Phonology of T'ap'anta Abaza: examples from Inzhig-Chkun and Gumlokt

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1 Introduction

1.1 General information about Abaza

In this article I describe two varieties of Tapanta dialect of Abaza (ISO-639-3 abq, glottocode abaz1241) spoken in two villages in the Karachay-Cherkess Republic: Inzhig-Chkun (in Abaza /jənˈdʒəgj-tʃkˈwən/) and Krasniy Vostok (in Abaza /gwəmˈlokt/). Abaza is a language of the Abkhaz-Abaza group of Northwest Caucasian family of languages. After the Caucasian War (1817–1864) a lot of Abaza, Abkhaz, Ubykh and Adyghe people were forced either to resettle from higher mountains or to immigrate to the Ottoman Empire. As a result Abaza people were split into those who remain in Russia (mostly in the Karachay-Cherkess Republic, see Figure 1 created with lingtypology (Moroz 2017)) and who moved to Turkey. According to the 2010 Russian census, there are slightly less than 38 thousand speakers of Abaza in Russia. The exact number of speakers in other countries, mainly in Turkey (Chirikba 2012: 21–23), is unknown. The data analyzed in this study were collected in 2018, 2019 and 2021 during a field trip to the villages. Even though traditionally Abaza is treated as a separate language with two dialects T'ap'anta and Shkharawa (Genko 1955: 5–7; Tabulova 1976: 3–4; Lomthathidze 2006: 98), some of the researches consider Abkhaz and Abaza to be a dialect continuum (e. g. Hewitt 1979: 1; Colarusso 1988: 7–9; Chirikba 1996). However varieties of Inzhig-Chkun and Gumlokt belong to the same dialect, those lects have their own differences, e. g. *Abaza language* is /abaza bəz\$a/ in Inzhig-Chkun and /abaza bəz\$a/ in Gumlokt.

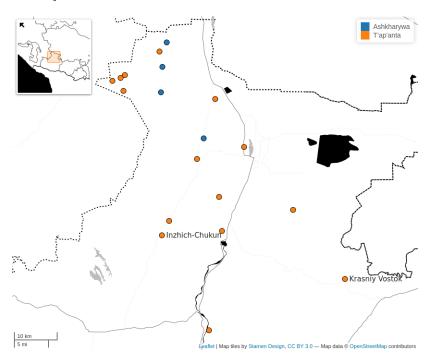


Figure 1: Abaza settlements of the Karachay-Cherkess Republic colored by the dialect (mostly based on (Chirikba 2020)). In Abazakt, Adyge-Khabl, Ersakon, Khumara, and Psauche-Dakhe Circassians are predominant. In Koydan Karachay are predominant.

1.2 State of research

Phonological inventory of Abaza can be found in multiple sources (Bouda 1940; Lomthathidze 1944, 2006; Genko 1955; Allen 1956; Tabulova 1976; Colarusso 1988; O'Herin 1992, 2021; Chirikba 1996; Arkadiev 2019), however more detailed phonological description is limited to (Bouda 1940; Lomthathidze 1944; Genko 1955; Catford 1972; Tabulova 1976; Colarusso 1988; Arkadiev 2019) and lack any acoustic analysis that appears just recently (Mamonova, Moroz 2019). It is also worth mentioning works by V. Chirikba (Chirikba 1985, 2020), where he provides data from huge amount of Abaza settlements, explores correspondences of post-alveolar sibilants among them and compare obtained data with data from Abkhaz and Adyghe.

2 Phonological inventory

2.1 Consonants

Phonological inventory of T'ap'anta is present in Table 1. I illustrate¹ consonant inventory with some examples in Appendix 1.

