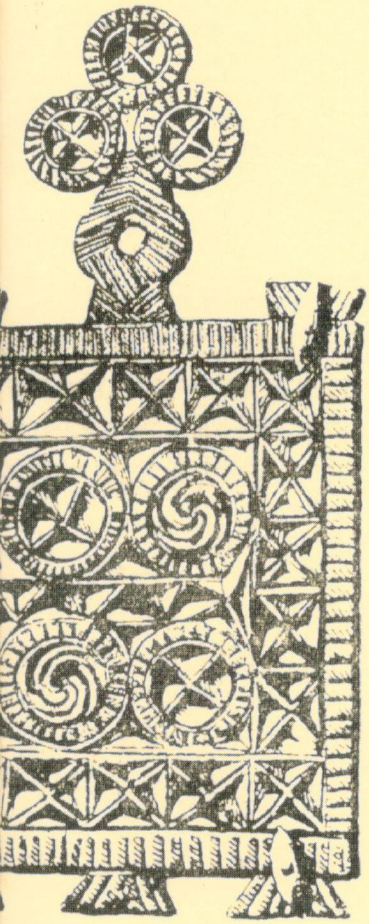
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Viacheslav A. Chirikba



COMMON WEST CAUCASIAN

The Reconstruction of its Phonological System and Parts of its Lexicon and Morphology

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THE RECONSTRUCTION OF ITS PHONOLOGICAL SYSTEM AND PARTS OF ITS LEXICON AND MORPHOLOGY

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Research School CNWS
School of Asian, African, and Amerindian Studies
Leiden, The Netherlands
1996

CNWS PUBLICATIONS
VOL. 48

CNWS PUBLICATIONS is produced by the Research School CNWS, Leiden University, The Netherlands

Editorial Board: M. Forrer; K. Jongeling; R. Kruk; W. van der Molen; J. de Moor; F.E. Tjon Sie Fat (editor in chief); W.J. Vogelsang; W. van Zanten.

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Chirikba, Viacheslav Andreevich

Common West Caucasian. The Reconstruction of its Phonological System and Parts of its Lexicon and Morphology. - Leiden : Research School CNWS. - (CNWS Publications, ISSN 0925-3084; vol. 48)
ISBN 90-73782-73-2
Subject heading: West Caucasian comparative linguistics

Cover design: Nelleke Oosten
Printing: Ridderprint, Ridderkerk

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Dedicated to the memory of my dear friends —

Mushni Khvartskija (archaeologist)

Adgur Inal-ipa (astrophysicist)

Mirod Gozhba (folk-philosopher) —

who gave their lives for Abkhazia

ACKNOWLEDGEMENTS

While working on this book, I was privileged to receive help and advice from a number of friends and colleagues. I would like to thank: Wim Lucassen for all his hospitality and help; Rieks Smeets for his invaluable assistance, help and advice on all stages of my work; George Hewitt for scientific advice and correcting my English; Sergei Starostin and Vladislav Ardzinba for stimulating discussions on various aspects of Proto-West Caucasian; Helma van den Berg for her generous assistance, especially in matters concerning contacting various Dutch authorities; Haye van den Oever for his assistance in various problems I encountered while dealing with my computer program; I would also like to thank other colleagues of the Department of Comparative Linguistics of Leiden University. I am especially thankful to many Abkhazian, Circassian and Ubykh friends who helped me immensely during my fieldwork in the Caucasus and in Turkey. I would also like to thank my other Dutch friends, Joke Passchier, Willy Willems, Charlotte Hille, and many others, thanks to whom I could not only work but also feel myself very much at home in Holland.

TABLE OF CONTENTS

TABLE OF CONTENTS vii
ABBREVIATIONS AND SYMBOLS
1. Abbreviations xii
2. Languages and Dialects Referred to xiii
3. Symbols Used xvii
LIST OF THE LANGUAGES RELEVANT FOR THE PRESENT STUDY xix
PHONEME-SYSTEM USED FOR THE WEST CAUCASIAN LANGUAGES xxii

CHAPTER I
INTRODUCTION
1. The West Caucasian Peoples and Their Languages 1
2. A Short Survey of the History of West Caucasian Comparative Research and the Aims of the Present Study 9

CHAPTER II
PHONOLOGICAL DESCRIPTION OF THE WEST CAUCASIAN LANGUAGES AND THEIR DIALECTS
1. Phonological Description of the Abkhaz Dialects 14
1.1. South Abkhaz 14
1.2. Ashkharywa 23
1.3. North Abkhaz 26
1.4. Consonant Distribution and Clusters 27
1.5. Vocalic System 28
1.6. Prosody 33
2. Phonological Description of Ubykh 37
2.1. Consonant Distribution and Clusters 40
2.2. Vocalic System and Prosody 40
3. Phonological Description of the Circassian Dialects 41
3.1. West Circassian (Adyghe) 42
3.2. East Circassian (Kabardian) 47
3.3. Consonant Distribution and Clusters 50
3.4. Vocalic System and Prosody 51

CHAPTER III

THE RECONSTRUCTION OF THE COMMON ABKHAZ PHONEMIC SYSTEM

1. Common Abkhaz Phonemic Inventory 58
2. Developments in Dialects 59
3. Inter-Abkhaz Consonantal Correspondences 60
4. The Structure of the Root Morpheme 73
5. Common Abkhaz Consonant Clusters 76
6. Reconstruction of the Common Abkhaz Vocalic System 90
7. Prosodic Properties of Common Abkhaz 93
8. Loans in Common Abkhaz 94

CHAPTER IV

THE RECONSTRUCTION OF THE COMMON CIRCASSIAN PHONEMIC SYSTEM

1. Common Circassian Phonemic Inventory 110
2. Developments in Dialects 111
3. Inter-Circassian Consonantal Correspondences 114
4. The Structure of the Root Morpheme 130
5. Common Circassian Consonant Clusters 136
6. Reconstruction of the Common Circassian Vocalic system 158
7. Reconstruction of the Common Circassian Stress System 165
8. Loans in Common Circassian 170

CHAPTER V

THE RECONSTRUCTION OF THE COMMON WEST CAUCASIAN CONSONANT SYSTEM

I. The Common West Caucasian Consonant Inventory 173
II. Sound Correspondences Between the West Caucasian Languages 174
III. The Reconstruction of the Common West Caucasian Obstruents 178
1. The Common West Caucasian Stops 178
1.1. The CWC Bilabial Stops 178
1.2. The CWC Dental Stops 183
1.3. The CWC Velar Stops 192
1.4. The CWC Uvular Stops 208
2. The Common West Caucasian Sibilant Affricates 223
2.1. The CWC Front Sibilant Affricates 223
2.2. The CWC Middle Sibilant Affricates 228

2.3. The CWC Back Sibilant Affricates 236
3. The Common West Caucasian Sibilant Fricatives 248
3.1. The CWC Labiodental Sibilant Fricatives 248
3.2. The CWC Front Sibilant Fricatives 249
3.3. The CWC Middle Sibilant Fricatives 254
3.4. The CWC Back Sibilant Fricatives 260
4. The Common West Caucasian Obstruent Laterals 268
4.1. The CWC Lateral Affricates 268
4.2. The CWC Lateral Fricatives 272
5. The Common West Caucasian Velar Fricatives 277
6. The Common West Caucasian Uvular Fricatives 281
7. The Common West Caucasian Pharyngeal Fricatives 289
IV. The Reconstruction of the Common West Caucasian Resonants 303
V. The Reconstruction of the Common West Caucasian Glides 309

CHAPTER VI
THE RECONSTRUCTION OF THE COMMON WEST CAUCASIAN VOCALIC SYSTEM
1. Identical Correspondences In Non-initial Vowels 312
2. Non-identical Correspondences in Vowels 314
3. The Problem of Root-initial **a-* in Common West Caucasian 316

CHAPTER VII
THE RECONSTRUCTION OF PROTO-CIRCASSIAN, PROTO-ABKHAZ AND PROTO-UBYKH PHONEMIC SYSTEMS
1. Proto-Circassian 321
2. Proto-Abkhaz 325
3. Proto-Ubykh 327

CHAPTER VIII
THE COMMON WEST CAUCASIAN CONSONANTISM
I. Characteristics of the Common West Caucasian Consonantism 330
1. The Local Series of West Caucasian Obstruents 330
1.1. Palatalisation 330
1.2. Labialisation 331
1.3. Labialisation-palatalisation 332
1.4. The Problem of Pharyngealised Consonants 332
1.5. The Problem of the Opposition "Lax-tense" 334

II. The Origin of the Common West Caucasian Phonemic System 342
III. The Common West Caucasian Linguistic Type 344

CHAPTER IX
THE COMMON WEST CAUCASIAN CONSONANT CLUSTERS, THE ROOT MORPHEME AND ACCENTUAL SYSTEM
I. Common West Caucasian Consonant Clusters 347
1. The Structure of Common West Caucasian Consonant Clusters 347
1.1. CWC Initial Clusters 347
1.2. CWC Medial Clusters 352
II. The Structure of the Common West Caucasian Root Morpheme 355
III. The Common West Caucasian Accentual System 359

CHAPTER X
THE COMMON WEST CAUCASIAN AFFIXES, MORPHOPHONOLOGY AND LEXICON
I. The Common West Caucasian Affixes 364
1. CWC Nominal Inflectional Affixes 364
2. CWC Nominal Derivational Affixes 366
3. CWC Verbal Inflectional Affixes 374
4. CWC Verbal Derivational Affixes 378
5. CWC Preverbs 380
II. Common West Caucasian Morphophonology: Ablaut 382
1. The Alternation *-ə ~ *-ø as a Means of Contrasting Nominative and Ergative Forms 382
2. The Alternation *-a ~ *-ə : Centripetal Versus Centrifugal 385
III. Common West Caucasian Lexicon 387
1. A 200-basic Wordlist for Common West Caucasian 387
2. Some Common West Caucasian Lexemes Subdivided into Thematic Groups 397

CHAPTER XI
THE PROBLEM OF EXTERNAL RELATIONS OF COMMON WEST CAUCASIAN
1. The Relation to East Caucasian Languages 402
2. The Relation to Hattic 406
2.1. Structural Parallels 407
2.2. Parallels in Affixes 409

2.3. Verbs 419
2.4. Nouns 423
2.5. Adjectives 428
2.6. Pronouns, Adverbs, Particles, Conjunctions 428
2.7. Conclusions 430

BIBLIOGRAPHY 433

ABBREVIATIONS AND SYMBOLS

1. ABBREVIATIONS

bot.	botanical
def.	form with definite article
dent.-alveol.	dental-alveolar
dial.	dialectal
dir.	directional
dyn.	dynamic
erg.	ergative
esp.	especially
etym.	etymologically
fem.	feminine
fin.	finite
fn	footnote
hum	human (grammatical class of human beings)
instr.	instrumental
interj.	interjection
IO	indirect object
isol.	isolect
lab.-palatal.	labialised-palatalised
lit.	literally
masc.	masculine
meteor.	meteorological
n.	noun
neg.	negative
nom.	nominal; nominative case
nonhum	non-human (grammatical class of non-human beings)
non-pred.	non-predicative form
obs.	obsolete
onomat.	onomatopoeic
p.	person
perf.	perfect
pers.com	personal communication
pharyng.	pharyngealised
pl.	plural
pred.	predicative form
pref.	prefix

pres.	presence
prev.	preverb
prov.	province
redupl.	reduplication
sg.	singular
smb	somebody
stat.	stative
sth	something
sub-prov.	sub-province
suf.	suffix
tech.	technical
tr.	transitive (verb)
v.	verb
VRE	verbal root extension
zool.	zoological

