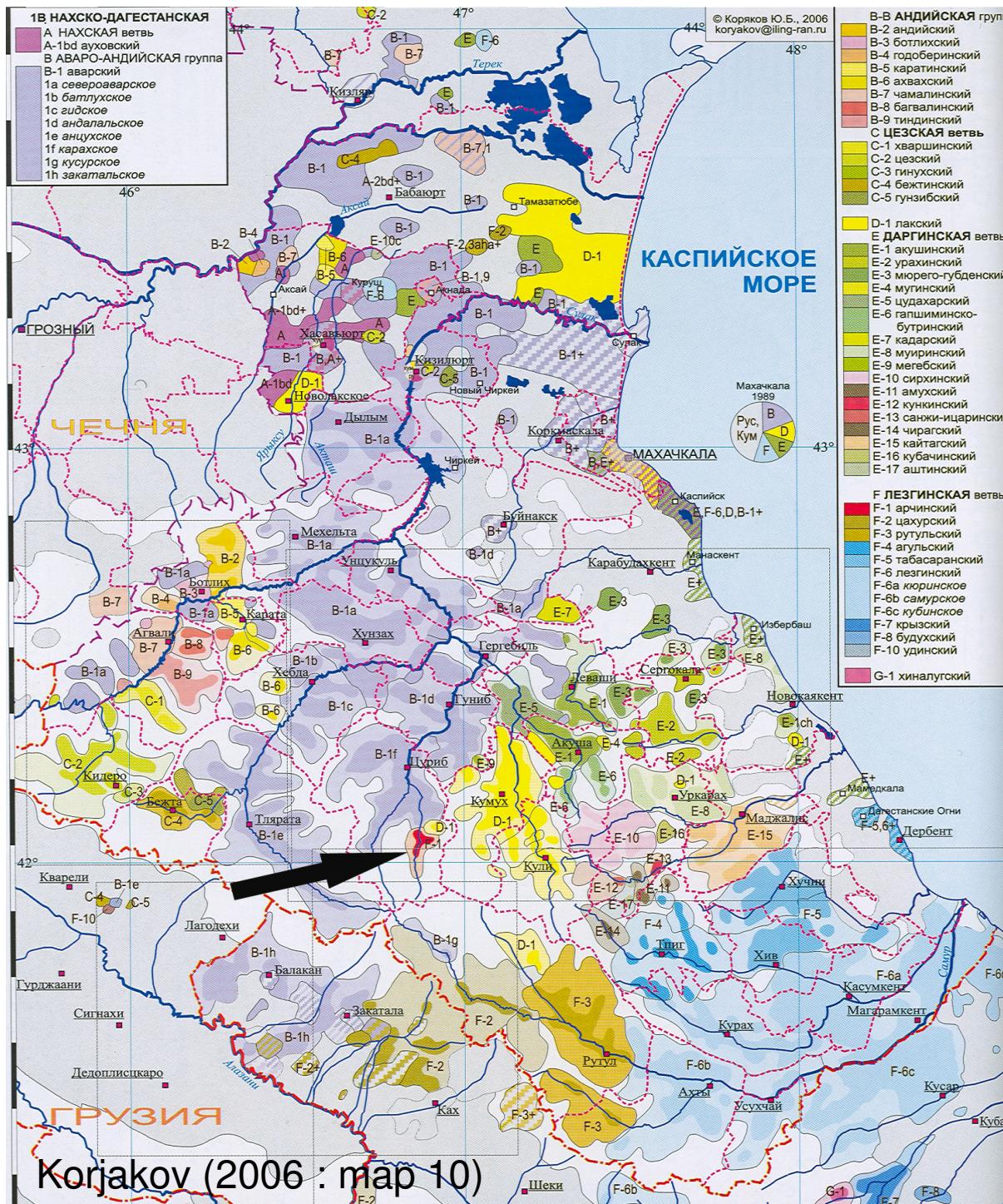
Surrey Morphology Group

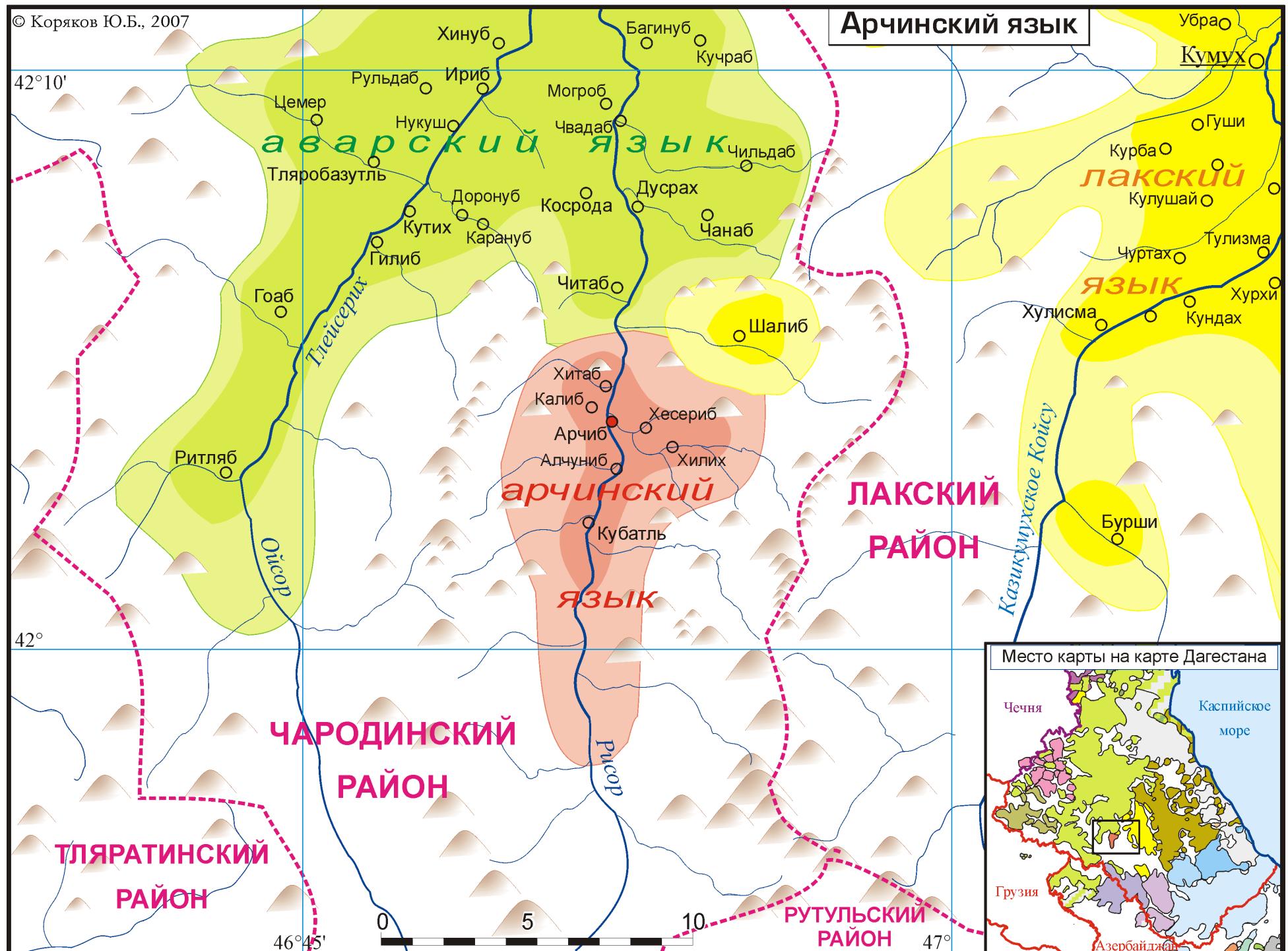
The support of ELDP and of the ESRC is gratefully acknowledged.

INTRODUCTION

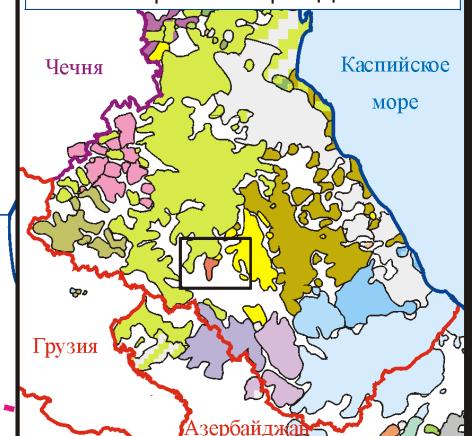
- Archi: special language
- a special place
- previous research
- a special dictionary
- the Workshop







Место карты на карте Дагестана









East Caucasian (=Northeast Caucasian, =Nakh-Daghestanian)

Nakh	Avar	Andic	Tsezic	Lak	Dargi	Lezgic	Khinalugh
Chechen-Ingush Chechen Ingush Tsova-Tush (=Batsbi)	Avar	Akhvakh Andi Bagwalal Botlikh Chamalal Godoberi Karata Tindi	Bezhta Hinuq Hunzib Khvarshi Tsez(=Dido)	Lak	Dargi	Archi Nuclear Lezgic Aghul Budukh Kryz Lezgian Rutul Tabassaran Tsakhur Udi	Khinalugh

Sources: Ethnologue, Comrie (2008)

recent surveys of Daghestanian languages

- van den Berg (2005)
- Comrie (2008)