Table 1: Joint consonant system of Inzhig-Chkun and Gumlokt. Parenthesis denote the system that is common for Gumlokt, where the vast mojority of speakers use labialised post-alveolar segments.

	aspirated plosives	ejective plosives	voiced plosives	voiceless affricates	ejective affricates	voiced affricates	voiceless fricatives	voiced fricatives	nasals	approximant	tap	laterals
labial	ph	p'	b				f	v	m	w		
dental	th	ť	d	ts	ts'	dz	S	Z	n			
alveolar											ſ	
post-alveolar (labialized)				tŝ(w)	tŝ'(w)	dâ(w)	ŝ(w)	$\hat{z}(w)$				
retroflex				tş	tş'	dz	ş	z				
alveolo-palatal				tç	t¢'	dz	Ç	Z				
lateral												l lj
palatal	C ^h	c'	j				ç			j		
plain velar	kh	k'	g									
labialized velar	khw	k'w	gw				xw					
plain uvular	qh	q'					χ	R				
palatalized uvular		q' ^j					χ ^j	$\mathbf{R}_{\mathbf{j}}$				
labialized uvular	qhw	q'w					χ ^w	R_{M}				
plain pharyngeal							ħ	ſ				
labialized pharyngeal							ħw	ςw				
glottal		?										

The main difference between Inzhig-Chkun and Gumlokt consonant systems is in post-alveolar consonants. All speakers of Inzhig-Chkun and some minority in Gumlokt use non-labialized post-alveolars (e. g. \hat{s} , see Figure 2). The majority of speakers in Gumlokt use labialised post-alveolars (e. g. \hat{s}^w). Everything become even more complicated, since some post-alveolars in Inzhig-Chkun correspond to retroflex segments in Gumlokt. It looks like there is some proto-phonemes that merged together in most Abaza dialects except Gumlokt and Apsua (Ashkharywa dialect, (Lomthathidze 2006: 47, 445–446)): in Apsua in the same position labialized retroflex fricatives are observed (cf. (1)–(2)).

- (1) ŝə (Inzhig-Chkun), sə (Gumlokt), swə (Apsua) 'door'
- (2) \hat{z} ə (Inzhig-Chkun), zə (Gumlokt), z^wə (Apsua) 'old'

Presented examples show that the post-alveolar correspondences between Inzhig-Chkun and Gumlokt not predictable without Gumlokt or Apsua data (see Table 2), so I decided to collect some lexicon that could be useful for further historical and

 $^{^1}$ In this work I will use two transcription systems. First system is my interpretation of Abaza phonology using IPA. Second is standard Abaza orthography. The IPA transcription used in this work differ from traditional Caucasian transcription, however Northwest Caucasian researchers still can retrieve desired information from orthographic correspondences. Unfortunately IPA alphabet still allows a lot of space for interpretation, so my system is differ from other recent phonological phonetic discriptions illustration of Northwest Caucasian languages (see (Gordon, Applebaum 2006; Andersson, Vaux, Pysipa (Şener) 2021)). I refuse to use symbols like \int , \int , \int or \int or

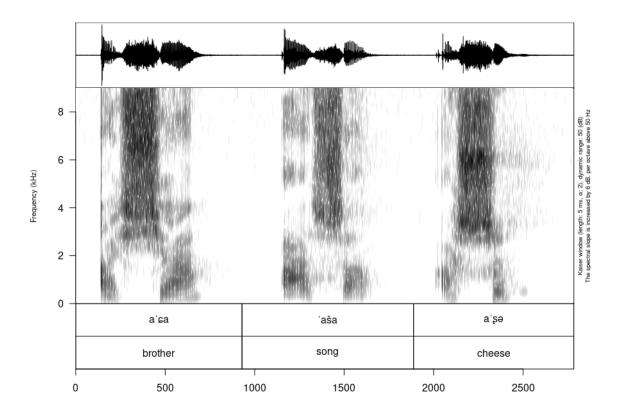


Figure 2: Fricatives by female speaker with non-labialised post-alveolars.

dialectal investigation (see Appendix 2).

Table 2: Post-alveolar correspondences between Inzhig-Chkun and Gumlokt.