2. LANGUAGES AND DIALECTS REFERRED TO

Abdz	Abadzakh dialect of Adyghe
Abx	Abkhaz
Abzh	Abzhywa dialect of Abkhaz
Ad	Adyghe
Ahch	Ahchypsy dialect of Abkhaz
Ak	Akusha dialect of Dargwa
Aps	Apsua, a subdialect of Ashkharywa
Arab	Arabic
Arm	Armenian
Ash	Ashkharywa dialect of Abaza
Ash1	the speech of the older generation of Ashkharywa
Ash2	the speech of the younger generation of Ashkharywa
Axv	Akhvakh
Bagv	Bagvalal
Bat	Abkhaz as spoken in Batumi (in Adjaria, Georgia)
BesKab	Beslenej dialect of Kabardian
Bezh	Bezhta
Bl	isolect of Blabyrkhwa, a Bzyp village
Botl	Botlikh

Bud	Budukh
Bz	Bzyp dialect of Abkhaz
Bzh	Bzhadygh dialect of Adyghe
CAbx	Common Abkhaz
CCirc	Common Circassian
CECirc	Common East Circassian
Chad	Chadakolob, a dialect of Avar
Chag	Chagataj (Turkic)
Cham	Chamala
Chech	Chechen
Chir	Chirag dialect of Dargwa
Circ	Circassian
CKab	Common Kabardian
CWC	Common West Caucasian
CWCirc	Common West Circassian
Darg	Dargwa
Dig	Digor, a dialect of Ossetic
Dzh	isolect of Dzhyrkhwa, a Bzyp village
Dzhg	isolect of Dzhgiarda, an Abzhywa village
Est	Estonian
Fin	Finnish
Geo	Georgian
GnSh	isolect of Genceli, a Shapsygh village in Turkey
God	Godoberi
Gr	Greek
Gum	isolect of Gumlokt (*g°əm-law-kət*), a Tapanta village
1 Gum	subisolect of Gumlokt reflecting CAbx *ʒ́°, *ś° as ǯ°, š° and CAbx *ʒ°, *ć°, *ć‘° as ǯ°, č°, č‘°
2 Gum	subisolect of Gumlokt reflecting CAbx *ʒ́°, *ś° as ź, ś and CAbx *ʒ°, *ć°, *ć‘° as ʒ°, ć°, ć‘°.
HakSh	Hakutsw subdialect of Shapsygh
Hat	Hattic
Heb	Hebrew
Hin	Hinukh
Hitt	Hittite
Hun	Hunzib
Hung	Hungarian
IE	Indo-European

IM	isolect of Ira Mikeladze, a Zwandrypsh Bzyp speaker
Imer	Imeretian dialect of Georgian
Ing	Ingush
Inxo	Inkhokvari
Iran	Iranian
Jash	isolect of Jashyra, a Bzyp village
Kald	isolect of Kaldakhwara, a Bzyp village
Ku	isolect of Kutol, an Abzhywa village
Kuv	Kuva (*q°əž°ə*), subdialect of Ashkharywa
Kab	Kabardian
Kar	Karata
Kar-Balk	Karachaj-Balkar
Kart	Kartvelian
KhalSa	Khaltsys, a subdialect of Sadz
Kirg	Kirgiz
Kub	isolect of Kubina, a Tapanta village
Kuba	Kubachi, the dialect of Dargwa
Kum	Kumyk
LAbx	Literary Abkhaz
Lat	Latin
Lyx	isolect of Lykhny, a Bzyp village
Meg	Megrel
MGeo	Modern Georgian
MUb	Modern Ubykh
Myc. Gr	Mycenean Greek
NM	isolect of Nazym Met, a Shapsygh speaker from Düzce, Turkey
OGeo	Old Georgian
OHeb	Old Hebrew
OHG	Old High German
OInd	Old Indian
OIran	Old Iranian
OIr	Old Irish
OKab	Old Kabardian
Oss	Ossetic
OJap	Old Japanese
OTu	Ottoman Turkish
PAbx	Proto-Abkhaz
PCirc	Proto-Circassian

Pers	Persian
PK	Proto-Kartvelian
PNakh	Proto-Nakh
PNC	Proto-North Caucasian
Ps	isolect of Psyzh, a Tapanta village
PUb	Proto-Ubykh
PWC	Proto-West Caucasian
Rus	Russian
Rut	Rutul
Sa	Sadz dialect of Abkhaz
SAbx	South Abkhaz dialects (i.e. Bzyp and Abzhywa)
Sam	isolect of Sameba, a Batum Abkhaz village
Sem	Semitic
Sh	Shapsygh dialect of Adyghe
SKab	Standard Kabardian
Tab	Tabasaran
Tap	Tapanta dialect of Abaza
Tapn	isolect of Tapanta, a Tapanta village
Tat	Tatar
Tem	Temirgoj dialect of Adyghe
Tin	Tindi
Tsab	Tsabal, an isolect of Abkhaz in Turkey
Tsax	Tsakhur
TswSa	Tswydzhy, a subdialect of Sadz
Tu	Turkish
TuAbx	Abkhaz as spoken in Turkey
TuBz	Bzyp dialect as spoken in Turkey
TuCirc	Circassian as spoken in Turkey
Ub	Ubykh
Ugar	Ugarite
Ur	Urakhi dialect of Dargwa
Xin	Khinalygh
Xu	isolect of Khwuap, a Bzyp village
Xvar	Khvarshi
YugAbdz	Abadzakh as spoken in Kosovo, former Yugoslavia
ZenBes	isolect of Zennun, a Beslenej village in Turkey
ZorPahlavī	Zoroastran Pahlavī
Zw	isolect of Zwandrypsh, a Bzyp village

3. SYMBOLS USED

C	a consonant
C̲	a pharyngealised consonant
C'	a glottalised consonant
C´	a palatalised consonant
C°	a labialised consonant
C°´	a labialised-palatalised consonant
C^h	an aspirated consonant; a lax (aspirated) consonant
C̄	a tense consonant
C̥	a syllabic consonant
C^v	a voiced consonant; a dentolabialised consonant
D	dominant (of accentual valency)
R	a resonant; recessive (of accentual valency)
S	a fricative
T	an obstruent stop
V	a vowel
Ṽ	a nasalised vowel
V̄	a long vowel
H	high tone
L	low tone
M	mid tone
*	indicates reconstructed forms
'.....'	indicates the meaning of a morpheme or word
<	"originated from"
>	"became"
#	absolute beginning or absolute end of the word
-	indicates a morpheme-boundary, or, with phonemes, indicates whether the phoneme occurs initially (*C*-), medially (-*C*-), or finally (-*C*)
:	"corresponds to"
~	"alternates between"; "contrasted to"
/	"is a phonetic variant of"; separates Adyghe forms from Kabardian ones; separates Ossetic Iron forms from Digor ones
//	"is a variant of"
=	"is equal to", or indicates the division between the two parts of the reduplicated word; designates the anlaut of Daghestanian forms without a prefixed class marker

=>	"changes into"
—>	"changes into"
+	close-knit combination of morphemes
ø	phonological zero
/.../	phonemic transcription
[...]	phonetic transcription
{...}	underlying form
"..."	morphological transcription
ˈ	(main) stress
ˌ	secondary stress

LIST OF THE LANGUAGES RELEVANT FOR THE PRESENT STUDY

1. The North Caucasian family:

1.1. East Caucasian (Nakh-Daghestanian) branch:

1.1.1. The Nakh group: Chechen, Ingush, Bats (spoken in one village in Georgia).

1.1.2. The Daghestanian group:
1.1.2.1. Avaro-Ando-Tsez grouping:
(1) Avaro-Andian languages:
(1.1) Avar subgroup: Avar
(1.2) Andian subgroup: Andi, Botlikh, Godoberi, Akhvakh, Karata, Bagvalal, Chamala, Tindi.
(1.3) Tsez subgroup: Tsez, Hinukh, Khvarshi, Hunzib, Bezhta.
1.1.2.2. Lak.
1.1.2.3. Dargwa.
1.1.2.4. Lezghi subgroup: Lezghi, Tabassaran, Agul, Rutul, Tsakhur, Archi, Udi (spoken in Georgia and Azerbaidjan), Kryz, Budukh, Khinalug (the last three spoken in Azerbaidjan; note that sometimes Khinalug is regarded as forming an independent taxon within the Daghestanian group).

1.2. West Caucasian (Abkhazo-Adyghean) branch:

1.2.1. Circassian group: Adyghe (West Circassian), Kabardian (East Circassian).
1.2.2. Abkhaz group: Abkhaz proper, (Tapanta) Abaza.
1.2.3. Ubykh group: Ubykh (since 1992 extinct).

2. The ancient Near Eastern languages with probable relation to the North Caucasian family:

2.1. Hattic (attested in northeastern Asia Minor, extinct since the early second millennium B.C.), probably an ancient member of the West Caucasian branch of the North Caucasian family (I.M. Dunaevskaja, V.G. Ardzinba, V.V. Ivanov, J. Braun).

2.2. Kaskian (north of Hattic in the mountainous regions of the Anatolian Black Sea coast), extinct somewhat later than Hattic, probably genetically related to

Hattic (G. Giorgadze).

2.3. Hurrito-Urartian family, consisting of Hurrian and Urartian, attested between the third and first millennia B.C. in Southwest Asia (northern parts of Anatolia, Syria, Iran and southern Transcaucasia), probably an ancient member of East Caucasian (I.M. Diakonov, S.A. Starostin).

3. Kartvelian (or South Caucasian) family:
This family, unrelated to the North Caucasian languages, comprises Georgian, Megrel and Laz, Svan. Georgian is attested in written documents since the Vth century A.D., and its lexical influence is evident both in West Caucasian (predominantly in Abkhaz) and in geographically adjacent East Caucasian languages. Megrel, Laz and Svan are unwritten languages.

4. Indo-European family:
4.1. Anatolian branch: Hittite, Luwian, Palaic, ancient languages of Asia Minor, attested in written documents from the second millennium B.C. Hittite is crucial for understanding the Hattic texts recorded by the Hittite scribes, sometimes with Hittite translation. Palaic, of all Anatolian languages, underwent most Hattic influence.

4.2. Armenian branch:
Armenian (consisting of a western and an eastern dialect group), attested from the Vth century A.D. in Transcaucasia and northeastern Anatolia.

4.3. Iranian branch:
4.3.1. East Iranian: Ossetic (consisting of two dialects, Iron and Digor) in the Northern Caucasus. A certain lexical influence of Ossetic is noticeable in all West Caucasian (especially in Kabardian and Abkhaz) and in some East Caucasian languages (especially in Chechen and Ingush).

5. Turkic family:
5.1. Karachaj-Balkar: closely related Karachaj in the Karachaj-Cherkes republic (neighbouring with Kabardian and Abaza) and Balkar in the Kabarda-Balkar republic (neighbouring with Kabardian) of the Russian Federation.
5.1. Kumyk, spoken in the Daghestan republic of the Russian Federation.
5.3. Nogaj, spoken in the Karachaj-Cherkes and Daghestan republics.
5.4. Azeri, close to Turkish, spoken in the Azerbaidjan republic in Transcaucasia.

Influenced adjacent Daghestanian languages.

5.5. Turkish, spoken in Turkey, Asia Minor. Though Turkish influenced nearly all North Caucasian languages, its influence (predominantly lexical) is of a rather late period (since XVI century on). Turkish was the second, and is now often the first language of numerous North Caucasian communities in Turkey.