Archi phonology

outline

1. Vowels

2. Consonants:

- primary articulation (manner and place)
- secondary articulation (ejectiveness, labialisation, fortis / lenis distinction)
- pharyngealisation: secondary articulation or prosody?

vowels

	front	central	back
high	i / iː		u / uː
middle	e / eː	ə	o / oː
low		a / aː	

(1) **кiniš** 
 from there
 higher than the speaker

кini:š 
 from there
 higher and way away from the speaker

consonants

	bilabial	dental	alveolar	palatal	velar
plosive	p b	t d			k g
nasal	m	n			
trill		r			
fricative		s z	š ž		
affricate		c	č		
approx	w			j	
lateral approx		l			

consonants

	bilabial	dental	alveolar	palatal	velar	uvular	pharyngeal	laryngeal
plosive	p b	t d			k g	q	χ	?
nasal	m	n						
trill		r						
fricative		s z	š ž			χ ʁ	ħ	h
affricate		c	č					
approx	w			j				
lateral approx		l						

consonants

	bilabial	dental	alveolar	palatal	palato-velar	velar	uvular	pharyngeal	laryngeal
plosive	p b	t d				k g	q	f	?
nasal	m	n							
trill		r							
fricative		s z	š ž				χ ʁ	ħ	h
affricate		c	č						
lateral fricative					ɬ ɭ				
lateral affricate					kɬ				
approx	w			j					
lateral approx		l							

consonants

	bilabial	dental	alveolar	palatal	palato-velar	velar	uvular	pharyngeal	laryngeal
plosive	p b p'	t d t'				k g k'	q q'	χ	?
nasal	m	n							
trill		r							
fricative		s z	š ž				χ ʁ	h	h
affricate		c	č						
		c'	č'						
lateral fricative					ɬ ɭ				
lateral affricate					kɬ kɭ				
approx	w			j					
lateral approx		l							

consonants

	bilabial	dental	alveolar	palatal	palato-velar	velar	uvular	pharyngeal	laryngeal
plosive	p b p' p: t d t' t: k g k' k: q q' q: q: χ χ' χ: χ: h h								
nasal	m	n							
trill		r							
fricative		s z s: s: š ř š: š:	š ř š: š:				χ ʁ χ: χ:	h	h
affricate		c c' c: č č' č:	č č' č:						
lateral fricative					ɬ ɭ ɬ: ɬ:				
lateral affricate					kɬ kɭ kɬ: kɭ:				
approx	w			j					
lateral approx		l							

consonants

	bilabial	dental	alveolar	palatal	palato-velar	velar	uvular	pharyngeal	laryngeal
plosive	p b	t d <i>t^w d^w</i>				k g <i>k^w g^w</i>	q <i>q^w</i>	f	?
	p'	t'				k' <i>k'^w</i>	q'		
	p:	t:				k: <i>k:^w</i>	q: <i>q:^w</i>		
nasal	m	n							
trill		r							
fricative		s z <i>s^w z^w</i> s: <i>s:^w</i>	š ž <i>š^w ž^w</i> š: <i>š:^w</i>				χ ʁ <i>χ^w ʁ^w</i> χ: <i>χ:^w</i>	h	h
affricate		c <i>c^w</i> c' <i>c'^w</i> c: <i>c:^w</i>	č <i>č^w</i> č' <i>č'^w</i> č: <i>č:^w</i>						
lateral fricative					ɬ ɭ ɬ: <i>ɬ:^w</i>				
lateral affricate					kɬ kɭ ^w kɬ' kɭ' ^w				
approx	w			j					
lateral approx		l							

examples: laterals

(2)	was	kammu-t <u>tu</u>	kudu	k <u>unne</u>
	2SG.DAT	shoot.PFV-ATR.I.SG	that.one.I.SG	I.SG.flee.PFV

The one who shot at you, he ran away. (Bear story, 8) 

(3)	lon		konnol	
	five (when counting sheep)		wife, woman	
	k ^w ert		k ^w a:na	
	scar, trace		resemble	
	kłan		kł'an	
	hole		love	

fortis consonants

(4) q'^fel kes 

collapse

q:^fel 

crack, split (noun)