	Inzhig-Chkun	minority in Gumlokt	majority in Gumlokt	orthography
bullock	tŝə	tŝə	tŝ ^w ə	чвы
apple	tŝ'a	tŝ'a	tŝ' ^w a	чІва
one person	za'dîə	za'dîşə	za'dâwə	заджвы́
you (2pl)	ŝa'ra	ŝa'ra	ŝ ^w a'ra	швара́
cow	źә	źә	ż́wə	жвы
hay	tŝa	tşa	tşa	чва́
oak	dztŝ'ə	dztş'ə	dztş'ə	джьчІвы
to go out	w'dâəlts'	w'dzəlts'	w'dzəlts'	уджвы́лцІ
door	ŝə	ŞӘ	Şə	ШВЫ
old	źә	zį∂	zə	жвы

It is worth mentioning that in (Chirikba 2020) based on different resources Vyacheslav Chirikba discovered even bigger variation. There are four sibilant subsystems in (ibid.: 27), however our field data support only two types: with labialised post-alveolars (majority) and with non-labialised post-alveolars (minority). In order to check my hypothesis I performed small experiment asking 31 Gumlokt speakers (15 female and 16 male speakers) for two words: $\hat{z}(w)$ 9 'cow' and $\hat{t}s'(w)$ 9 'apple.' As I found indeed there is a variation across speakers I worked with, however only Gumlokt 2 (with labialised post-alveolars, 25 people) and Gumlokt 1 (with non-labialised post-alveolars, 6 people) sibilant subsystems from (ibid.) were attested (see

Figure 3). It also visible from the experiment results that non-labialised post-alveolars are tend to appear in speach of older females, but this is just a preliminary result that should be checked with greater number of stimuli and speakers.

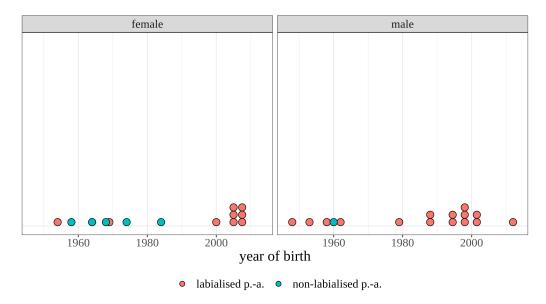


Figure 3: Results of experiment. Each dot represents one person colored by result and faceted by gender.

Except of my interpretation of alveolar and retroflex consonants (see the footnote on the page 3) the main difference between my phonological description and older ones is in the palatal area: I treat segments c^h , c', and \mathfrak{g} as palatal, however more traditional interpretation is palatalized velars: k^j , k', and \mathfrak{g}^j .

Articulation of labialization in T'ap'anta is different for different places of articulation (see (Catford 1972) for the similar observations for Abkhaz):

- · /w/-labialisation this kind of labialization is more or less independent of the main place of articulation. This kind of labialisation is typical for velar and uvular places fricatives and stops.
- \cdot / η /-labialisation this kind of labialization is typical for pharyngeals. It looks like the tongue body is retracted (due to pharyngeal place of articulation) and raised, that results / η /-like sound
- $\cdot \ \ /y/-labialisation \ -- this kind of labialisation is typical only for post-alveolars in Gumlokt. \ The main place of articulation somehow merged with the additional place of articulation that produces a long hole for \ /y/-like sound.$

There is also so called weaken labialised post-alveolars mentioned in literature (Chirikba 1985, 2020; Lomthathidze 1944), but we didn't noticed such sounds neither in Inzhig-Chkun nor Gumlokt.

2.2 Vowels

3 Stress

Appendix 1: List of consonant examples

Example words for consonants from Table 1. First example before slash is from Inzhig-Chkun and some speakers from Gumlokt, example after slash are common for most speakers from Gumlokt.