PHONEME-SYSTEM USED FOR THE WEST CAUCASIAN LANGUAGES

b — bilabial voiced stop
b̲ — bilabial voiced pharyngealised stop
p — bilabial voiceless stop
p^{h} — bilabial voiceless aspirated lax stop
p̄ — bilabial voiceless tense stop
p̲ — bilabial voiceless pharyngealised stop
p' — bilabial (voiceless) glottalised stop
p$^{\circ}$ — bilabial (voiceless) glottalised labialised stop
d — dental voiced stop
d$^{\circ}$ — dental voiced labialised stop
d$^{\circ\prime}$ — dental voiced labialised-palatalised stop
t — dental voiceless stop
t^{h} — dental voiceless aspirated lax stop
t̄ — dental voiceless tense stop
t$^{\circ}$ — dental voiceless labialised stop
t$^{\circ\prime}$ — dental voiceless labialised-palatalised stop
t' — dental (voiceless) glottalised stop
t$^{\circ}$ — dental (voiceless) glottalised labialised stop
g — velar voiced stop
g$^{\prime}$ — velar voiced palatalised stop
g$^{\circ}$ — velar voiced labialised stop
g$^{\circ\prime}$ — velar voiced labialised-palatalised stop
k — velar voiceless stop
k$^{\prime}$ — velar voiceless palatalised stop
k$^{\circ}$ — velar voiceless labialised stop
k$^{\circ\prime}$ — velar voiceless labialised-palatalised stop
k$^{h\prime}$ — velar voiceless palatalised aspirated lax stop
k$^{h\circ}$ — velar voiceless labialised aspirated lax stop
k̄$^{\prime}$ — velar voiceless palatalised tense stop
k̄$^{\circ}$ — velar voiceless labialised tense stop
k' — velar (voiceless) glottalised stop
k$^{\prime\prime}$ — velar (voiceless) glottalised palatalised stop
k$^{\circ}$ — velar (voiceless) glottalised labialised stop
k$^{\circ\prime}$ — velar (voiceless) glottalised labialised-palatalised stop
G — uvular voiced stop
G$^{\prime}$ — uvular voiced palatalised stop

G° — uvular voiced labialised stop
$G^{\circ\prime}$ — uvular voiced labialised-palatalised stop
q — uvular voiceless stop
q' — uvular voiceless palatalised stop
q° — uvular voiceless labialised stop
$q^{\circ\prime}$ — uvular voiceless labialised-palatalised stop
q^{h} — uvular voiceless aspirated lax stop
$q^{h\circ}$ — uvular voiceless lax aspirated labialised stop
$\bar{q}$ — uvular voiceless tense stop
$\bar{q}^{\circ}$ — uvular voiceless tense labialised stop
$\underline{q}$ — uvular voiceless pharyngealised stop
$\underline{q}^{\circ}$ — uvular voiceless pharyngealised labialised stop
q' — uvular (voiceless) glottalised stop
$q'^{\prime}$ — uvular (voiceless) glottalised palatalised stop
q'° — uvular (voiceless) glottalised labialised stop
$q'^{\circ\prime}$ — uvular (voiceless) glottalised labialised-palatalised stop
$\underline{q}'$ — uvular (voiceless) glottalised pharyngealised stop
$\underline{q}'^{\circ}$ — uvular (voiceless) glottalised pharyngealised labialised stop
$ʔ$ — glottal stop
$ʔ'$ — glottal palatalised stop
$ʔ^{\circ}$ — glottal labialised stop
$ʒ$ — dental (= front) voiced affricate
c — dental (= front) voiceless affricate
c^{h} — dental (= front) voiceless aspirated lax affricate
$\bar{c}$ — dental (= front) voiceless tense affricate
c' — dental (= front) (voiceless) glottalised affricate
$ʒ́$ — dental-alveolar (= middle) voiced affricate
$ʒ^{\circ}$ — dental-alveolar (= middle) voiced labialised affricate
$ć$ — dental-alveolar (= middle) voiceless affricate
$ć^{\circ}$ — dental-alveolar (= middle) voiceless labialised affricate
$ć^{h\circ}$ — dental-alveolar (= middle) voiceless labialised aspirated lax affricate
$\bar{ć}^{\circ}$ — dental-alveolar (= middle) voiceless labialised tense affricate
$ć'$ — dental-alveolar (= middle) (voiceless) glottalised affricate
$ć'^{\circ}$ — dental-alveolar (= middle) (voiceless) glottalised labialised affricate
$ǯ$ — alveolar (= back) voiced affricate
$ǯ'$ — alveolar (= back) voiced palatalised affricate
$ǯ^{\circ}$ — alveolar (= back) voiced labialised affricate
$ǯ^{\circ\prime}$ — alveolar (= back) voiced labialised-palatalised affricate

$\check{c}$ — alveolar (= back) voiceless affricate
$\check{c}'$ — alveolar (= back) voiceless palatalised affricate
$\check{c}^{\circ}$ — alveolar (= back) voiceless labialised affricate
$\check{c}^{h}$ — alveolar (= back) voiceless aspirated lax affricate
$\check{c}^{h}{}'$ — alveolar (= back) voiceless palatalised aspirated lax affricate
$\check{c}$ — alveolar (= back) voiceless tense affricate
$\check{c}'$ — alveolar (= back) voiceless palatalised tense affricate
$\check{c}'$ — alveolar (= back) (voiceless) glottalised affricate
$\check{c}''$ — alveolar (= back) (voiceless) glottalised palatalised affricate
$\check{c}^{\circ}$ — alveolar (= back) (voiceless) glottalised labialised affricate
v — labiodental voiced fricative
$\underline{v}$ — labiodental voiced pharyngealised fricative
f — labiodental voiceless fricative
f° — labiodental voiceless labialised fricative
f' — labiodental (voiceless) glottalised fricative
z — dental (= front) voiced fricative
z° — dental (= front) voiced labialised fricative
s — dental (= front) voiceless fricative
s° — dental (= front) voiceless labialised fricative
s' — dental (= front) (voiceless) glottalised fricative
$\acute{z}$ — dental-alveolar (= middle) voiced fricative
$\acute{z}^{\circ}$ — dental-alveolar (= middle) voiced labialised fricative
$\acute{s}$ — dental-alveolar (= middle) voiceless fricative
$\acute{s}^{\circ}$ — dental-alveolar (= middle) voiceless labialised fricative
$\acute{s}'$ — dental-alveolar (= middle) (voiceless) glottalised fricative
$\acute{s}^{\circ}$ — dental-alveolar (= middle) (voiceless) glottalised labialised fricative
$\check{z}$ — alveolar (= back) voiced fricative
$\check{z}'$ — alveolar (= back) voiced palatalised fricative
$\check{z}^{\circ}$ — alveolar (= back) voiced labialised fricative
$\check{z}^{\circ}{}'$ — alveolar (= back) voiced labialised-palatalised fricative
$\check{s}$ — alveolar (= back) voiceless fricative
$\check{s}'$ — alveolar (= back) voiceless palatalised fricative
$\check{s}^{\circ}$ — alveolar (= back) voiceless labialised fricative
$\check{s}^{\circ}{}'$ — alveolar (= back) voiceless labialised-palatalised fricative
$\check{s}^{h}$ — alveolar (= back) voiceless aspirated lax fricative
$\check{s}^{h}{}'$ — alveolar (= back) voiceless palatalised aspirated lax fricative
$\check{s}$ — alveolar (= back) voiceless tense fricative
$\check{s}'$ — alveolar (= back) voiceless palatalised tense fricative

ɬ — lateral voiced affricate
ƛ — lateral voiceless affricate
ƛʲ — lateral voiceless palatalised affricate
ƛʷ — lateral voiceless labialised affricate
ƛʷʲ — lateral voiceless labialised-palatalised affricate
ƛˀʲ — lateral (voiceless) glottalised palatalised affricate
L — lateral voiced fricative
Lʲ — lateral voiced palatalised fricative
ɬ — lateral voiceless fricative
ɬʲ — lateral voiceless palatalised fricative
ɬʷ — lateral voiceless labialised fricative
ɬʷʲ — lateral voiceless labialised-palatalised fricative
ɬˀ — lateral (voiceless) glottalised fricative
ɣ — velar voiced fricative
ɣʲ — velar voiced palatalised fricative
x — velar voiceless fricative
xʲ — velar voiceless palatalised fricative
xʷ — velar voiceless labialised fricative
xʷʲ — velar voiceless labialised-palatalised fricative
ɣ — uvular voiced fricative
ɣʲ — uvular voiced palatalised fricative
ɣʷ — uvular voiced labialised fricative
ɣʷʲ — uvular voiced labialised-palatalised fricative
ɣˤ — uvular voiced pharyngealised fricative
ɣˤʷ — uvular voiced pharyngealised labialised fricative
χ — uvular voiceless fricative
χʲ — uvular voiceless palatalised fricative
χʷ — uvular voiceless labialised fricative
χʷʲ — uvular voiceless labialised-palatalised fricative
χˤ — uvular voiceless pharyngealised fricative
χˤʷ — uvular voiceless pharyngealised labialised fricative
ʕ — pharyngeal emphaticised voiced fricative
ʕʷ — pharyngeal emphaticised voiced labialised fricative
ħ — pharyngeal emphaticised voiceless fricative
ħʷ — pharyngeal emphaticised voiceless labialised fricative
ʕ — pharyngeal emphatic voiced fricative
ʕʲ — pharyngeal emphatic voiced palatalised fricative
ʕʷ — pharyngeal emphatic voiced labialised fricative

ʕ°′ — pharyngeal emphatic voiced labialised-palatalised fricative
H — pharyngeal emphatic voiceless fricative
H′ — pharyngeal emphatic voiceless palatalised fricative
H° — pharyngeal emphatic voiceless labialised fricative
H°′ — pharyngeal emphatic voiceless labialised-palatalised fricative
m — bilabial resonant
m̲ — bilabial pharyngealised resonant
n — dental resonant
l — lateral resonant
r — vibrant resonant
w — bilabial glide
w̲ — bilabial pharyngealised glide
j — palatal resonant
j° — palatal labialised resonant
a — open vowel
ă — mid-open vowel
ə — close vowel

CHAPTER I

INTRODUCTION

1. THE WEST CAUCASIAN PEOPLES AND THEIR LANGUAGES

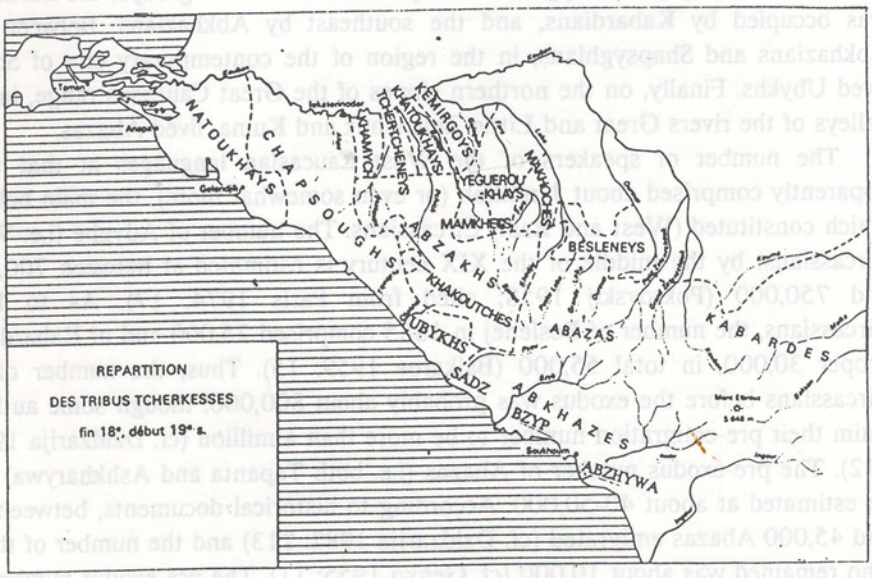
The West Caucasian, or Abkhazo-Adyghean linguistic group consists of five languages, namely, Abkhaz and Abaza, Adyghe and Kabardian, and Ubykh. The speakers of these languages, until the middle of the XIX century, compactly inhabited the North-Western Caucasus and the adjoining part of western Transcaucasia — from the mouth of the Kuban river in the northwest up to the river Ingur in the southeast and the contemporary city of Mozdok in northeast, while in the south the waters of the Black Sea served as a natural boundary to this ethnolinguistic area. Circassian settlements could be found also in the Crimea. In the northwest of this territory lived the Adyghe tribes Shapsygh, Abadzakh, Temirgoj, Bzhadygh, Natukhaj and other smaller groups; the northeast was occupied by Kabardians, and the southeast by Abkhazians. Between the Abkhazians and Shapsyghians, in the region of the contemporary city of Sochi, lived Ubykhs. Finally, on the northern slopes of the Great Caucasus range, in the valleys of the rivers Great and Little Zelenchuk and Kuma, lived Abazas.