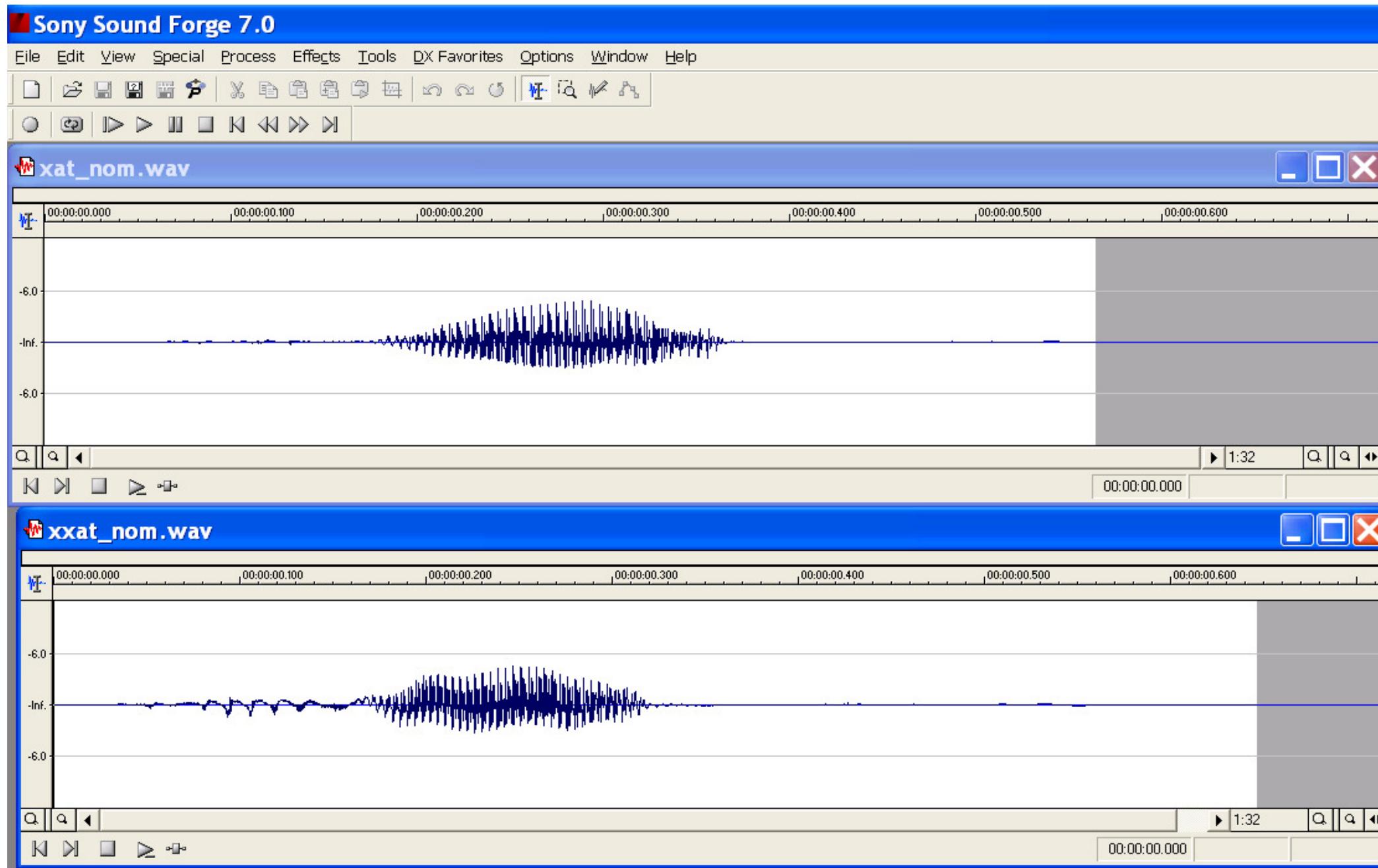
χat 

scratch

χ:at 

tie-beam





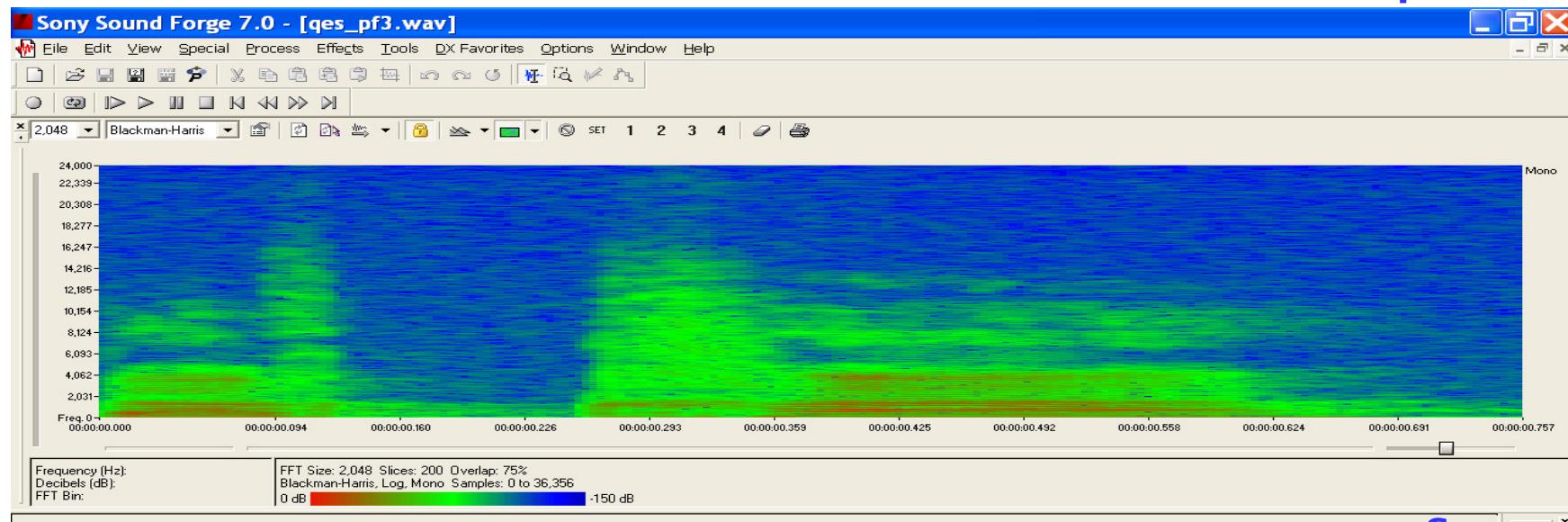
pharyngealisation

(5) baqa 
it(III.SG) got cold

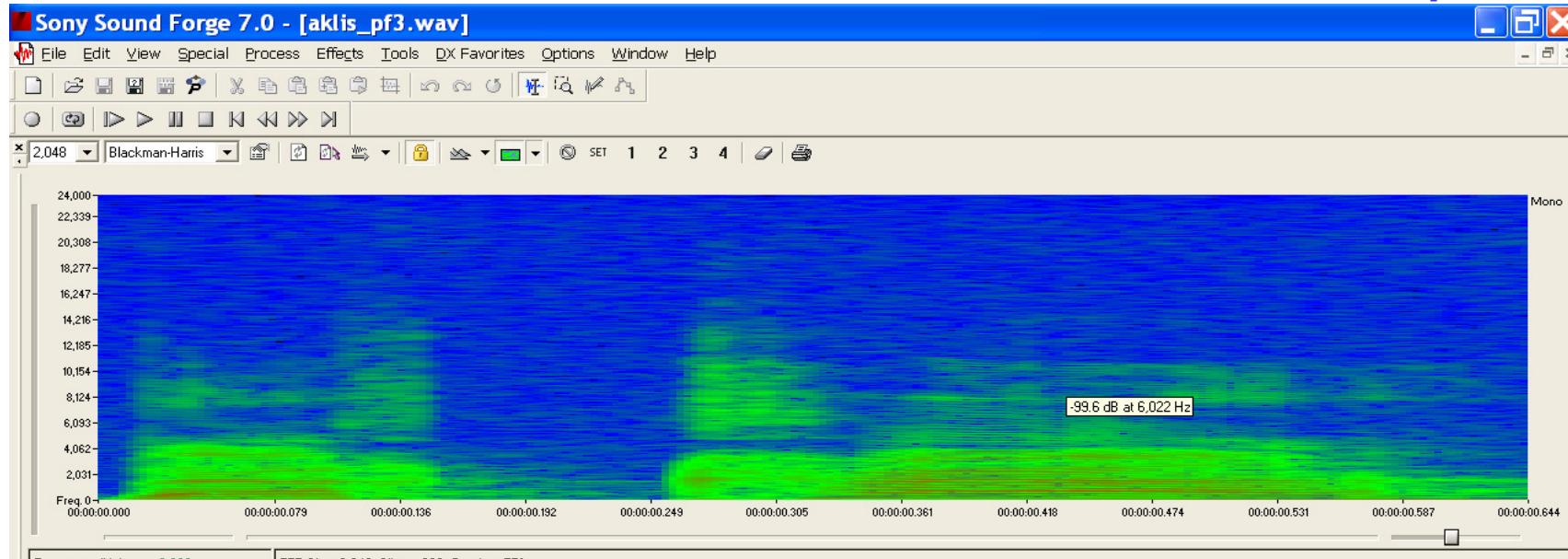
baq^ʕa 
it(III.SG) came

a^ʕra^ʕč' 
reasonably big

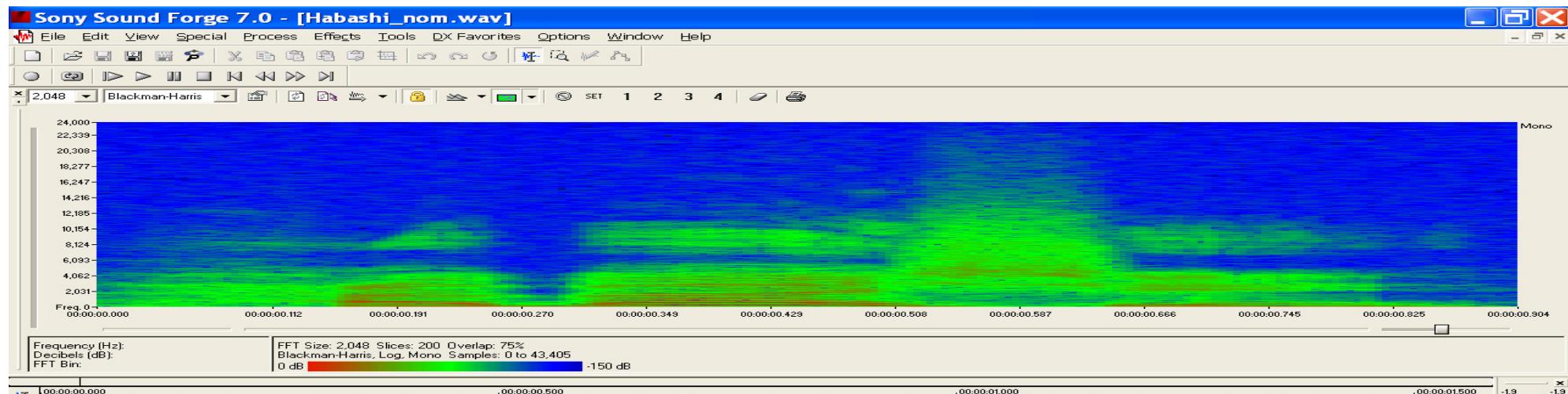
baqa



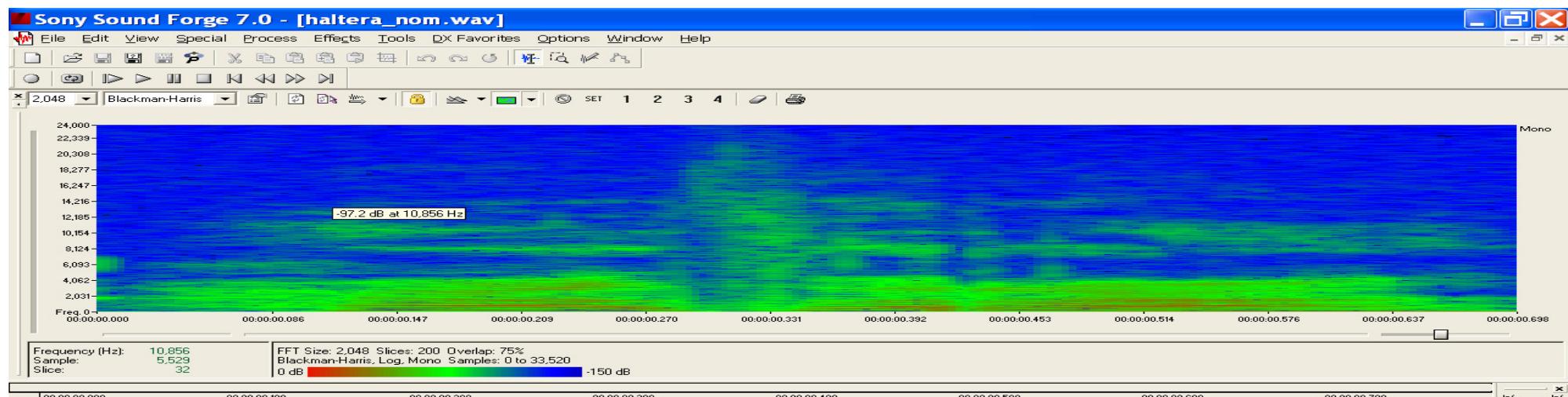
baq'a



ħabaši



ha^tera



pharyngealisation

(6) daki un za-t:i-k b-e^f<r>š:u-r

why 2SG.ABS 1.OBL.SG-SUPER-LAT III.SG-<IPFV>run-IPFV

Why are you running towards me? (Bear story, 10) 

(7) χir q^{wf}et'u k'onc'ol-u χir i-t:u-b jam...

after two cub(IV)[SG.ABS]- and behind be-ATR-III.SG wolf(III)[SG.ABS]