		_
transcription	orthography	translation
p ^h a	па	son
p'aj	пІай	dirt
ba	ба	you (2sgf)
fa'ra	фара́	to eat
ma	ма	here you are (giving something)
wa	ya	you (2sgm)
't ^h aba	та́ба	frying pan
't'at'a	тІа́тІа	soft
da	да	tendon
tsa	ца	barn
ts'a	цІа	louse
dza	дза	rib
sa	ca	I
'ʕʷaza	гІва́за	twins
na'Sa	нагІа́	slope
ba'ra	бара́	you (2sgf)
tŝa / tŝ ^w a	чва	skin
tŝ'a / tŝ'wa	чІва	apple
dâa'ra / dâwa'ra	джвара́	vomiting
ŝa / ŝ ^w a	шва	you (2pl)
aˈŝa / aˈŝʷa	ажва́	word
'tṣaba	тша́ба	gelding
tṣ'a	шІа	mouth
'pʰadza	па́джа	firstborn
sa'ba	шаба́	dried-up
'zac'a	жа́кІьа	beard
tça'ra	чара́	to eat
'tc'atc'a	чIáчIa	kidney
'dzadza	джьа́джьа	curly
ca	ща	blood
za'ra	жьара́	to deceive
la	ла	dog
l ^j a'g ^j an	льагьан	basin
'mac ^h a	ма́кьа	grindstone
'c'ana	кІьа́на	lump
' j aba	гьа́ба	(body) side
'çap ^h ad	тлапа́д	stocking
ja'ra	йара́	he (3sgm)
k ^h ət ^h	кыт	village
k'aˈɾa	кІара́	something
'gara	га́ра	cradle
k ^{hw} a	ква	rain
k'wa	кІва	bosom
g ^w a'ban	гваба́н	mattress
'x ^w at ^h a	хва́та	rug
q ^h a	хъа	head
q'a'la	къала́	town
q a ia	R Da/Ia	town

transcription	orthography	translation
χaˈra	xapá	to give a present
_r rara	гъа́гъа	broad, wide
'q' ^j ara	къьара́	to wave
χ ^j a'ra	хьара́	to give birth
r _j a _' sa	гъьаса́	nutwood
q ^{hw} a	хъва	ashes
q'waˈra	къвара́	to stay too long
χ ^w a	хва	mountain
tŝ ^w a'ʁ ^w a	чвагъва́	ploughed up
ћа	xIa	we
a'Sa	arIá	raw leather
ћ ^w а	хІва	pig
ςwa	гІва	dry
a'?aca	аъа́ща	situation

Appendix 2: Post-alveolar/retroflex correspondences to Inzhig-Chkun's post-alveolars in Gumlokt

transcription	orthography	translation
za'dâwə	заджвы	one person
dâwdâwə	джвджвы	saliva
hadâw	хІаджв	stack
ŝ ^w a 'ra	швара́	you
alarŝ ^w a'ra	аларшвара́	to turn on
'aŝ ^w a	аларшвара áшва	
gwlaŝw		song indifferent
ˈ _ł aŝ ^w a	гвлашв	
jaswa k'aŝwa'ra	гьа́шва	orphaned to fall
	кІашвара́	
k ^w rəŝ ^w	кврышв	patch
laŝw	лашв	blind
marat ^h aˈŝ ^w art ^h a	мараташва́рта	west
uap _, raż _m	набгъа́шв	one year old foal
p ^h əŝ ^w t ^h amamk' ^w a	пышвт ама́мкІва	without break
wəˈdzəŝʷa	удзышва	green
wəˈnaŝʷa	уна́шва	advice
q ^h ŝ ^w a	хъвшва	food (cooked)
ts'aˈŝʷa	цІашва́	trump card
ˈŝʷabəzॄ	шва́быж	very
'ŝ ^w apχa	шва́пха	example
'ŝ ^w aχ ^j a	швахьа́	Monday
ŝ ^w woc ^h	швуокь	gun
ŝ ^w ər	швыр	fruit
şə	шы	door
aˈsə	ашы́	cheese
ajˈṣa	айша́	traditional table
'ajşa	áйшa	bitter
bza'şə	бжашы́	not fully painted
şk'ə	шкІы	hundred
bəz'şa	бызша́	language
gwas	гваш	gate
la'şan	лаша́н	time for weeding
mşə	мшы	bear
rșa'ra	ршара́	to scare
nəs	ныш	clay
t ^h araş	тара́ш	gate
q _{hw} şə	ХЪВШЫ	medicine
q ^h əş	ХЪЫШ	window
teas	чаш	patty
şa'Swə	шагІвы́	fearful
şaga'la	шагала́	pack of jackal
	шпІа	thick
şp'a		document
şʔa	шъа	
ŞƏſ	шыр	animal
tŝ'wa	чІва	apple
amts'tŝ'wa'ra	амцІчІвара	to rob
a'qhatŝwra	ахъа́чІвра	to stitch
jaˈtŝʷa	йачІва́	star