The number of speakers of the West Caucasian languages at that time apparently comprised about 1 million (or even somewhat more), the main bulk of which constituted (West and East) Circassians. The number of Adyghe (i.e. West Circassians) by the middle of the XIX century is estimated at between 700,000 and 750,000 (Pokrovskij 1958; cited from Paris 1974: 17). As to East Circassians, the number of Beslenej in 1885 comprised 25,000 and of Kabardians proper 30,000, in total 55,000 (Balkarov 1959: 15). Thus, the number of all Circassians before the exodus was probably about 800,000, though some authors claim their pre-emigration number to be more than a million (cf. Dzidzarija 1982: 212). The pre-exodus number of Abazas (i.e. both Tapanta and Ashkharywa) can be estimated at about 40-50,000. According to historical documents, between 30 and 45,000 Abazas emigrated (cf. Dzidzarija 1982: 213) and the number of those who remained was about 10,000 (cf. Genko 1955: 11). The pre-exodus number of Abkhazians proper was more than 130,000. From this figure more than 25,000

comprised Sadzians and Pskhwy-Ahchypsy tribes, about 15,000 inhabitants of the mountainous Dal-Tsabal region, and about 90,000 lived in Abkhazia proper (cf. Dzidzarija 1982: 161, 213, 289). Thus before emigration in the West Caucasus there were about 170-180,000 speakers of different Abkhaz-Abaza dialects. The estimates for the numbers of Ubykhs before emigration are: 40-45,000 (Dzidzarija 1982: 87, 214), about 30,000 (DA III: 19), or between 30,000-50,000 (Hewitt 1989: 16).

The devastating Caucasian war, which was waged by fire and sword during several decades by Tsarist Russia aiming at conquering the North Caucasus, dramatically changed the whole ethnolinguistic landscape of the West Caucasus region. Most of the Abkhazo-Adygheans had to flee to the then Ottoman Empire, and this forced emigration, during which thousands died of hunger and epidemic diseases, resulted in the present sparseness of the Abkhazo-Adyghean population in their historical habitat. Against approximately 1 million Circassians in the middle of the last century, after the Caucasian war and emigration there were about 100,000 of them left in the Caucasus (Dzidzarija 1982: 212). The post-emigration number of Tapanta in the North Caucasus in 1885 comprised

Map 1. *Distribution of West Caucasian tribes ca. 1800 (adapted from Paris 1974: 21)*



about 6,000, and of Ashkharywa, about 4,000 (Genko 1955: 11), in total 10,000.

According to the all-Russian census of 1897, there were 58,697 Abkhazians left in Abkhazia (Dzidzarija 1982: 447). As to Ubykhs, the western Abkhazian tribes Sadz and Tswydzhy, and the mountain Abkhazians (Ahchypsy, Aibga, Pskhwy, Dal-Tsabal) — they were all expelled to Turkey. The last speaker of Ubykh, the famous Tevfik Esenç, died at the age of 86 on 7 October 1992 in the Western Turkey village of Haci Osman köyü.

Historical background

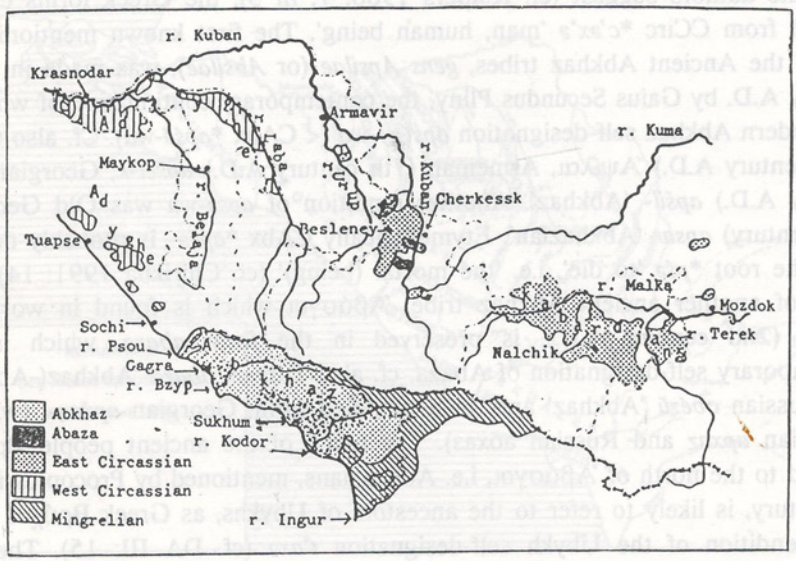
Historical sources (in particular, Ancient Greek and Roman and, later, Byzantine, Armenian, Georgian, Old Russian ones) provide enough evidence to ascertain the autochtony of Abkhazo-Adyghean peoples (and their languages) in the region they occupy now, or occupied in the observable past, i.e. the Western Caucasus (cf. Amichba 1988; Anchabadze 1964; 1976; Butba 1990; Fedorov 1983; Hewitt 1987: 2-3; Inal-ipa 1965; 1976; Klimov 1986; Kollautz 1968; Krupnov 1960; Kuipers 1960: 7, fn 3, 113, fn 11; Kumykov 1967; Istorija; Latyshev 1890; Paris 1974: 12, 14; Smeets 1984: 45-50). The Ancient Greek name Κερκέται by which some of the West Caucasian tribes were designated (5th century B.C.), is associated with one of their present-day designations, *čerkes*. The Greek name Ζύγοι/Ζυγοί or Ζιχχοί (1st century A.D.) is in all probability connected with Abx *á-zəx̌ʷa*, TuAbx *á-ʒəx̌ʷa* 'Circassian' (cf. perhaps also TuCirc, Ub *azγa* 'Abkhazian'). As some authors suggest (cf. Kuipers 1960: 7, fn 3), the Greek forms can be derived from CCirc **c'əxʷə* 'man, human being'. The first known mentioning of one of the Ancient Abkhaz tribes, *gens Apsilae* (or *Absilae*), was made in the 1 century A.D. by Gaius Secundus Pliny, the contemporary continuation of which is the modern Abkhaz self-designation *áps(ə)-wa* (< CAbx **apśə-wa*). Cf. also Greek (2nd century A.D.) Ἀψῦλαι, Armenian (7th century A.D.) *apšeł-k*, Georgian (7th century A.D.) *apšil-* 'Abkhaz'. Another rendition of *apsə-wa* was Old Georgian (XII century) *apsar* 'Abkhazian'. Etymologically CAbx **apśə-* is probably derived from the root **pśə* 'to die', i.e. 'the mortal (being)' (cf. Chirikba 1991: 14). The name of another ancient Abkhaz tribe, Ἀβάσγοι which is found in works by Arrian (2nd century A.D.), is preserved in the form *abaza*, which is the contemporary self-designation of Abaza, cf. also Turkish *abaza* 'Abkhaz(-Abaza)', Old Russian *obézŭ* 'Abkhaz' and, in a modified form, Georgian *apx̌az-i* (whence Armenian *apxaz* and Russian абхаз). The name of the ancient people Βρύχοι, situated to the north of Ἀβάσγοι, i.e. Abkhazians, mentioned by Procopius in the VI century, is likely to refer to the ancestors of Ubykhs, as Greek Βρύχοι could be a rendition of the Ubykh self-designation *tʷaxə* (cf. DA III: 15). The Old Georgian name *ʒik-i*, found, for instance, in writings of such historians as Atoneli

(X-XI centuries), Djuansher, Mroveli (XI century) etc., must have referred either to Ubykhs, or to Western Abkhaz Sadzians (cf. Ub *ʒʼəxə* 'Abkhaz' or 'Ubykh').

Contemporary geographical distribution of the West Caucasian languages and some statistical data

Nowadays the speakers of Adyghe (numbering 124,826, acc. to 1989 census) live mainly on the territory of the Republic of Adyghea (capital Majkop) and in some coastal villages near Tuapse and Lazarevskaja in the Krasnodar region of the Russian Federation. Kabardians (443,177, acc. to 1989 census) inhabit the Kabarda-Balkar republic (capital Nalchik), Karachaj-Cherkes republic (capital Cherkesk) and several villages in Adyghea (all in the Russian Federation). Abkhazians (105,308, acc. to 1989 census) live in the Republic of Abkhazia (capital Sukhum) and in some villages of Adjarian Autonomous Republic (around its capital, Batumi) in the south of the Republic of Georgia. Abazas (33,613, acc. to 1989 census) live in Karachaj-Cherkessia and in one village in Adyghea. The total number of the speakers of Abkhazo-Adyghean languages in the former Soviet Union, according to 1989 census, was more than 700,000.

Map 2. *Present-day distribution of West Caucasian languages in the Caucasus (adapted from Smeets 1984: 55)*



The West Caucasian Diaspora

Probably over one million West Caucasians are living now in Turkey (Hewitt 1989: 17), though we have to operate only with estimate figures, as the official Turkish data are not reliable. Specialists speak of well over 500,000 Circassians (Smeets 1984: 51), more than 100,000 Abkhazians (Dzidzarija 1982: 493; Klimov 1986: 30), ca. 20,000 (or probably more!) Abazas, and ca. 15-20,000 Ubykhs (who speak, apart from Turkish, also Shapsygh or Abadzakh Adyghe, but not their own language). The West Caucasians are to be found also in such Middle East countries, as Syria: ca. 40,000 Circassians (Smeets 1984: 53) and 5,000 Abkhazians (information from Syrian Abkhazians), Jordan: ca. 30,000 Circassians (Smeets, ibid.; Sa'd Abujaber 1989: 216 estimates their number in Jordan in 1986 at 60,000, which could be an exaggeration; my Jordanian Circassian informants were speaking of a number which is closer to that given by Smeets) and about 300 Abkhazians (cf. Abaza 25), Israel: ca. 3,000 Shapsygh and Abadzakh Adyghe (Catford 1986: 240), Iraq: ca. 8,000 Circassians (Atlas 1964). An indeterminate number of West Caucasians live also in Iran (allegedly mostly Circassians, though their actual affiliation is not clear, cf. Oberling 1963; according to this author, Irani "Circassians" did not preserve their native language) and probably in Greece (mainly Abkhazians ?). About 200 Adyghe live in the autonomous region of Kosovo in Serbia (Bersirov 1981; Özbek 1986). Abkhazo-Adyghean colonies also exist in such Western European countries, as Germany (the biggest West Caucasian diaspora in the West), the Netherlands, Belgium, France, Great Britain, Switzerland and Austria, as well as in New Jersey, USA (about 2,000 Circassians, according to Catford 1986: 240, and about 100 Abkhazians, according to my Abkhaz informants; the majority are immigrants from Syria). Thus the approximate number of Abkhazo-Adyghean population outside the Caucasus and Turkey is about 90,000, while their general number in the world counts probably at somewhat more than one and a half million.

The map given below shows the distribution of West Caucasian languages in Turkey. The information on Abkhaz dialects in Turkey was collected by the author (cf. Chirikba, forthcoming); the abbreviation "Abx" here covers the speakers of all dialects of the Abkhaz group, including Tapanta, which has the status of a literary language in the Caucasus. The information on the distribution and number of Circassian villages in Turkey is from Smeets 1984: 52. Note that the major Turkish cities, including Istanbul, Ankara, Eskişehir, Adapazarı, Bilecik, Samsun, etc., host quite a lot of West Caucasians, but their exact numbers there are not yet available.