Then there was the wolf, and with two cubs behind him... (Bear story, 6) 

morphology

word classes (in order of appearance):

nouns

adjectives

verbs

(supporting cast, not discussed):

pronouns

adverbs

postpositions

particles

numerals

noun morphology: stems

‘ram’		
	<i>ba^ŋk'</i> (stem 1)	<i>ba^ŋk'-ur</i> (stem 3)
	<i>be^ŋk'-iri</i> (stem 2)	<i>ba^ŋk'-ur-čaj</i> (stem 4)

noun morphology: stems

'ram'	SG	PL
ABSOLUTIVE	<i>ba^čk'</i> (stem 1)	<i>ba^čk'-ur</i> (stem 3)
ERGATIVE	<i>be^čk'-iri</i> (stem 2)	<i>ba^čk'-ur-čaj</i> (stem 4)

stem formation

		SG	PL
ram	ABS	ba ^f k'	ba ^f k'-ur
	ERG	be ^f k'iri	ba ^f k'ur-čaj
eagle	ABS	liq' ^f i	loq' ^f or
	ERG	liq' ^f i-li	loq' ^f or-čaj
hide	ABS	ili	ollo
	ERG	elle	ollor-čaj
child	ABS	lo	lobur
	ERG	laha	lobur-čaj
cow	ABS	χ ^f on	buc ^f i
	ERG	χ ^f ini	buc ^f i-li

number

plural formation

	SG	PL
liver	dilik'	dilik'-mul
spring (water)	q'ulli	q'ulli-tu
ear of a grain	lok	lok:or
cheek	eχ ^f	eχ ^f ut
ram	ba ^f k'	ba ^f k'ur
claw	χ:eč	χ:ečum
Russian	o ^f ro ^f s	o ^f ro ^f sul
knee	po ^f mp	po ^f t
hide	ili	ollo
man	bošor	kłele

formation of new plurals

	SG	PL
driving the bulls around the threshing floor	liχ:i	liχ:i <u>t:u</u>
pea	čaq	čaq <u>mul</u>

76 regular out of 93

	SG	PL
skin, fruit peel	qal	qalum
honey	imc'	omc:'om
potato	q ^{wf} ib	q ^f obor



Archi cases (non-spatial)

ba^čk' 'ram'

value	form			example	
	SG	PL	shared case endings	SG	PL
absolutive	stem1	stem 3		<i>ba^čk'</i>	<i>ba^čk'-ur</i>
ergative	stem2	stem4		<i>be^čk'-iri</i>	<i>ba^čk'-ur-čaj</i>
genitive			-n	<i>be^čk'-iri-n</i>	<i>ba^čk'-ur-če-n</i>
dative			-s, -s'	<i>be^čk'-iri-s</i>	<i>ba^čk'-ur-če-s</i>
comitative	stem2 + shared case endings	stem4 + shared case endings	-k <u>u</u>	<i>be^čk'-iri-k<u>u</u></i>	<i>ba^čk'-ur-če-k<u>u</u></i>
similative			-q ^č di	<i>be^čk'-iri-q^čdi</i>	<i>ba^čk'-ur-če-q^čdi</i>
causal			-ši	<i>be^čk'-iri-ši</i>	<i>ba^čk'-ur-če-ši</i>
comparative			-χur	<i>be^čk'-iri-χur</i>	<i>ba^čk'-ur-če-χur</i>
partitive			-q ^č iš	<i>be^čk'-iri-q^čiš</i>	<i>ba^čk'-ur-če-q^čiš</i>
substitutive			-k ^č əna	<i>be^čk'-iri-k^čəna</i>	<i>ba^čk'-ur-če-k^čəna</i>

example

(8) kudu	k'onoč	laha-s	zari	han
that.I.SG	k'onoč	boy.OBL.SG-DAT	1SG.ERG	what(IV) [SG.ABS]
uw-li	edi			
do.IV.SG.PFV-CVB1	IV.SG.be.PAST			

That k'onoč guy, what (harm) had I done to him? [i.e. what harm had I done, to make him want to shoot and put me in this situation] (Bear story, 9)

The formation of spatial forms: STEM 2 / STEM 4 + localisation + directional case

localisation	form		
	SG	PL	localisation affixes
IN	stem2 + localisation affixes	stem4 + localisation affixes	-a/-aj-
INTER			-q ^f (a)-
SUPER			-t̪i-/t̪
SUB			-k̪l'(a)-
CONT			-ra-

Directional cases

directional cases:		directional case endings
ESSIVE		-
ELATIVE		-š
LATIVE		-k
ALLATIVE		-ši
TERMINATIVE		-kena
TRANSLATIVE		-χut:
form of localization + directional case endings		

examples

- | | | |
|-----|--|---|
| (9) | t'e ^č -li-t:i-k
flower-OBL.SG-SUPER-LAT
'onto the flower' | iskalat'-l-a-š
warehouse-OBL.SG-IN-ELAT
'from the warehouse' |
| | šahru-l-a-ši
town-OBL.SG-IN-ALL
'to the town' | liq' ^č i-li-ra-š
eagle-OBL.SG-CONT-ELAT
'from the eagle' |
| | darc'-li-ra-kəna
post-OBL.SG-CONT-TERM
'up to the post' | dunil-li-t:i-χut
sky-OBL.SG-SUPER-TRANS
'in (through) the sky' |

examples

(10)	daki	un	za-t̪i-k	b-e ^f <r>š:u-r
	why	2SG.ABS	1.OBL.SG-SUPER-LAT	III.SG-<IPFV>run-IPFV

Why are you running towards me? (Bear story, 10)

(11)	kʷač'-ur-če-t	osd-er	žu-s	harak
	paw(III)-PL-OBL.PL-SUPER	<III.SG>stand.PFV-RPRT	LOGOPH.I.OBL.SG-DAT	in.front

(it came)...and allegedly stood on its (hind) paws in front of him (Uncle Umar).
(Bear story, 6)

gender and number (evidence from verbs)

GENDER	NUMBER	
	singular	plural
I (male human)	<i>w-/⟨w⟩</i>	<i>b-</i>
II (female human)	<i>d-/⟨r⟩</i>	
III (some animates, all insects, some inanimates)	<i>b-/⟨b⟩</i>	\emptyset -
IV (some animates, some inanimate, abstracts)	\emptyset -/⟨∅⟩	

(12)	šipiſ-li	e b ču-li	tumank'	kammu-li
	Shapi(I)-SG.ERG	<III.SG>put.PFV-CVB1	gun(III)[SG.ABS]	shoot.PFV-EVID

Shapi, having put the gun (i.e. having aimed), shot. (Bear story, 3)

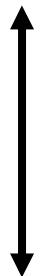
(13)	zari	han	uw-li	was
	1SG.ERG	what(IV) [SG.ABS]	do. IV.SG.PFV-CVB1	2SG.DAT

‘What have I done to you?’ (Bear story, 7)

Gender assignment

gender assignment

MEANING



FORMS



gender assignment

system type

MEANING ← Kannada

semantic

FORMS

gender assignment

system type

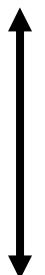
MEANING ← Kannada

semantic

FORMS

semantic
and formal

Russian



GENDER III

domestic animals and birds

χ^fon ‘cow’, *dogi* ‘donkey’, *qaz* ‘goose’

larger wild animals and birds

pil ‘elephant’, *jam* ‘wolf’, *isu* ‘owl’

all insects

hilku ‘fly’, *nibsу* ‘moth’

mythical beings

žin ‘genie’, *ilbis* ‘demon’

musical instruments

parx ‘drum’, *moxol* ‘tambourine’

GENDER IV

young animals and birds (wild and domestic)

biš ‘calf’, *k'e^frt* ‘foal (of donkey)’

smaller wild animals and birds

mejmanak ‘monkey’, *hudhud* ‘hoopoe’, *žibəla* ‘swallow’

most tools and cutting instruments

bel ‘spade’, *dab* ‘awl’, *k'os* ‘knife’

(see Kibrik, Kodzasov, Olovjannikova & Samedov 1977a: 55-66 for details, and Corbett 1991: 27-29 for discussion of their data).

GENDER III

cereals

qoqol ‘wheat’, *maxa* ‘barley’

trees

had ‘lime’, *kal* ‘fir’

water phenomena

lat ‘sea’, *ba^fri* ‘lake’,

bi^w ‘whirlpool’, *qol* ‘ice’

astronomical and meteorological phenomena

bac ‘moon’, *barq* ‘sun’, *marχəla* ‘snow’

GENDER IV

cloth, most clothing

at'ras ‘satin’, *palatnoj* ‘linen’, *k'az* ‘shawl’,
χalac'i ‘sleeve’

metals

lacut ‘iron’, *qalaj* ‘tin’

liquids

tan ‘water’, *čiχir* ‘wine’

nabq ‘tears’, *χ:^fel* ‘rain’

abstracts (including some temporal concepts)

iq ‘day’, *s:an* ‘year’, *mukul* ‘beauty’



Does gender also include person in Archi?

- No unique phonological material for person
- For Kibrik et al. some lexical items irregular for gender

agreement with no sign of person

(14)	konnol	d-as:ar-ši	d-i
	woman (II)[ABS.SG]	II.SG-tremble.IPFV-CVB2	II.SG-be
<i>The woman is trembling.</i>			

(15)	zon	d-irχ:w in	
	1SG.ABS	II.SG-work	
<i>I work (woman speaking)</i>			

(16)	un	hanžugur	d-aq'a ?
	2SG.ABS	what.way	II.SG-come.PFV
<i>How did you get here? (to a woman)</i>			

plural pronouns

Archi (Aleksandr Kibrik 1972 and personal communication)

- | | | | |
|--------------------------|---------------------|------------------------------|------------------|
| (17) teb | ba-q ^f a | (18) teb | q ^f a |
| they | H.PL-came | they | [N_H.PL]came |
| <i>they (human) came</i> | | <i>they (non-human) came</i> | |
| (19) nen | q ^f a | (20) ž ^w en | q ^f a |
| we.EXCL | [?]came | you.PL | [?]came |
| <i>we came</i> | | <i>you came</i> | |

agreement with personal pronouns in Archi

zon “I”

→ gender agreement

un “you (sg)”

→ gender agreement

teb “they”

→ gender agreement

nen “we” [humans]

→ Ø-

žʷen “you (pl)” [humans]

→ Ø-

verbal affixes marking agreement in Archi

GENDER	NUMBER	
	singular	plural
I (male human)	<i>w-/⟨w⟩</i>	<i>b-</i>
II (female human)	<i>d-/⟨r⟩</i>	
III (other)	<i>b-/⟨b⟩</i>	\emptyset -
IV (other)	\emptyset -/⟨∅⟩	

gender resolution

(21)	dija-wu father(I)[ABS.SG]-and	buwa-wu mother(II)[ABS.SG]-and	ɬ:wak near	b-i H.PL-be.PRS
------	----------------------------------	-----------------------------------	---------------	--------------------

Father and mother are near.