transcription	orthography	translation
jaˈtŝ' ^w a	йачІва́	grey
kwaj tŝ'wa	квайчІва́	black
mətş'w	мычІв	shy
p ^h ətŝ'w	пычІв	initial
waˈtŝ'ʷə	уачІвы́	tomorrow
tŝ'wra	чІвра	to turn sour
tŝ' ^w ə	чІвы	bolt
tŝ ^w ə	чвы	bullock
'tŝ ^w aź ^w ara	чва́жвара	to speak
an'tŝ ^w az	анчва́жь	birthmark
'aq ^h atŝ ^w açara	а́хъачващара	to find respectable
a'tŝ ^w ədzra	ачвы́дзра	to lose something
bnatŝ ^w	бначв	aurochs
tŝ ^w a	чва	skin
tŝ ^w ra	чвра	to cut (wood)
tŝ ^w a	чва	color
dzətŝ ^w	дзычва	swan
źwtśwa	жвчва	overdone (about food)
'q'ətŝ ^w ga	къы́чвга	hatchet
maˈtŝwə	мачвЫ	finger
maˈtŝwəsra	мачвысра	glare (about lightning)
an'tŝ ^w a	анчва	God
'nətŝ ^w a	ны́чва	+
p ^h ərtŝ ^w		hemp
	пы́рчв пша́чвгьа	mane strong wind
ˈpṣatŝʷɟa tŝʷaˈɾa		strong wind dream
tsa'tŝwa, tħa'tŝwa	чвара́ тгІачва́, тхІачва́	family
q ^h ətŝ ^w	хъы́чв	bird comb
tŝ ^w a		skin
tŝ ^w a'ba	чва чваба́	
tŝwa'ħwa	чваоа чвахІва́	Wax
tŝ ^w bza	чвахтва	stripe lover
tŝ ^w ja tŝ ^w c ^h a¢	чвгьа	evil
tŝwts'a'ra	чвкьа́щ	shabby
	чвцІара́	to scatter
tŝ ^w əş	ЧВЫШ	pale
alar'tşa	алартшА	alloyed
la'tṣa	латшА	ferment
ma'tşa	матшА	dishes
psla'tşa	пслатша	fish
'akwtṣaga	а́квтшага	watering-pot
t ^h atşa'ra	татшара́	to pour
tşa	тша	hay
atş'şa'ra	ашІшарА	to be afraid of
ˈakʰwtṣ'ara	а́квшІара	to sit down
a'tş'əja	ашІы́йа	what
bəlˈtʂ'ə	былшІы	fuel
dztş'ə	джьшІы	oak
nq'wga'tş'ə	нкъвгашІы́	sick person
pssʕaˈts̞'ə	псстІашІы́	bird

transcription	orthography	translation
χaˈtʂ'ə	хашІы́	task
źŵә	жвы	cow
aˈâʷa	ажва́	word
baŝ ^w	бажв	abundant
ˈgʷə͡ɛwk'ra	гвыж́вкІра	to be angry
źwba	жвба	nine
ĉwʕwa'qʰa	жвгІвахъа́	shoulder
źwʕwa	жвгІва	cow that didn't gave birth
ĝwʕwand	жвгІванд	sky
ĉ ^w p'a	жвпІа	thick
ź ^w ra	жвра	drink
źwts'ә	жвцІы	swallow
ts'əâ ^w	цІыжв	tick
χts'əź ^w	хцІыжв	accidental bullet
ˈtŝʷaźʷaɾa	чва́жвара	to speak
ˈca͡zwəʕw	ща́жвыгІв	bloodsucker
pʰə̂zwˈbana	пыжвба́на	hedgehog
ź ^w ra	жвра	to boil, to drink
ĉ ^w tŝ ^w a	жвчва	overdone (about food)
a'zə	ажы	old
'Satş'zara	гІа́шІжара	to tear off
za'ba	жаба́	ten
'zzaga	жжа́га	harrow
t ^h az _l	таж	grandmother
wasa'raz _t	уасара́ж	wise
wzə	ужы́	now

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