Map 3. *The distribution of West Caucasian-speaking groups in Turkey (adapted from Kündig-Steiner 1977: 569)*



1.	Adana	10 Abx (Tap, + Ash?), 5 Circ	
2.	Adıyaman	2 Circ	
3.	Afyon	4 Circ	
4.	Amasya	1 Abx (Bz), 6 Circ	
5.	Ankara	4 Circ	
6.	Antalya	2 Circ	
7.	Aydın	3 Circ	
8.	Balıkesir	3 Abx (Tsab ?), 74 Circ	
9.	Bilecik	13 Abx (Tsab, Tsw, Ash), 16 Circ	
10.	Bingöl	1 Abx, 5 Circ	
11.	Bitlis	2 Circ	
12.	Bolu	29 Abx (Bz, Ahch), 71 Circ	
13.	Burdur	2 Circ	
14.	Bursa	8 Abx (Tsab), 30 Circ	
24.	Kayseri	9 Abx (Ash, Tap), 63 Circ	
25.	Kırşehir	2 Circ	
26.	Kocaeli	6 Abx (Abzh, + ?), 10 Circ	
27.	Konya	12 Circ	
28.	Kütahya	3 Abx (Tsab, + ?), 4 Circ	
29.	Manisa	1 Abx, 5 Circ	
30.	Maraş	4 Abx (Tap, + Ash ?), 18 Circ	
31.	Mardin	3 Circ	
32.	Muğla	1 Circ	
33.	Niğde	2 Circ	
34.	Sakarya	74 Abx (Bz, Ahch, Abzh, Khal Sa, Tap), 66 Circ	
35.	Samsun	10 Abx (Bz, Abzh,	

15. Çanakkale 16 Circ
16. Çorum 2 Abx (Ash), 35 Circ
17. Denizli 3 Circ
18. Eskişehir 18 Abx (Tsab, Ash, Tap), 27 Circ
19. Gümüşhane 3 Circ
20. Hatay 6 Circ
21. Içel 2 Circ
22. Istanbul 5 Abx, 6 Circ
23. Izmir 3 Circ
36. Sinop 14 Abx (Bz, Abzh), 20 Circ
37. Sivas 7 Abx (Ash, Tap), 20 Circ
38. Tokat 20 Abx (Ash, Tap), 45 Circ
39. Yozgat 9 Abx (Ash, + Tap ?), 13 Circ
40. Zonguldak 3 Abx (Bz ?)

The Split-up of Common West Caucasian

From a purely linguistic viewpoint it is correct to speak about three linguistic entities within West Caucasian, namely, Abkhaz, Circassian and Ubykh, as Adyghe and Kabardian, on the one hand, and Abkhaz and (Tapanta) Abaza, on the other, are in interdialectal relation to each other (Abaza and Abkhaz proper are actually somewhat closer to each other, than Adyghe and Kabardian). The Abkhazian and Circassian groups can be regarded as two poles, while Ubykh occupies an intermediate position, being nearly equally close to Abkhaz and Circassian. This correlates with the former geographical position of Ubykh between Abkhaz- and Circassian-speaking areas.

Common West Caucasian split into at least three dialects: Proto-Circassian, Proto-Abkhaz, and Proto-Ubykh. Possible sister-languages were ancient Anatolian Hattic and probably Kaskian. There are different opinions as to the division of Common West Caucasian: a) first it was divided into three dialects which further developed into three independent idioms (cf. MS 3); b) it was divided into Circassian-Ubykh and Abkhaz, and only afterwards the split of the former group into Circassian and Ubykh took place (Kumaxov 1976: 48-57); c) it was divided into Abkhaz-Ubykh and Circassian, and then Abkhaz and Ubykh split. The scarceness of Hattic material (cf. Chapter XI, 2.) does not allow us so far to determine its exact position inside West Caucasian. Ubykh, though morphologically showing more parallels with Circassian, phonetically shares with Abkhaz important archaisms. The examination of the basic vocabulary from Swadesh's 200 wordlist shows greater closeness of Ubykh to Abkhaz than to Circassian (cf. Chapter X, 3.1.). Though the question needs further discussion (cf., for example, the development of Common West Caucasian labialised-palatalised consonants in Ubykh, different from their evolution in Circassian and Abkhaz), I tentatively suggest that initially Common West Caucasian was divided into

Abkhaz-Ubykh and Circassian, and then Abkhaz and Ubykh split. Later Ubykh underwent strong and continuous Circassian influence, which made for their uniformity.

The division of Common Circassian into two dialect groups, the western (Adyghe) and the eastern (Kabardian), occurred approximately in the XIII-XIV centuries, when the ancestors of the present-day Kabardians moved from the west, where they constituted an ethnolinguistic entity with the Adyghe, eastwards, to the area of today's Kabarda, after Alania was crushed by the Mongol invasion (Fedorov 1983: 96-97). In the new territory the Proto-Kabardians came into contact with Iranian Alanians (the ancestors of the present-day Ossetes) and Kypchak Turkic tribes, ancestors of contemporary Karachajs and Balkars. Here East Circassian further split into Beslenej and Kabardian proper; Beslenej preserved many archaic features connecting it with Adyghe, or to be more precise, with Common Circassian. By the XV-XVI century some of the Kabardians moved further to the east, to the valleys of the river Terek, which led to the separation of the language into the dialects of Great and Little Kabarda. Later, at the end of the XVIII and the beginning of the XIX century, another group of East Circassians, the so-called "fugitive Kabardians", moved to the west, to the valleys of the Kuban river, to the territory of what is now Karachaj-Cherkessia, where they mixed with different Adyghe and partially Abaza groups, which resulted in the formation of the "Cherkess", or "Kuban-Zelenchuk" dialect of Kabardian.

The time of the split of Proto-Abkhaz in Tapanta, on the one hand, and in Abkhaz proper, on the other, may be assigned approximately to the margin of the XIV and XV centuries, when part of the Abkhazians moved from their historical territory to the North Caucasus, to regions earlier occupied by Alanians, which had become vacant after the Mongol invasion. These newcomers settled along tributaries of the Kuban (namely, Great and Little Zelenchuk) and Kuma rivers (Fedorov 1983: 97-100; Istorija 118-121). The move was not a single act: various Abkhaz groups at different times were crossing the Great Caucasus range and settling on its northern slopes. The descendants of these migrants are the present-day Tapantas, or the Abazas proper. Though in the special literature (mainly historical) one can read that Tapanta Abazas came to the North Caucasus from the territory of northwestern Abkhazia and adjoining areas, there are indications (folklore, toponymical, historical and archaeological) pointing at southern Abkhazia as the starting place for at least some of the Tapanta groups (cf. Istorija 120-121). The analysis of the Kartvelian (in particular, Megrelian) loans in Tapanta testifies in favour of this opinion. Much later, maybe in the

beginning of the XVII century, another group of Abkhazians migrated to the North Caucasus from Abkhazia's mountain regions, whence their name *a-šǯarʒ́wa* (Abx), *šǯqaráwa* (Tap) "mountaineer". Up to our days some Ashkharywa speakers still call themselves *apsawa*, i.e. "Abkhazian". Ashkharywa is much closer to Abkhaz proper than to Tapanta, though by some of its features it may be regarded as a transitional dialect between Abkhaz proper and Tapanta. Intensive contacts of both North Caucasian dialects stimulated the process of their convergence, with overwhelming and ever growing influence of Tapanta, on which Standard Abaza is based. Note that it was mainly Ashkharywa who emigrated in the last century to Turkey. The mutual similarity is also strengthened by a considerable Kabardian influence on both of these dialects.

The dominant feature which determined the sociolinguistic situation of the Abkhazo-Adyghean linguistic area was a close geographical neighbourhood of these idioms. This situation was changed only in the middle of the XIX century with the total disappearance of Ubykh, Sadz Abkhaz and the mountain Abkhaz subdialects, which used to be zones of intensive Abkhazo-Ubykho-Adyghean contacts, connecting these three genetically related areas. Such a long interaction provided favourable conditions both for the conservation of common archaic features and for the appearance of parallel innovations. One of the consequences was the appearance of a noticeable layer of shared lexicon due to mutual borrowings. It should be noted that for many centuries essential factors have been a considerable and almost unilateral Circassian influence on Ubykh, Abaza and (in much lesser degree) Abkhaz and, on the other hand, Abkhaz influence on Ubykh.

2. A SHORT SURVEY OF THE HISTORY OF WEST CAUCASIAN COMPARATIVE RESEARCH AND THE AIMS OF THE PRESENT STUDY

The genetic relationship of the West Caucasian languages was noticed as early as at the end of the XVIII century by the German I.A. Güldenstädt (1791), and later confirmed by the pioneer of Caucasian linguistics, P.K. Uslar (1887: VI, 82). P. Charaia 1912 demonstrated some lexical affinities between Circassian and Abkhaz. The publication in 1922 and 1930 of important articles by N.S. Trubetzkoy, who for the first time established a number of sound correspondences between the West Caucasian idioms, marked the birth of a new discipline — West Caucasian comparative linguistics. Trubetzkoy demonstrated regular correspondences between Circassian obstruent laterals and Abkhaz alveolar spirants and argued for the secondary character of the latter.

The decades that followed were characterised by unhurried work in the direction of establishing new lexico-grammatical correspondences. In France the young G. Dumézil's (1932) daring (though at that time, as he himself later admitted, somewhat premature) attempts to create a comparative grammar of North Caucasian languages on the basis of comparison of morphological elements were useful and stimulating additions to Trubetzkoy's phonetic studies. Apart from his invaluable efforts devoted to fixation and analysis of then still available Ubykh, in his numerous publications Dumézil revealed quite a number of new lexical and morphological affinities between the Abkhazo-Adyghean languages (cf. Dumézil 1932; 1937; 1969; 1971; Notes; 1975; 1975a; Dumézil and Esenç 1971; 1977, etc.).

In his study on Ubykh, the Hungarian linguist J. Mészáros (1934) proposed some new comparisons. In the then Soviet Union two important centres of comparative West Caucasian research became Georgia's capital Tbilisi and Moscow. In Georgia K.V. Lomtatidze and G.V. Rogava have contributed considerably to a better understanding of many developments which took place in the history of the Abkhazo-Adyghean languages (cf. Rogava 1943; 1956; 1973; 1974; Lomtatidze 1944; 1953; 1960; 1967; 1970; 1976). Important studies were made by Russian scholars in Moscow (cf. Yakovlev 1928; German translation: 1930; a small article which influenced much of the later work on Circassian historical phonology; cf. also Serdiuchenko 1949), and Leningrad (cf. Genko 1934, published in 1955, and 1935, published in 1957). A certain contribution to the study of common Abkhazo-Adyghean linguistic heritage was made also in Abkhazia (cf. Shakryl 1968; 1971).

More recently, substantial progress in the field of West Caucasian comparative research was achieved by two Kabardian linguists, M.A. Kumaxov and A.K. Shagirov, working in Moscow. In his publications on Circassian comparative morphology and phonology, Kumaxov established a number of new correspondences between the three West Caucasian idioms, especially between their grammatical elements (cf. Morf; Kumaxov 1971; 1973; 1981; 1984; 1989; 1992). To the works of Shagirov on Abkhazo-Adyghean etymology and lexicology we owe the main bulk of the revealed West Caucasian related material, which makes his works indispensable for any student in this branch of comparative linguistics (cf. Shagirov 1962; 1964; 1971; 1971a; ES I, II; MS; ZL). Another Kabardian linguist, A.I. Abdokov, working in Kabarda's capital Nal'chik, has made his own valuable contribution to the establishment of phonetical and lexical correspondences between the Abkhazo-Adyghean languages and to the demonstration of their relationship with the East Caucasian languages (cf. FL;

Abdokov 1976; 1981; ZS).

The Dutch linguist A.H. Kuipers published a number of important works devoted to reconstruction of the Proto-Circassian sound system and lexicon (cf. Kuipers 1963; PC). Among other important works in this field one can mention Balkarov 1967; 1970, Klimov 1967; 1969, Lafon 1966, Smeets 1988, Charachidzé 1990-91, Colarusso 1981; 1989, Dybo 1989, Lucassen 1992; 1992a.

The comparative studies in the last decades were substantially facilitated by publication of synchronic descriptions and dictionaries, undertaken mainly by Soviet linguists. Nearly all the Abkhazo-Adyghean dialects preserved in the Caucasus (i.e., except Ubykh and Sadz Abkhaz) have been monographically described and dictionaries of the standard dialects have been published. Besides, dialects spoken by the Abkhazian, Circassian and Ubykh emigré communities in Turkey and some Arab countries have also been investigated, this time by Western scholars, cf. the works by G. Dumézil (DA I, II, III, V; Dumézil 1959; 1975), H. Vogt (HV), R. Smeets (1976; 1984), C. Paris (1974; 1974a; 1989), J. Colarusso (1992).