(22)	dija-wu father(I)[ABS.SG]-and	dogi-wu donkey(III)[ABS.SG]-and	ɬ:wak near	b-i H.PL-be.PRS
------	----------------------------------	------------------------------------	---------------	--------------------

Father and the donkey are near.

(23)	dogi-wu donkey(III)[ABS.SG]-and	moto:l-u kid(IV)[ABS.SG]-and	ɬ:wak near	i [N_H.PL]be.PRS
------	------------------------------------	---------------------------------	---------------	---------------------

The donkey and the goat kid are near.

(Kibrik 1977: 186-187, Corbett 1991: 271-273)

resolution rules in Archi (if no person feature)

- If there is at least one conjunct denoting a rational or rationals, gender I/II agreement (*b-*) will be used;
- otherwise, gender III/IV agreement (\emptyset -) will be used.
- However, when one of the conjuncts is the pronoun *zon*, *un*, *nen*, or *ž^wen* (“I, you sg, we, you pl”) → \emptyset - (i.e. equivalent to gender III/IV agreement).

difficult example of resolution in Archi

(24)	zo:n-u	buwa-wu	q ^s a
	1.SG.ABS-and	mother(II)[SG.ABS]-and	[??]come.PFV

I and mother came.

two options for the description of Archi

Earlier account (Kibrik et al. 1977a, Kibrik 1977):

- No person feature.
- Personal pronouns *zon*, *un*, *nen*, and *žʷen* form a special *gender*.
- For resolution rules (based only on gender and number), genders must be *ranked*, with the gender containing the pronouns ranked higher than other genders.

Our proposal:

- Accept a person feature.
- Usual gender resolution rules.
- Fairly standard person resolution rules (but only: persons 1 and 2 > person 3).

proposed person-number paradigm in Archi

PERSON	NUMBER	
	singular	plural
1	gender agreement	bare stem
2	gender agreement	bare stem
3	gender agreement	gender agreement

adjective

non-derived:

- no inflection
- small class (33 in our dictionary), none “basic”:

nationalities

ʕarab ‘Arab’ *haman* ‘Lak’ *maʕarul* ‘Avar’ *o‘ro‘s* ‘Russian’ *pirsi* ‘Persian’

characteristics:

bis̥in ‘foreign, step’ *č'ere* ‘barren’ *dalu* ‘mad’ *mekle* ‘male’

inflected adjectives: derived

from verbs + -tu

t'i-tu-t ‘small’ *na^fč-du-t* ‘blue’ *χala-tu-t* ‘old’ *mac'a-tu-t* ‘new’

from adverbs + -tu

hinc-du-t ‘present, actual’ *qi-tu-t* ‘day’ *jak-du-t* ‘deep’

from genitives + -tu

kutak-li-nnu-t ‘hard’ *orχ^fi-li-nnu-t* ‘salty’

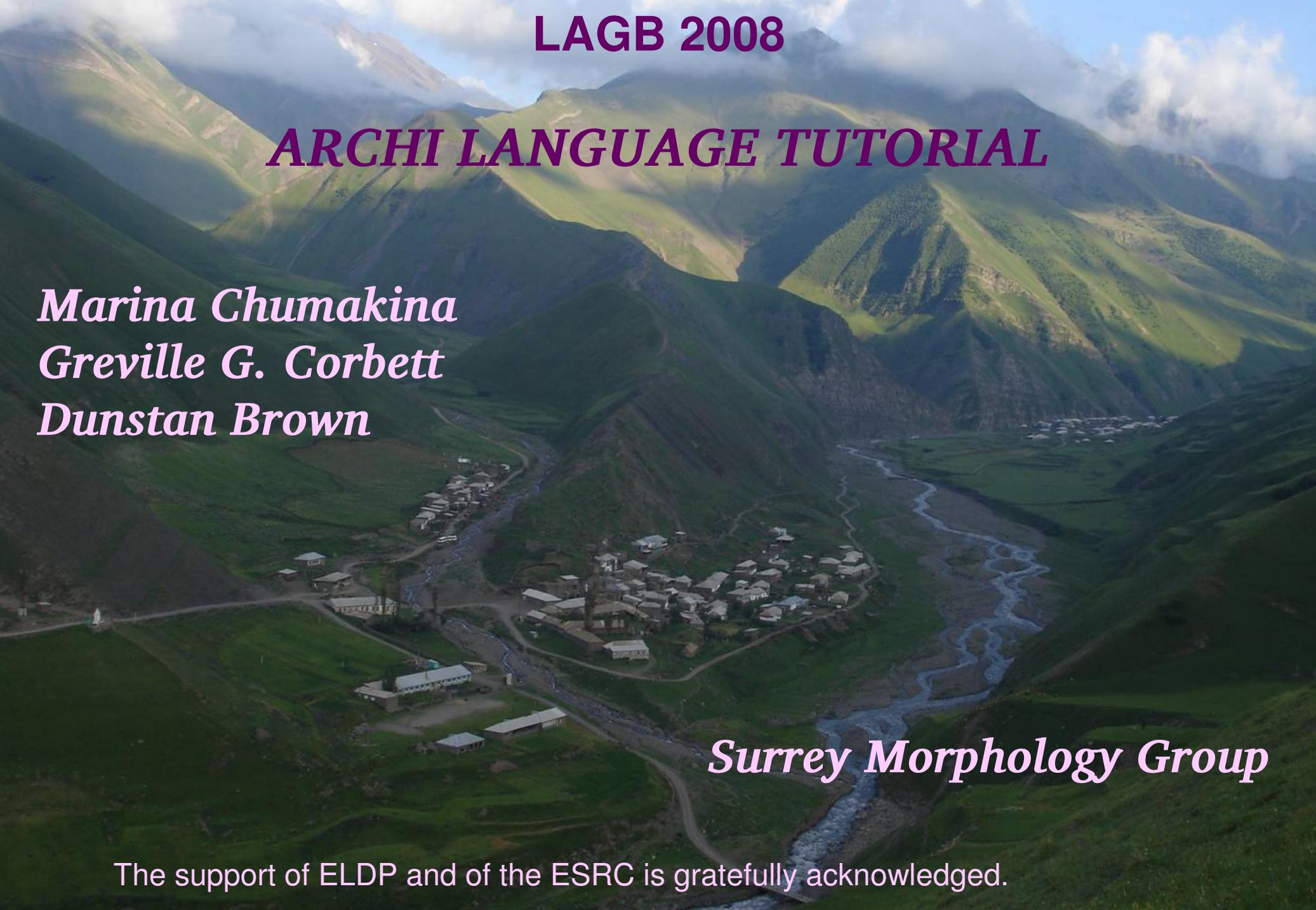
from loanwords + -tu

zor-tu-t ‘strong’ *χas-du-t* ‘special’ *mašhur-tu-t* ‘famous’

“occasional” adjectives:

(25) <i>ha^fter-če-q^f-aš-du-t</i>	<i>duχ:^fa-n</i>	<i>hal-mu-s</i>
river(IV)-OBL.SG-INTER-EL-ATR-IV.SG	mill(IV).OBL.SG-GEN	master(I)-OBL.SG-DAT
<i>da:^fzeχ:u-li</i>		
fall.on.IV.SG.PFV-EVID		

The one (small child, IV) from the river fell on the miller. (Kibrik et al., 1977b)

The background image shows a wide-angle aerial shot of a deep mountain valley. The valley floor is a mix of green fields and a winding blue river. A small, scattered settlement of houses is nestled in the valley. The surrounding mountains are steep and covered in dense green forests, with patches of snow or ice visible at higher elevations. The sky above is a clear blue with some wispy white clouds.

LAGB 2008

ARCHI LANGUAGE TUTORIAL

*Marina Chumakina
Greville G. Corbett
Dunstan Brown*

Surrey Morphology Group

The support of ELDP and of the ESRC is gratefully acknowledged.

verb

- verb morphology:
 - stems
 - number of forms
 - aspect, tense, mood
 - non-finite forms
- structure: simple vs. complex verbs

number of forms

The Archi verb has “basic” **tense/aspect/mood** forms and related **gerunds, participles** and **masdars** total **12,405**.

The Archi verb agrees with the Absolutive of the clause in **gender** and **number**. Masdars can take the nominal **case** endings. These two factors multiply the paradigm up to **188,463**.

The **reportative** can be formed from all personal forms, and from the admirative, and itself has an impressive array of forms; it is also the base for further participles. The additional forms (excluding gender and number distinctions) are **107,078**.

When gender/number and case distinctions are included that number rises to **1,314,376** forms. When added to 188,463 this gives **1,502,839** forms in total. (Based on Kibrik, 1998: 466-467)

verbal stems

dynamic verb: three (morphemic) stems, irregular imperative

regular formation

	INF	IPFV	PFV	IMP
‘divide’	q’f a-s	q’f a-r	q’f o	q’f a
‘get cold’	qe-s	qe>r>qi-r	qa	qeqi
‘beat’	daxi-s	da>r>xi-r	daxdi	daxi

irregular formation

	INF	IPFV	PFV	IMP
‘carry away’	χ:e-s	o>r>χ:i-r	oχ:a	χ:a
‘go’	q ^f e-s	o>r>q ^f i-r	oq ^f a	oq ^f a
‘boil’	s:ubu-s	sal	set:e	sisi

stative verb: one stem, no imperative

kł'an 'love', *sini* 'know', *hiba* 'be good'

gender marking

$a\chi a-s$ 'lie down':

number	gender	INF	IPFV	PFV
SG	I	w-aχa-s	w-a<r>χa-r	a<w>χu
	II	d-aχa-s	d-a<r>χa-r	a<r>χu
	III	b-aχa-s	b-a<r>χa-r	a χu
	IV	aχa-s	a<r>χa-r	aχu
PL	I	b-aχa-s	b-a<r>χa-r	a χu
	II			
	III	aχa-s	a<r>χa-r	aχu
	IV			

gender marking according to verb type

1. Gender-number marker is prefixal, imperfective marker is $<r>..-r$ everywhere:

	INF		IPFV		PFV	
'milk'	III	IV	III	IV	III	IV
	b-aca-s	aca-s	b-a<r>ca-r	a<r>ca-r	b-acu	acu

2. Gender-number marker is infixal, supplanting the first $<r>$ of the imperfective marker where appropriate:

	INF		IPFV		PFV	
'drop'	III	IV	III	IV	III	IV
	caχa-s	caχa-s	caχa-r	ca<r>χa-r	caχu	caχu

aχas ‘lie down’

moods

ADMIRATIVE	<i>arχarši χo, aχuna χoqi etc</i>
APPROBATIVE	<i>arχar-di, arχarši edi-di, aχuqi-di etc</i>
COHORTATIVE	<i>aχa-su</i>
CONJUNCTIVE	<i>arχar-kini, aχuli i-kini, aχuli edi-kini etc</i>
DUBITATIVE	<i>aχu-čugu, arχar-čugu, arχarši i-čugu etc</i>
EVIDENTIAL	<i>aχu-li, aχuli edi-li, aχuqiši edi-li etc</i>
INDICATIVE	<i>aχas</i>
IMPERATIVE	<i>aχa</i>
INTERROGATIVE	<i>aχu-ra, aχulla, arχa-ra, arχarši i-ra etc</i>
OPTATIVE	<i>aχu-tan</i>
POSSIBILITIVE	<i>aχu-li χoqi, arχarši edi-li χoqi etc</i>
PROHIBITIVE	<i>arχar-(di)gi</i>
REPORTATIVE	<i>arχarer, aχor, arχarši ir etc</i>

tense is periphrastic

kos ‘hear’:

		PRESENT (i)	PAST (edi)
IPFV (<i>kor</i>)	IPFV-ši	present1 <i>kor-ši i</i>	imperfect1 <i>kor-ši edi</i>
	IPFV-mat	present2 <i>kor-mat i</i>	imperfect2 <i>kor-mat edi</i>
PFV (<i>ko</i>)	PFV-li	perfect1 <i>ko-li i</i>	pluperfect1 <i>ko-li edi</i>
	PFV-mat	perfect2 <i>ko-mat i</i>	pluperfect2 <i>ko-mat edi</i>
POT (<i>koqi</i>)	POT + ši	inceptive <i>koqi-ši i</i>	past inceptive <i>koqi-ši edi</i>

tense is periphrastic

kos ‘hear’:

		PRESENT (i)	PAST (edi)
IPFV (<i>kor</i>)	IPFV-ši	present1 <i>kor-ši i</i>	imperfect1 <i>kor-ši edi</i>
	IPFV-mat	present2 <i>kor-mat i</i>	imperfect2 <i>kor-mat edi</i>
PFV (<i>ko</i>)	PFV-li	perfect1 <i>ko-li i</i>	pluperfect1 <i>ko-li edi</i>
	PFV-mat	perfect2 <i>ko-mat i</i>	pluperfect2 <i>ko-mat edi</i>
POT (<i>koqi</i>)	POT + ši	inceptive <i>koqi-ši i</i>	past inceptive <i>koqi-ši edi</i>



non-finite forms

converbs:

irχ^wmus ‘work’

	CONSECUTIVE	SIMULTANEOUS	CONTINUOUS	NEGATIVE
INF		<i>irχ^wmus-ši</i>		<i>irχ^wmus-t'u-ši</i>
IPFV		<i>irχ:^win-ši</i>	<i>irχ:^wim-mat</i>	<i>irχ^wna:-t'u-ši</i>
PFV	<i>irχ^wni-li</i>	<i>irχ^wni-na</i>	<i>irχ^wni-mat</i>	<i>irχ^wni-t'aw</i>
POT		<i>irχ^wniqi-ši</i>		

participles: gender, number, case

verbal nouns (masdars): case, some agree in gender and number

'heaviness'		SG	PL
I	<i>wiq^{wf}kul</i>	<i>biq^{wf}kul</i>	
	<i>dīq^{wf}kul</i>		
III	<i>biq^{wf}kul</i>	<i>iq^{wf}kul</i>	
	<i>iq^{wf}kul</i>		

simple vs. complex verbs

1. Simple verbs: about 170
2. Complex verbs: 1000+

complex verb = lexical part + simple verb

simple verb:

*as ‘do’, kes ‘become’, bos ‘say’,
other simple verb (less commonly)*

lexical part:

stative verb: *do^{fz} ‘be big’*

do^{fz} as ‘grow’

noun: *cac ‘prickle’*

cac kes ‘frown’

lexical part of a complex verb

noun in the locative: *ba^{ri}* ‘pool’

ba^{ri}raj aχas ‘bathe’

noun in the ergative: *k'os* ‘knife’

k'as:an as ‘slaughter’

verbal noun form a Russian verb *mešat'* ‘disturb’

mišajatkul as ‘disturb’

reduplicated form not otherwise used

χ:iriχ-χ:iris as ‘pester’

loanwords not otherwise used

dagawur as ‘sign an agreement’, *jabalgu as* ‘barter’

unclassified

acr'is eχmus ‘fall ill’ (“fake” dative of *acr'i* ‘illness’, real dative is *ac:ilis*)

Archi syntax.

Outline

Simple sentences:

- alignment of the central arguments;
- agreement

Complex sentences:

- relative clauses;
- complement clauses;
- adverbial clauses

Alignment of the main arguments

Intransitive: ABS (26)

Transitive: ERG-ABS (27-28)
DAT-ABS (29-30)

OTHER: ERG-ABS (31)
GEN-ABS (32)
SUPEREL-ABS (33)

agreement

Controllers (34-35)

Archi is a thoroughly ergative language, so agreement at clause level is controlled by the absolute argument

agreement

controllers within NP: the head noun controls its attribute (36)

agreement

Targets:

verbs, adjectives, adverbs (37)

particles (38)

pronouns (39)

postpositions (40)

relative clauses

Accessibility Hierarchy :

SU > DO > IO > OBL > GEN > OCOMP

(Keenan & Comrie 1977)

(examples 41 to 53)

complement clauses

'begin', 'like', 'want', 'need' + infinitive:

- (54) laha-s diq' a-s kɬ'an ke-r
 girl(II).OBL.SG-DAT soup(III)[SG.ABS] make.IV.SG-INF like AUX.IV.SG-IPFV
The girl likes making soup.
- (55) laha-s kʷaš-ši diq' a-s
 girl(II).OBL.SG-DAT need.PFV[IV.SG]-CVB2 soup(III)[SG.ABS] make.IV.SG-INF
The girl needs to make soup.
- (56) lo bijeʳk'u diq' a-s
 girl(II)[SG.ABS] start_{II.SG>PFV} soup(III)[SG.ABS] make.IV.SG-INF
The girl started to make soup.

complement clauses

‘finish’ + converb:

- (57) lo laq^we<r>t:i diq' uw-li
 girl(II)[SG.ABS] finish<II.SG>PFV soup(IV)[SG.ABS] make.PFV[IV.SG]-CVB1
- The girl finished making soup.*

‘know’ + masdar:

- (58) t:unne-li laq^wiwt:a-t'u-kul sin-š-er
 flee.I.SG.PFV-CVB1 save.I.SG.PFV-NEG-MSD know-CVB2-RPRT

Allegedly having understood that he would not be able to save himself by fleeing... (Bear story 11)

complement clauses

logophors (3rd person pronouns used in dependent clause)

3 rd person pronoun		SG				PL	
	I	II	III	IV			
ABS	tuw	tor	tob	tot	teb		
ERG	tuwmi	tormi	tummi	totmi	temmaj		
logophors		SG				PL	
	I	II	III	IV			
	ABS	inž					
	ERG	žu	že				

- (59) kʷač'-ur-če-t o**b**sd-er žu-s harak
 paw(III)-PL-OBL.PL-SUPER <III.SG>-stand.PFV-RPRT LOGOPH.1.OBL.SG-DAT in.front
...and allegedly stood on his paws in front of him (Uncle Umar) (Bear story, 6).

long-distance agreement

agreement across clause boundary

- (60) laha-s me^f c'abu-s kɬ'an **b-eker**
girl(II)SG.OBS-DAT whey(**III**)[SG.ABS] drink-INF like **III.SG-AUX.IPFV**
The girl likes drinking whey.