Despite the undoubted progress in the field of West Caucasian comparative research, and the publication of a Common Circassian reconstruction (cf. Kuipers 1963; Kumaxov 1981) and dictionary (cf. PC), as well as of the Circassian etymological dictionary (cf. ES I, II), until recently no systematic demonstration of the genetic relationship between the West Caucasian languages, based on an established system of sound correspondences and the West Caucasian reconstruction, has been carried out. This was in sharp contrast not only to spectacular results achieved in Indo-European and some other branches of comparative linguistics, but also in the field of East Caucasian (cf. Bokarev 1961; 1981; Leksika; Gigineishvili 1977; Gudava 1979; Imnaishvili 1977; Talibov 1980; Nazarov 1974; Alekseev 1985; 1988) and especially Kartvelian linguistics (cf. Chikobava 1942; Klimov 1964; Gamkrelidze and Machavariani 1965, Schmidt 1962). It is only the last decade, thanks to the publication of important works by Abdokov (FL; ZS; cf. also 1981; 1982) and especially by Nikolayev and Starostin (NS; cf. also Starostin 1978; 1982; 1985; 1987; 1988), that a real breakthrough in West Caucasian historical linguistics can be scored from.

In his latest book "On phonetic and lexical correspondences of the North Caucasian languages" (ZS), Abdokov discusses basic characteristics of the reconstructed North Caucasian proto-phonemes and their local series, explains some sound correspondences between the two North Caucasian groups, and presents a rather extensive North Caucasian etymological dictionary, which

demonstrates the genetic relationship between the Abkhazo-Adyghean and Nakh-Daghestanian languages. This valuable work, however, has some methodological drawbacks. Thus, though it contains a remarkably convincing manifestation of the North Caucasian relationship, the lack of any schemes of regular and systematic sound correspondences, accompanied by a reasonable number of examples, often makes it unclear just how these forms are arrived at. No intermediate Proto-Abkhaz or Proto-Circassian reconstructed forms are given.

The publication in 1994 of the long awaited "A North Caucasian etymological dictionary" by two Moscow linguists, S. Nikolayev and S. Starostin, marks a real breakthrough in the field of North Caucasian comparative linguistics, which, even despite the works by Shagirov, Abdokov, and Kumaxov, on the whole has long been characterised by virtual stagnation and lack of fresh ideas. 20 pages (p. 179-199) of this impressive work are devoted specifically to Proto-West Caucasian reconstruction. The authors give a chart of the postulated Proto-West Caucasian phonemic inventory, a table of the established sound correspondences between Proto-Abkhaz, Ubykh and Proto-Circassian, as well as phonemic charts of Proto-Abkhaz and Proto-Circassian, sets of intra-Abkhaz and intra-Circassian sound correspondences, characteristics of the reconstructed phonemes and of their reflexes in the individual languages and a discussion of Proto-West Caucasian consonant clusters, vocalism, prosody. The reconstructed Proto-West Caucasian phonemic system, presented in NS, raises, however, serious doubts as to the reliability of such a huge phonemic inventory, reaching a total of 168 consonants! Apart from this, the reconstructed inventory contains such phonetically unlikely or unique phonotypes as, for example, *$b^{\circ\prime}$ (labialised-palatalised voiced bilabial), *$\tilde{q}^{\circ\prime}$ (pharyngealised labialised-palatalised strong voiceless uvular stop), *$\chi^{\circ\prime}$ (pharyngealised labialised-palatalised uvular fricative), etc. Note that pharyngealisation and palatalisation are always in complementary distribution in any language where they occur within one phonological system (cf. Ubykh). Another remark is that the established sets of sound correspondences lack any illustrations, which makes it rather difficult for the reader to critically assess either the validity of the reconstructed system or the credibility of the material on which this reconstruction has been based. The authors, as much as Abdokov, retort nearly exclusively to the method of external reconstruction, which strongly determines the shape of the whole of Proto-West Caucasian reconstruction. It is obvious, though, that sometimes the internal analysis of a given word can present a more simple and economical explanation. The tendency to explain most of the observed correspondences by positing in each case a distinct proto-phoneme disregards the possibility of later (irregular) developments

and leads to an extension of the reconstructed inventory.

The two important books briefly discussed above, devoted primarily to the demonstration of the relationship between the two indigenous North Caucasian linguistic groups, the Abkhazo-Adyghean and Nakh-Daghestanian, put the fact of the existence of such relationship and of a distinct North Caucasian linguistic family beyond any doubt. At the same time, the discussion of the West Caucasian reconstruction proper plays in both works only a subordinate role.

The present study aims at a systematic demonstration of the genetic relationship between the three West Caucasian languages, Circassian, Ubykh, and Abkhaz through the establishment of the sets of regular and systematic phonemic correspondences, the reconstruction of the Common West Caucasian phonemic system, as well as a part of its morphology and lexicon. This reconstruction (in contrast to the reconstructions undertaken by my predecessors) has been achieved primarily on the basis of internal West Caucasian material, and only in special cases were concrete solutions determined by external evidence, i.e. by the data of the distantly related East Caucasian languages. In certain cases the possibility of different reflexes of a single proto-phoneme is admitted, which allows us to avoid the necessity of positing quite a number of additional proto-phonemes. The reconstruction is based on the comparisons between the previously reconstructed Common Circassian (using, with some modifications, the reconstructed system elaborated by Kuipers 1963 and the same author's Common Circassian dictionary), Common Abkhaz (using the phonemic reconstruction proposed by Starostin 1978, NS 193-197, and somewhat revised in Chirikba 1992 and my Common Abkhaz dictionary), and on the synchronous material of Ubykh (published by Dirr, Mészáros, Dumézil, Vogt and Charachidzé). As no Ubykh dialects are known, an internal Ubykh reconstruction is impossible. The additional lexical material was either borrowed from numerous dictionaries and scientific publications, or collected during the fieldwork.

Besides phonology, this research will touch upon the Common West Caucasian affixes and lexicon. I will also discuss shortly the problem of external connections of Proto-West Caucasian (East Caucasian, Hattic). The reconstruction of Common Circassian, Common Abkhaz, and Common West Caucasian is preceded by a short survey of the phonological systems of all West Caucasian dialects.

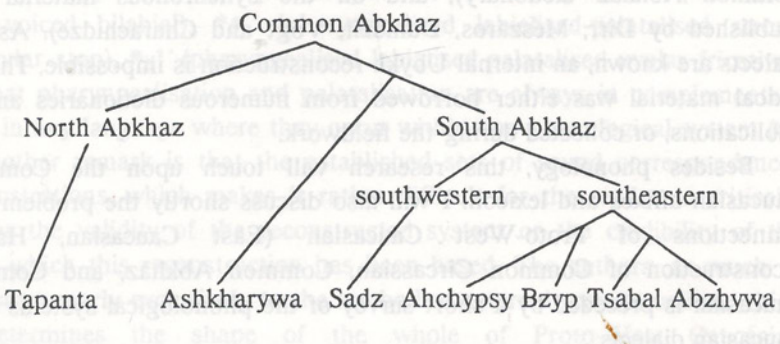
CHAPTER II

PHONOLOGICAL DESCRIPTION OF THE WEST CAUCASIAN LANGUAGES AND THEIR DIALECTS

1. PHONOLOGICAL DESCRIPTION OF THE ABKHAZ DIALECTS

The Abkhaz group consists of five main dialects: Bzyp, Abzhywa, Sadz, Ashkharywa and Tapanta. Besides, there is Ahchypsy, close to Bzyp, but showing some isoglosses with Sadz, and Tsabal, which can be an archaic form of Abzhywa. All these isolects can be subdivided into three major groups: southern, northern, and Ashkharywa. The southern group is further subdivided into southeastern subgroup, comprising Bzyp, Abzhywa, Ahchypsy and Tsabal, and southwestern subgroup, comprising Sadz. Northern group comprises subdialects of Tapanta Abaza. Ashkharywa is on the whole much closer to South Abkhaz than to Tapanta, but shares with the latter some important archaisms and innovations, which allow us to regard it as an intermediate dialect.

Internal Subgrouping of Abkhaz dialects



1.1. SOUTH ABKHAZ

The main characteristics of the South Abkhaz sound system are as follows.

(a) Labialised sibilants, plain middle sibilants and labialised pharyngal *ħ°* are

phonetically palatalised.

(b) In the indigenous vocabulary the voiced fricative */v/* occurs only in the morpheme *v(a)* 'side' and in a few onomatopoeic words.

(c) Labialisation in Abkhaz is, according to Catford 1975, of 5 different types: (1) lip-rounding of [w]-type (e.g. *g°*), (2) labial+palatal approximant (e.g. *ħ°*), (3) labial±palatal fricative (e.g. *š°*), (4) labiodental (to be more precise, endolabiodental) [v]-type (e.g. *ć°*), and (5) complete inner labial closure, [p]-type (e.g. *t°*).

(d) Aspiration and glottalisation in all Abkhaz dialects are phonetically rather weak (unless under emphasis), especially when compared with similar sounds in Georgian or in some Daghestanian languages, like Karata. Voiceless obstruents are aspirated (this feature being non-phonemic). Glottalised consonants are ejective.

(e) Plain alveolar sybilants are phonetically retroflex.

(f) The glottal stop is usually not recorded for South Abkhaz, but it does exist, at least on the periphery of the system, cf. such minimal pairs, as *ʔaj* 'no' ~ *aj* 'yes', *ʔaj* 'no' ~ *ħaj* 'oh' (interj.), *ʔaj-ʔaj* 'no' ~ *ħaj-ħaj* 'interjection of encouragement', *ʔaj-ʔaj* 'no' ~ *aj-aj [ajej]* 'yes', *ʔaħ* 'no' ~ *aħ* 'oh' (interj.), *ʔaħ* 'no' ~ *ħaħ* 'our prince'. It also occurs in such interjections as *ʔoħ* (expresses surprise), *ʔaħ* (expresses regret), *ʔaħ-ʔaħ* 'no', and in the (Bzyp) vocative *ʔín-taa-taa* 'a call for calves'. Intervocalic */q'/* can also be realised as a glottal stop, especially in allegro speech, cf. */jəq'alazəj/= [jəʔalazij//jəalazij]* 'what's happened?'.

(g) The pharyngal *ħ* in all West Caucasian idioms is emphaticized or, in other terminology, epiglottalised (S. Kodzasov, pers.comm.). Genko 1957: 183-184 called *ħ* epiglottal, and according to Bgazhba (BD 93), it is a middle pharyngal. Phonetically */ħ/* can be *[ħ], [ɦ]* or, in intervocalic position, *[ɦ], [ɦ]*. Note that unlike East Caucasian, the contrast between */ħ/* and */h/* is not usually found in the West Caucasian languages (for rare examples in Düzce Shapsygh cf. Smeets 1986: 111, 131). In all Circassian dialects preaspiration before a vocalic anlaut can be regarded as automatic and thus non-phonemic.

(h) Traditionally *j°* is regarded as a labialised laryngal (cf. Lomtatidze 1976: 213, 215) or as a mid-pharyngal (cf. BD 93), a voiced counterpart of *ħ°*, which is true historically but not from the point of view of modern Abkhaz. This phoneme was correctly defined as a labiopalatal spirant by Trubetzkoy 1987: 272 (cf. also Catford 1977: 291). Paradigmatically it forms a pair not with *ħ°* (as claimed by some authors), but with *j*, and, moreover, when delabialised, it becomes *j*. Just like *j*, also *j°* causes the narrowing of the following vowel *a*, cf. */aj°až'/ = [aj°ež']* 'yellow'.

1.1.1. *Southeastern Abkhaz dialects*

(1) *Bzyp*

The Bzyp dialect zone, so named after the main river of northern Abkhazia (Abx *bzəp*, whence *a-bzəp-k°a*, i.e. "the Bzypians"), stretches from the town of Gagra southwards to the western suburbs of Sukhum. It should be noted that before 1864 Gagra was inhabited by speakers of Sadz, which was spoken north of the river Bzyp. The Bzyp dialect consists of three subdialects: Lykhny (named after the village *ləxnə́*), Kaldakhwara (after the village *k'aldax°ára*) and Aatsy (after the village *aaćə́*). Speakers of Bzyp live between Gagra and Sukhum in the villages of *bzə́pta, bárməš', č'aabáləRx°a, k'aldax°ára, aaćə́, d°ərpš', ləxnə́, ǯ'ərx°á, x°ap, garp, watħará, ʒ°andrə́pš', ač'andára*, etc., and in the towns of *gágra, g°ədáwəta, nóvəj afón*, as well as in the Abkhaz capital Sukhum (Abx *áq°a*). The phonemic system of Bzyp comprises 67 segmental consonants, plus the marginal glottal stop (*ʔ*).

The Bzyp consonant inventory (cf. BD 93)

	Stops			Affricates			Spirants		Resonants		Glides
Labials	*b*	*p*	*p'*				*v*	*f*	*m*		*w*
Dentals	*d*	*t*	*t'*	*ʒ*	*c*	*c'*	*z*	*s*	*n*	*r*	
labialised	*d°*	*t°*	*t'°*								
Dent.-alveol.				*ǯ*	*ć*	*ć'*	*ź*	*ś*			
labialised				*ǯ°*	*ć°*	*ć'°*	*ź°*	*ś°*			
Alveolars				*ǯ*	*č*	*č'*	*ž*	*š*			
labialised							*ž°*	*š°*			
palatalised				*ǯ'*	*č'*	*č''*	*ž'*	*š'*			
Palatals											*j*
labialised											*j°*
Laterals									*l*		
Velars	*g*	*k*	*k'*								
labialised	*g°*	*k°*	*k'°*								
palatalised	*g'*	*k'*	*k''*								

Uvulars	q'	γ $\check{x}$
labialised	q'°	γ° $\check{x}^{\circ}$
palatalised	q''	γ' $\check{x}'$
Pharyng. uvulars		$\check{\chi}$
labialised		$\check{\chi}^{\circ}$
Pharyngals	(ʔ)	$\hbar$
labialised		$\hbar^{\circ}$

Comments to the chart:

(a) The middle fricatives $\hat{z}^{\circ}$ and $\hat{s}^{\circ}$ in Caucasian Bzyp became very rare, but they are well-preserved in the speech of Bzyp speakers in Turkey. Their articulation is of the endolabiodental type.

(b) Recently (in 1990) I noticed that some Bzyp (and some Ahchypsy) speakers probably distinguish yet another back spirant, namely, voiceless velar /x/. The acoustic distinction between velar /x/ and uvular /ǩ/ is rather subtle. Though I don't have ideal minimal pairs, cf. such pair as *a-xə́* 'bullet' vs. *áǩa* 'stick supporting winding plants'. The corresponding Circassian velar /x/ is more front and, consequently, more palatalised, which renders the contrast between the velar and uvular series acoustically more prominent. I failed to find this consonant in other Abkhaz dialects. Actually Abaza does have velar /x/, but only in numerous Russian loans, whereas it renders the (front) velar /x/ in Circassian loans by means of *[ç]* (ich-Laut). The question concerning the occurrence and distribution of the additional velar fricative in Abkhaz needs further examination, which is why I do not make use of it in the material adopted for the present study.

(c) The phonetic distinction between the Bzyp uvulars $\check{x}$ and $\check{\chi}$ (and their labialised counterparts, $\check{x}^{\circ}$, $\check{\chi}^{\circ}$) is not quite clear. Some authors regard it as a contrast between back velar and velar-pharyngeal (cf. BD 93), while others define it as a contrast between plain and pharyngealised uvulars (Catford 1971: 679; 1977: 290; Colarusso 1981). I am inclined to adopt the second view. Historically Bzyp $\check{\chi}$ and $\check{\chi}^{\circ}$ are reflexes of uvular stops **q* **q°* (see below), preserved by Tapanta and Ashkharywa. Note that none of the West Caucasian and only few East Caucasian languages possess a voiced uvular stop.

(2) *Abzhywa*

The speakers of this dialect (Abx *abžə́waa*, lit. 'those who live in the middle (of Abkhazia), in between') inhabit the territories eastwards from Sukhum, up to the

town of Gal. It is subdivided into three subdialects: Atara (after the name of the village *atára*), Dzhgiarda (vil. *ǯǧárda*), and Chkhwartal (vil. *čx̌ʷartál*), the differences between which are not essential. Besides the villages mentioned, speakers of Abzhywa live also in such villages as *wataáp, č'ɬaw, k'ə́ndəɣ, kʷtawl, ɣʷáda, tx̌ə́na, pakʷáš́, gʷəp*, etc., and in the towns of *wačamčə́ra, tqʷarč'ál* and in Sukhum (*áqʷa*). The number of segmental consonants in Abzhywa is 59 (plus the peripheral *ʔ*).

The Abzhywa consonant inventory (cf. Lomtatidze 1976: 212-213)

	Stops			Affricates			Spirants			Resonants		Glides
Labials	*b*	*p*	*p'*				*v*	*f*	*f'*	*m*		*w*
Dentals	*d*	*t*	*t'*	*ʒ*	*c*	*c'*	*z*	*s*		*n*	*r*	
labialised	*dʷ*	*tʷ*	*tʷ'*									
Dent.-alveol. labialised				*ʒ́ʷ*	*cʷ*	*cʷ'*						
Alveolars				*ǯ*	*č*	*č'*	*ž*	*š*				
labialised							*žʷ*	*šʷ*				
palatalised				*ǯ́*	*č́*	*č'́*	*ž́*	*š́*				
Palatals												*j*
labialised												*jʷ*
Laterals										*l*		
Velars	*g*	*k*	*k'*									
labialised	*gʷ*	*kʷ*	*kʷ'*									
palatalised	*ǵ*	*ḱ*	*k'́*									
Uvulars			*q'*				*ɣ*	*x̌*				
labialised			*qʷ'*				*ɣʷ*	*x̌ʷ*				
palatalised			*q'́*				*ɣ́*	*x̌́*				
Pharyngals			(*ʔ*)				*ħ*					
labialised							*ħʷ*					

Comments to the chart:
(a) Glottalised *f'* is found in one morpheme only (*f'a* 'thin'), met in the speech of (some) older speakers, while in the speech of the rest of the speakers the main variant of this morpheme is *p'a* (as in Bzyp). In the same morpheme Ashkharywa has *f'* and Sadz *f* (see below).
(b) Dentolabial *ʒ° c° ć'°* in Abzhywa can be alternatively classified as labialised counterparts of the plain *ʒ c c'*, as Abzhywa lost the plain middle sibilants.
(c) Uvular *q'* in intervocalic position is often realized as a glottal stop.

(3) *Ahchypsy*
Speakers of Ahchypsy live in the following villages in Turkey: Çakallık, Yarıca (Abx *k'°ar(a)c°g'á*), Kalayık, Soğuk-su (Abx *apsará souk-su*), Yeniköy (Abx *tag°arák'g'*), Hüseynşeyhköy (Abx *č'ə́waa*), Nüfren (Abx *apsará*, includes 3 villages), Karaçökek, Sarıyer (?), Bey-köy, Çapyak (Abx *mac'ará*), Zörbek mahalle (prov. Sakarya, sub-prov. Hendek), Yeşil Yayla (prov. Sakarya, region of Kışla), Kayalar (prov. Sakarya, near the city of Adapazarı), district Efteniya, comprising four Ahchypsy villages: Suleymanbey, Çay-köy, Kurak mahalle, Zekeriyabey (prov. Bolu, sub-prov. Gölyaka), Tavak (prov. Bolu, region of Kaynaşli).

The generic self-designation of Ahchypsy is *ápsəwa//ápsawa* 'Abkhazian', more specifically they refer to themselves as *aħč'ə́psə́* (sg.), *aħč'ə́psaá* (pl.), and they call their language *ápsa-š°a*, i.e. 'Abkhaz'. On the whole Ahchypsy is close to Bzyp (specifically, to its Aatsy subdialect and to Turkey Bzyp) in its sibilants series, in reflexes of uvular stops and in the sporadic preservation of the velar *x*. At the same time it displays some morphological and lexical features shared with Sadz and Ashkharywa, which can be explained by the close and long geographic contact of these three dialects prior to their emigration to Turkey.

The Ahchypsy consonant inventory

	Stops			Affricates			Spirants		Resonants		Glides
Labials	*b*	*p*	*p'*				*v*	*f*	*m*		*w*
Dentals	*d*	*t*	*t'*	*ʒ*	*c*	*c'*	*z*	*s*	*n*	*r*	
labialised	*d°*	*t°*	*t'°*								
Dent.-alveol. labialised				*ʒ°*	*c°*	*ć'°*	*ẑ°*	*ś°*			

Alveolars			ʒ	č	č'	ž š
labialised						ž° š°
palatalised			ʒ´	č´	č'´	ž´ š´
Palatals						j
labialised						j°
Laterals						l
Velars	g	k	k'			
labialised	g°	k°	k'°			
palatalised	g´	k´	k'´			
Uvulars			q'			γ x̌
labialised			q'°			γ° x̌°
palatalised			q'´			γ´ x̌´
Pharyn. uvulars						χ̌
labialised						χ̌°
Pharyngals						ħ
labialised						ħ°

(4) *Tsabal*

Speakers of Tsabal (*c'abál*) can be found only in Turkey (and probably in Syria). Their ancestors, before their total deportation by the Russians in the middle of the XIX century, used to inhabit the mountainous villages *c'abál* and *dal* in the upper reaches of the Kodor river in Southern Abkhazia. In Turkey they live in villages near the cities Inegöl, Kütahya, Eskişehir, Bursa, Bilecik. The Tsabal villages in Turkey are as follows: Mezit, Sulhiye, Kestanealan (Abx *kemsá-k'oj*), Rüşti-köy//Rüştiye (Abx *kaj°aa-r-k'ój*), Gömcık//Gedikpınar, Güneykestana, Osmaniye (Abx *q'°ará-k'oj*) (prov. Bursa, sub-prov. Inegöl), Düzdağ, Guyemcik (prov. Bilecik, sub-prov. Söğüt), Sarnıçköy, Alınca (sub-prov. Pazaryeri), Ağapınar, Ahalar, Akpınar, Karaalan (prov. Eskişehir, near the city of Eskişehir), Taşköprü, Tandır, Bektaşpınar, Kızılcaören (prov. Eskişehir, near the city of Hekimdağ), Yenicekızılcaören (prov. Kütahya, near the city of Kütahya), Aykırıkcı (Abx *kərʒ'əna-kət*) (prov. Kütahya, near the city of Altıntaş).

The phonemic inventory of Tsabal is practically the same as that of

Ahchypsy (see below), though it does not seem to have *x*. The labiopalatal *jˢ* is pronounced with a slight pharyngeal colouring (*[ʲʰwˤ]*). By all its parameters Tsabal is definitely closer to Bzyp and Abzhywa, than to Sadz or even to Ahchypsy.

Besides the mentioned dialects there are some transitional South Abkhaz isolects. First, the speech of the inhabitants of the villages *jašə́ra* and *baymarán* near Sukhum shows both Bzyp or Abzhywa features, though on the whole the *jašə́ra* isolect is closer to Bzyp, whereas the speech of *baymarán* is closer to Abzhywa. The speech of these villages reflects the peculiarities of a central, Sukhum (or Abzhakwa, Guma) transitional dialect, intermediate between Bzyp and Abzhywa. Guma (*gˢəmá*) and Abzhakwa (*abžə́qʷa*) villages can also be found in Turkey.