YES for ‘need’, ‘want’, ‘like’, ‘know how’,
see examples 61-63

long-distance agreement

NO for ‘start’, ‘finish’:

(64) lo	bije<r>k <u>u</u>	berku	aa-s
girl(II)[SG.ABS]	start<II.SG>PFV	pasty(III)[SG.ABS]	<III.SG>make-INF

The girl started making pasties.

(65) *lo	bijek <u>u</u>	berku	aa-s
girl(II)[SG.ABS]	start<III.SG>PFV	pasty(III)[SG.ABS]	<III.SG>make-INF

**The girl started making pasties.*

backward control

control “upwards”: downstairs overt argument determines interpretation of upstairs absent argument. (Polinsky, 2002)

The first piece of evidence needed would be from case assignment.

to the best of our knowledge: NO evidence for backward control in Archi:

(66)	*laha	berku	aa-s	k ^f 'an	ke-r
	girl(II).SG.ERG	pasty(III)[SG.ABS]	<III.SG>make-INF	like	IV.SG.AUX-IPFV

**The girl likes making pasties.*

(67)	laha-s	berku	aa-s	kɬ'an	ke-r
	girl(II).OBL.SG-DAT	pasty(III)[SG.ABS]	<III.SG>make-INF	like	IV.SG.AUX-IPFV

The girl likes making pasties.

(68)	laha	berku	au
	girl(II).SG.ERG	pasty(III)[SG.ABS]	<III.SG>make.PFV

The girl has made pasties.

(69)	b-ez	laha	berku	aa-s	kɻ'an	be-ke-r
	III.SG-1SG.DAT	girl(II).SG.ERG	pasty(III)[SG.ABS]	<III.SG>make-INF	like	III.SG-AUX-IPFV
<i>I like the pasties that the girl makes.</i>						

adverbial clauses: converbs

simple

(70)	šipif-li	e <bu> li	tumank'	kammu-li
	Shapi(I)-SG.ERG	<III.SG>put.PFV-CVB1	gun(III)[SG.ABS]	shoot.PFV-EVID
<i>Shapi, having put the gun (i.e. having aimed), shot. (Bear story, 3)</i>				

(71)	to-t	naq' ^w	lap'a:-r-ši	b-aq'ā-li
	that-IV.SG	earth(IV)[SG.ABS]	throw-IPFV-CVB2	III.SG-come-EVID
<i>...throwing the earth, he came... (Bear story, 6)</i>				

specialised

(72)	un	asmus	d-eq ^f e-l-kan	zon	q ^{wf} ijla
	2SG.ABS	marry	II.SG-go.INF-CVB1-until	1SG.ABS	twice
	asmus-u	o<r>q ^f a-li	χara:šu-wu	d-aq ^f a	
	marry-AND	<II.SG>go.PFV-CVB1	back-AND	II.SG-come.PFV	

During the time when you haven't even got married (until you get married), I was married twice and divorced (came back).

21st century dictionary

- data stored in relational database
- four versions of the dictionary
 - community version (hardcopy)
 - community version (CD, MP3 files)
 - reference version (DVD, WAV files, linguist format)
 - linguist version (CD, MP3 files, linguist format)
- technological requirements of community
 - PC-based
 - implemented by Harley Quilliam using .Net

21st century dictionary



21st century dictionary

- advantages of the relational database
 - easy to keep adding data beyond life of the dictionary project
 - searching for interesting data, such as minimal pairs

21st century dictionary

- scripts
 - Cyrillic-based orthography for speakers
 - IPA-based for linguists

21st century dictionary

- 410 page hardcopy production
 - local production for logistic and economic reasons

21st century dictionary

A Archi Dictionary

File Help

Archi A dictionary of the language of the Archi People, Daghestan, Caucasus.

Created by the Surrey Morphology Group
Funded by the Hans Rausing Endangered Languages Documentation Programme

Click on an initial letter/symbol of the search word (greyed letters - no matching words):

English : A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Russian : А Б В Г Д Е Ж З И Й К Л М Н О П Р С Т У Ф Х Ц Ч Ш Щ Ъ Ы Ъ Э Ю Я
Archi (IPA) : a a ^f a: b c č c' č' d e e ^f e: g g ^w h i i ^f i: j k k' k ^w k ^t k ^t ' k ^w k ^t ^w l + +: + ^w m n o o ^f o: p p' q q ^r q ^w q ^t q' q ^r r v v ^r v ^w s s: š š: t t' t ^w u u ^f u: w z ž ž ^w ñ ý ý ^w ý ^t ý: ý ^w ý ^r ý ^t ý ^w h
Archi (Cyrillic) : а аи аа б в г ги гв гъ гыв гъ д е еи ж жв з и ии ий к ки кив ккы къ кы кыв къ кыв л ли лив ллъв лъв лъв м н о ои оо п пл р с сс т ти тв у уи уу х хи хв хх ххв ххы ххыв хъ хы хыв хы хыв ц ци ч чи ш щ

Grant:
Hans Rausing
Endangered Languages
Documentation
Programme

Investigator:
Greville G. Corbett

Researcher:
Marina Chumakina

Consultants:
Aleksandr Kibrik
Sandro Kodzasov
Dzhalil Samedov
Dunstan Brown
Nicholas Evans
Peter Lutzeier
Harley Quilliam

A random picture from the dictionary (click to see the entry)



játzikan árci: top layer on the stack of dried cow dung protecting the stack from rain

UNIVERSITY OF SURREY Surrey Morphology Group

Exit

21st century dictionary

A Archi Dictionary

File Help

Created by the Surrey Morphology Group
Funded by the Hans Rausing Endangered Languages Documentation Programme

Archi A dictionary of the language of the Archi People, Daghestan, Caucasus.

Click on an initial letter/symbol of the search word (greyed letters - no matching words):

English : A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Russian : А Б В Г Д Е Ж З И Й К Л М Н О П Р С Т У Ф Х Ц Ч Ш Щ Ъ Ы Ь Э Ю Я
Archi (IPA) : a a' a: b c č c' ě d e e' e: g gʷ h i i' i: j k k' kʷ kť kʷ kʷ kʷ kʷ t t' tʷ t'ʷ m n o o' o: p p' q q' qʷ q'ʷ q' q'ʷ r v v' vʷ s s: š š: t t' tʷ u u' u: w z ž zʷ ſ ſ' ſʷ ſ: ſ'ʷ ſ'ʷ h
Archi (Cyrillic) : а ал аа б в г гл гв гъ гы гыв гъ д е ел ее ж жв з и ил ии ий к ки кив кв ккы къ кы кыв къ къв л лі лів ллъв лъв лъв м н о ол оо п пл р с сс т ті тв у ул уу х хл хв хх ххв ххы ххыв хъ хы хыв хы хыв ц ці ч чи ш щ

S Click on a word

settlement
seven
seventy
several
severely
sew
sexual
shade
shaft
shah
shake
shaken
shame
share
sharia
sharp
sharpen
sharpen
sharply
shave
shawl
she
sheaf
sheath
shed
sheep
sheep-cote
sheepfold
sheepskin
sheer
sheet
sheikh
shelf
shell
shelter
shepherd
shiftv

A random picture from the dictionary (click to see the entry)



játikan árči : top layer on the stack of dried cow dung protecting the stack from rain

Exit

21st century dictionary



The screenshot shows the Archi Dictionary application window. At the top, there's a menu bar with 'File' and 'Help'. Below the menu is a navigation bar with language links: English, Russian, Archi (IPA), Archi (Cyrillic), and a few others in smaller fonts. The main title 'Archi' is prominently displayed in large blue letters, followed by the subtitle 'A dictionary of the language of the Archi People, Daghestan, Caucasus.' A note at the top right states 'Created by the Surrey Morphology Group' and 'Funded by the Hans Rausing Endangered Languages Documentation Programme'. Below the title, a search bar prompts the user to 'Click on an initial letter/symbol of the search word (greyed letters - no matching words)'. There are four search boxes for different alphabets: English (A-Z), Russian (А-Я), Archi (IPA) (a-i, etc.), and Archi (Cyrillic) (а-и, etc.). The main search field contains the word 'sheepfold'. To the left of the search field is a sidebar with a list of words starting with 'S': settlement, seven, seventy, several, severely, sew, sexual, shade, shaft, shah, shake, shaken, shame, share, sharia, sharp, sharpen, sharply, shave, shawl, she, sheep, sheaf, sheath, shed, sheep, sheep-cote, sheepfold, sheepskin, sheer, sheet, sheikh, shelf, shell, shelter, shepherd, shifty. To the right of the search field, a message says '2 entries match the word "sheepfold"'. Below the search area, two definitions are listed: 'kárk' n. smallish underground **sheepfold** (see máti) for 10-15 sheep' and 't'uq' n. stone post inside an underground **sheepfold** (see mati) which supports the stone roof'. The bottom of the screen features the University of Surrey logo and the 'Surrey Morphology Group' name.



21st century dictionary

A Archi Dictionary

File Help

Archi Архи English Russian Archi (IPA) Archi (Cyrillic)

Created by the Surrey Morphology Group
Funded by the Hans Rausing Endangered Languages Documentation Programme

Archi

A dictionary of the language of the Archi People, Daghestan, Caucasus.

Click on an initial letter/symbol of the search word (greyed letters - no matching words):

English : A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Russian : А Б В Г Д Е Ж З И Й К Л М Н О П Р С Т У Ф Х Ц Ч Ш Щ Ъ Ы Ь Э Ю Я
Archi (IPA) : a a ^f a: b c ě c' ě' d e e ^f e: g gʷ h i i ^f i: j k k' kʷ k ^t k ^t ' kʷ kʷ kʷ t t' t ^f t ^w m n o o ^f o: p p' q q ^f qʷ q ^w q' q: ^f r v v ^f v ^w s s: š š: t t' t ^w u u ^f u: w z ž ž ^w ʐ x xʷ x ^f x ^w x: xʷ x ^t x ^w h
Archi (Cyrillic) : а аl аа б в г гl гв гъ гы гыv гъ д е еl ее ж жв з и ил ии ий к кl ки кв кв ккы къ ккы къ ккв къ л лl лв ллъв лъ лъв м н о оl оо п пл р с сс т тl тв у ул уу х хl хв хх ххы ххыv хъ хы хыv хы хыv ц цl ч чl ш щ

S Click on a word **sheepfold** Click on a dictionary entry 2 entries match the word 'sheepfold'

settlement seven seventy several severely sew sexual shade shaft shah shake shaken shame share sharia sharp sharpen sharply shave shawl she sheaf sheath shed sheep sheep-cote sheepfold sheepskin sheer sheet sheik shelf shell shelter shepherd shifty	<p>k'árk'l n. smallish underground sheepfold (see mat^l) for 10-15 sheep t'uq^f n. stone post inside an underground sheepfold (see mat^l) which supports the stone roof</p>
---	---

UNIVERSITY OF SURREY Surrey Morphology Group

Exit

21st century dictionary

A тұсы

t'ūq'
NOUN
каменный столб в подземном загоне (см. маллыи), на который опирается каменный потолок; stone post inside an underground sheepfold (see мағи) which supports the stone roof



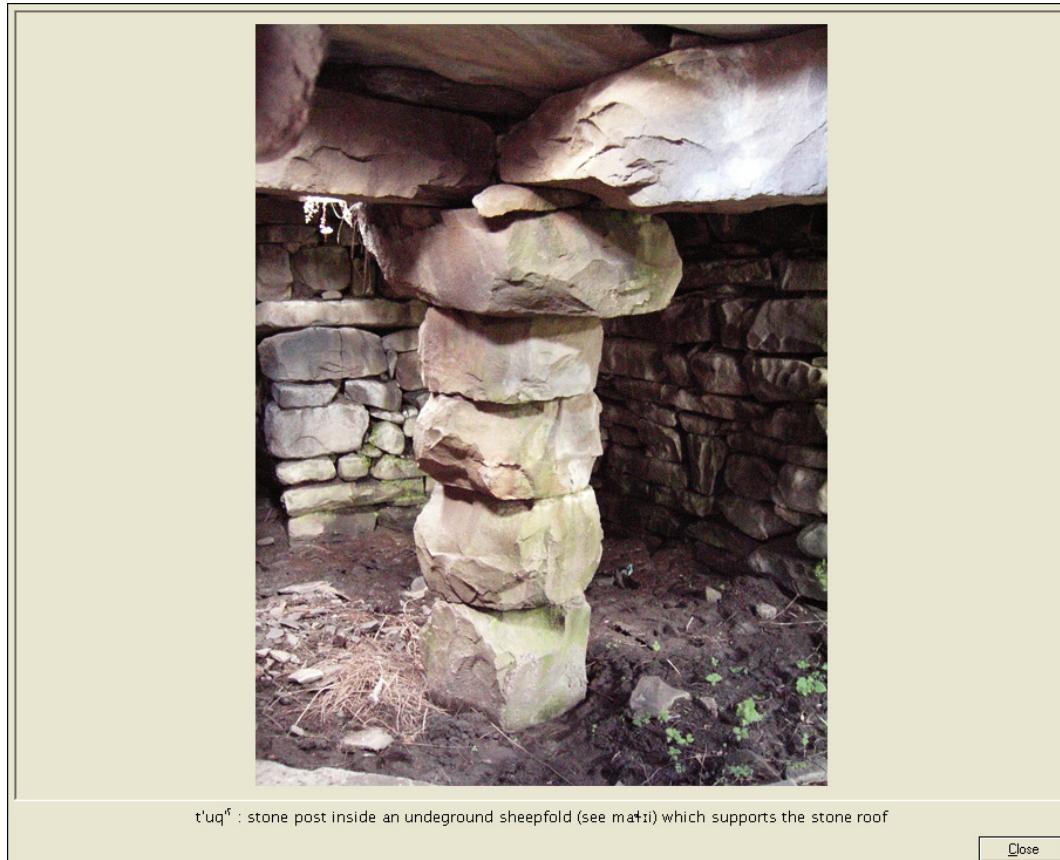
Morphology:
GENDER: III
Sg: NOM: t'uq' (▶)
ERG: t'ūq'li (▶)
LOC: t'ūq'lit (▶)
Pl: t'ūq'mul (▶)
t'ūq'mulčaj (▶)

Close 100

File Edit

t'ik'abos dyn. v.
t'il n.
t'irn n.
t'irk'bos dyn. v.
t'itut adj.
t'isuf'sa'nñamma adv.
t'isarakdumma adv.
t'jonna adv.
t'jta-šítas dyn. v.
t'jtias dyn. v.
t'jtakes dyn. v.
t'o stat. v.
t'onó n.
t'óshikes dyn. v.
t'uj n.
t'uk' n.
t'ummúl n.
t'ummulin qʷʷil n.
t'ump'ür n.
t'und n.
t'uq' n.
t'usúm n.
t'ut'ú n.
t'ufrúš n.
tábarzan n.
tahár n.
taká n.
tálíh n.
tálíh bekés c. verb.
tamár n.
tamát n.
tamáša n.
tamáša ábas c. verb.
tamáša busbús c. verb.
támmugu n.
tampál stat. v.
tampálu adj.
tántkes dyn. v.
tany n.
tapáńči n.
tapáwut n.
tarás dyn. v.
taráz n.
tárbı n.
tárbı abas c. verb.
tári n.
tartıb n.
taržuma n.
tárxbos dyn. v.
tawákial n.
tawákial ábčas c. verb.
tax n.
taxtá n.
taxtápeč n.
témmet adv.
témmeti jt' u adj.
tempiň n.
ténil adv.
téniš adv.
téniyxut adv.

21st century dictionary





references

- Berg, Helma van den. 2005. The East Caucasian language family. *Lingua* 115.147-190.
- Chumakina, Marina, Dunstan Brown, Harley Quilliam and Greville G. Corbett. 2007. Slovar' arčinskogo jazyka (arčinsko-russko-anglijskij) [A dictionary of Archi: Archi-Russian-English]. Makhachkala: Delovoj Mir.
- Chumakina, Marina, Anna Kibort and Greville G. Corbett. 2007. Determining a language's feature inventory: person in Archi. In: Peter K. Austin and Andrew Simpson (eds) *Endangered Languages* (special issue of *Linguistische Berichte*, number 14), 143-172. Hamburg: Helmut Buske.
- Comrie, Bernard. 2008. Linguistic diversity in the Caucasus. *Annual Review of Anthropology* 37.131-143.
- Corbett, Greville G. 1991. *Gender*. Cambridge: Cambridge University Press.
- Keenan, Edward L. and Bernard Comrie. 1977. Noun phrase accessibility and universal grammar. *Linguistic Inquiry*, Vol. 8, No 1. 63-99.

references

- Kibrik, A. E. 1972. O formal'nom vydelenii soglasovatel'nyx klassov v arčinskem jazyke. *Voprosy jazykoznanija* no. 1.124-31.
- Kibrik, A. E. 1977. *Opyt strukturnogo opisanija arčinskogo jazyka*, III: *Dinamičeskaja grammatika*. (Publikacii otdelenija strukturnoj i prikladnoj lingvistiki, 13). Moscow: Izdatel'stvo Moskovskogo universiteta.
- Kibrik, A. E., S. V. Kodzasov, I. P. Olovjannikova and D. S. Samedov. 1977a. *Opyt strukturnogo opisanija arčinskogo jazyka*, I: *Leksika, fonetika*. (Publikacii otdelenija strukturnoj i prikladnoj lingvistiki, 11). Moscow: Izdatel'stvo Moskovskogo universiteta.
- Kibrik, A. E., S. V. Kodzasov, I. P. Olovjannikova and D. S. Samedov. 1977b. *Arčinskij jazyk. Teksty i slovari*. (Publikacii otdelenija strukturnoj i prikladnoj lingvistiki, 11). Moscow: Izdatel'stvo Moskovskogo universiteta.
- Kibrik, A.E. 1998. Archi. In: Andrew Spencer and Arnold M. Zwicky (eds), *The Handbook of Morphology*, 455-476. Oxford: Blackwell Publishers.
- Korjakov, Ju. B. 2006. *Atlas kavkazskix jazykov: s priloženiem polnogo reestra jazykov*. Moscow: Piligrim.
- Polinsky, Maria and Eric Potsdam. 2002. Backward Control. *Linguistic Inquiry* 33: 245-282.

references

Chumakina, Marina, Dunstan Brown, Harley Quilliam
and Greville G. Corbett. Electronic dictionary of Archi.

<http://www.smg.surrey.ac.uk/archi/linguists/>