1.1.2. *Southwestern Abkhaz*

(1) *Sadz*

The Sadz dialect (Bz *a-šáʒ(-wa)*, Abzh, Sa *a-sáʒ(-wa)* 'Sadzian'), before the expulsion of its speakers to the Ottoman empire in 1864, was spoken from the river Bzyp in the east up to the river Matsesta (*mcasta)* and, further to the northwest, to the river Sochipsta (contemporary Sochi). Thus it neighboured Bzyp to the east and Ubykh to the west. In Abkhazia Sadzians used to live in such villages as *x̌amə́šʼ* (or *xʷásta* > Rus Xosta, a place near Sochi), *artkət* (or rather *arəd-kət*), *x̌ə́šʼx̌a*, *candrə́pšʼ*, *gʼačʼrə́pšʼ*, *bagrə́pšʼ*, *mkʼalrə́pšʼ* (in the upper reaches of the river *psaw*), *gágra//gagrə́pšʼ*. On the river *kʷədəpsta* (Rus Kudepsta) there settled another Sadz community, Chuzhi (*cʲəʒʼə*, pl. *a-cʲə́ʒʼ-aa*), and on the river *mcasta* (> contemporary Rus Matsesta) was situated a Chywa (*čʼə́wa*) tribe.

At present the Sadz dialect can be found only in Turkey. It is subdivided into two subdialects: Kháltsys, or Sadz proper, and Tswydzhy.

The generic self-designation of Sadzians proper is *apsə́wə [apsúŭ]* 'Abkhazian', more specifically they refer to themselves as *a-x̌álcʼəs//a-x̌álcʼəs*, or *a-sáʒ-wa* (sg.), *a-sáʒ-kʲa* (pl.). Subdivisions are the *x̌amə́šʼaa*, who before the emigration lived in *xamə́šʼ//xʷasta*, the *gágraa*, emigrants from the contemporary town of Gagra, and the *taápsa*. In Turkey they inhabit the following villages of the province Sakarya: Taşburun, Yongalık, Kuzuluk, Gebeş (mixed Sadz-Bzyp) (sub-prov. Akyazı), Kemaliye (Abx *x̌amə́š*), Şükriye-köy (Abx *dáylaʒʼa*), Çaybaşi Yeni köyü (Abx *taápsa(a)*; one district of the village is called in Abkhaz *tarskʷá*, and another, now deserted, *gágraa*) (near the city of Adapazarı), Akbalık, Bıçkıdere, Mesudiye, Harmanlı (Abx *cʲ(ə)x̌ə́n(a)ra*)) (near the city of Karapürçek), Boğazköy (Abx *čʼə́waa rkə́ta*, mixed Ubykh-Sadz), Doğançay (sub-prov. Geyve),

Karadere (sub-prov. Hendek).

The generic self-designation of Tswydzhy is *ápsawa* 'Abkhazian', and the name of their community is *c°ǯ'aa*. Tswydzhy do not regard themselves as "Sadzians". They live in three villages near the town of Bilecik: Küncaz, Hasan-dere and Elmabahça (the latter is now nearly almost deserted). Many moved from villages to towns, mostly to Bilecik.

On the whole the phonemic inventory of Khaltsys Sadz coincides with that of Abzhywa, the only distinction being the non-glottalised *f* in the morpheme *fa* 'thin' (cf. Abzh, Ash *f'a*, Bz *p'a*). Besides, Tswydzhy, and only few Khaltsys speakers, retain the old opposition between middle and back labialised spirants (*ź° ś°* vs. *ž° š°*).

The Sadz consonant inventory

	Stops			Affricates			Spirants		Resonants		Glides
Labials	*b*	*p*	*p'*				*v*	*f*	*m*		*w*
Dentals	*d*	*t*	*t'*	*ʒ*	*c*	*c'*	*z*	*s*	*n*	*r*	
labialised	*d°*	*t°*	*t'°*								
Dent.-alveol. labialised				*ʒ°*	*c°*	*c'°*	*ź°*	*ś°*			
Alveolars				*ǯ*	*č*	*č'*	*ž*	*š*			
labialised							*ž°*	*š°*			
palatalised				*ǯ'*	*č'*	*č''*	*ž'*	*š'*			
Palatals											*j*
labialised											*j°*
Laterals									*l*		
Velars	*g*	*k*	*k'*								
labialised	*g°*	*k°*	*k'°*								
palatalised	*g'*	*k'*	*k''*								
Uvulars			*q'*				*γ*	*x̌*			

labialised	$q^{ʷ}$	$\gamma^{ʷ}$	$x^{ʷ}$
palatalised	$q'^{ʲ}$	$\gamma^{ʲ}$	$x^{ʲ}$
Pharyngals		$ħ$	
labialised		$ħ^{ʷ}$	

Comments to the chart:

(a) The final glottalised stop in the ending of the present dynamic is often realized as a glottal stop, cf. *jə-z-dár-wə-t' [jizdáruʔ]* 'I know', *wəcút' [ʷucúʔ]* 'you (man) go'.

(b) The affricates *c* and *č* often have a hardly noticeable initial stop-part.

(c) In the morpheme meaning 'thin' Khaltsys has *f* (*a-fá*) and Tswydzhy *p'* or *f* (*a-p'á//a-fá*), the form with *p'* being the main variant.

(d) The Sadz middle labialised sibilants are endolabiodental (as in South Abkhaz).

One of the peculiar features of Sadz is the presence of geminate (or strong) consonants. At first one can get the impression that geminates have a phonetically conditioned distribution as they mostly occur in final stressed open syllable, cf. Khaltsys *a-llá//a-llə́* 'dog', *a-kʷət'á* 'hen', *ažžá* 'hare', *a-čəddá* 'donkey', *a-mattá* 'snake', *a-ffá* 'thin'. Cf. also Tswydzhy *a-llá* 'dog' (but *á-la-kʷa* 'eye'), *a-ffá* 'thin', *a-kʷət'ə́* 'hen', *a-xʷá* 'hill' vs. Bz, Abzh *a-lá*, *a-kʷt'ə́*, *ažá*, *a-čadá*, *á-mat*, *a-xʷə́*. However, in other words the consonant of a final stressed and open syllable does not geminate, cf. *a-xá* 'head', *a-qʷasá* 'alycha' (kind of damson), *a-mžʷá* 'grapes', etc. The geminate character of the consonants mentioned does not tend to be neutralized in other positions, cf. *a-llá* 'dog', *lla-k'* 'one dog', *a-lla-kʷá* 'dogs', *a-kʷət'ə́* 'hen', *kʷət'ə́-k'* 'one hen'. These examples show that the geminate consonants are retained in closed stressed and in open unstressed syllables. Cf. also *lla-k'//llə-k'* 'one dog' vs. *a-ləkʷ* 'fairy-tale'. In all other dialects of the Abkhaz group geminates are clusters, which either result from vowel elision (cf. Bz, Abzh *á-čʼčʼa-ra* vs. Sa *a-čʼəčʼá-ra* 'to laugh', Bz, Abzh *á-ʒʲʒʲara* vs. Ash *a-ʒʲaʒʲa-ra* 'to wash'), or have an expressive function, which is usual in the Caucasus (cf. SAbx *a-p-ćʷa-ra* 'to break' ~ *a-p-ćʷćʷa-ra* 'to break in many places', *a-ħʷa-ra* 'to speak' ~ *a-ħʷħʷa-ra* 'to cry', etc.). The rules governing the distribution of geminates in Sadz are still to be revealed.

1.2. ASHKHARYWA

Speakers of the Ashkharywa dialect inhabit three villages in Karachaj-Cherkessia: Starokuvinsky (Ash *qʷəžʷ-dəw*), Novokuvinsky (Ash *qʷəžʷ-čʼkʷən*) and Apsua

(*apsəwá*, the older name of which is *č'ag'ərâj*). In the first two villages the Kuvin subdialect is spoken, while the inhabitants of the third village speak the Apsua subdialect. Ashkharywa speakers also live in the village of Abazakt (together with speakers of Tapanta and Kabardian), and in the village of Uliap in Adyghea (together with Beslenej Kabardians and Adyghe). An indeterminate number of Ashkharywa speakers live in Turkey, and possibly also in Syria. On the whole Ashkharywa is undoubtedly closer to Abkhaz proper than to Tapanta, and thus the term Abaza can be safely used only in relation to the more distinct Tapanta.

The original labilalized dental stops (*d°*, *t°*, *t'°*) can be found only in the speech of the older speakers of Ashkharywa, where they are in one-way free variation with their non-labialised counterparts. All Ashkharywa speakers preserve a distinction between back and middle labialised spirants. The former are of a bilabial closed type, though in the pronunciation of some older speakers of Apsua these sounds are characterized by an exolabiodental articulation. The middle spirants are of an open bilabial type, and in the speech of the middle-aged and the younger generation they are partially or completely delabialised. Unlike the situation in South Abkhaz, labialised affricates are of a bilabial open type, and in the speech of younger representatives of the dialect they are delabialised.

Some older speakers of Ashkharywa have a labialised glottalised bilabial stop *p'°*, found only in one morpheme (*š'a-p'°ə́* 'foot', *m-p'°ə* 'hand' vs. *-p'ə* in all other dialects).

Ashkharywa preserves the original uvular stops *q q°* (which in southern and western dialects became spirants), as well as the voiced emphaticized labialised pharyngal (*ħ°*). Its non-labialised counterpart phonetically fluctuates between *ħ* and *ā*. Like Abzhywa, Ashkharywa possesses glottalised *f'* in the morpheme *f'a* 'thin'. Glottal stop is present only in the periphery of the system, cf. *ʔaħ//ʔaħ-ʔaħ* 'no'.

The Ashkharywa consonant inventory (cf. Lomtatidze 1976: 216-7)

	Stops	Affricates	Spirants	Resonants	Glides
Labials	*b p p'*		*v f f'*	*m*	*w*
labialised	*(p'°)*				
Dentals	*d t t'*	*ʒ c c'*	*z s*	*n r*	
labialised	*(d° t° t'°)*				

Dent.-alveol.							
labialised			ʒ°	c°	c'°	ẑ°	ŝ°
Alveolars			ǯ	č	č'	ž	š
labialised			ǯ°	č°	č'°	ž°	š°
palatalised			ǯ´	č´	č'´	ž´	š´
Palatals							j
Laterals						l	
Velars	g	k	k'				
labialised	g°	k°	k'°				
palatalised	g´	k´	k'´				
Uvulars		q	q'			γ	x̌
labialised		q°	q'°			γ°	x̌°
palatalised			q'´			γ´	x̌´
Pharyngals		(ʔ)				ħ/ā	ħ
labialised						ħ°	ħ°

Comments to the chart:

(a) I do not include in this chart sounds borrowed from Circassian (i.e. lateral and velar spirants), given in Lomtatidze 1976. Another difference with Lomtatidze 1976 is that in her chart of Ashkharywa consonants (p. 217) one finds both phonetically palatalised closed-bilabial back spirants (*[ẑʷ']*, *[ŝʷ']*) and velarised exolabiodental labialised back spirants (*[ẑᵛ]*, *[ŝᵛ]*). These two pairs, however, are just different phonetic realisation of the reflexes of Common Abkhaz **ẑ°*, **ŝ°*, and do not coexist within one and the same system.

(b) *ħ* is realized in different isolects either as an emphaticised (epiglottalised) pharyngal or, more usually, as a long *ā*, i.e. more like its South Abkhaz correspondent. In the latter case sometimes a slight epiglottalisation can be heard. In case of its realization as *ā*, the latter is shorter than Abkhaz *aa*, and sounds like a usual long vowel, while in Abkhaz it has a diphthongized pronunciation.

1.3. NORTH ABKHAZ

(1) *Tapanta*

Speakers of Tapanta live in the following villages of Karachaj-Cherkessia: Elburgan (Tap *albərhán*), Psyzh (*psəž°*), Krasny Vostok (Tap *g°əm-láw-kt*), Kubina (*q‴əbájna*), Kojdan (*q‴ajdán*), Indzhik-chkun (*jənʒ'əg'-č'k‴ən*), Kara-Pago (*q'arapág°a*), Psauche-Dakhe (*psawəč'a-dáça*), Abazakt, Abazahabl. In Psauche-Dakhe, Tapanta speakers live together with Kabardians, and in Abazakt with Kabardians and Ashkharywas. Tapanta is divided into two subdialects: Kubino-Elburgan and Gumlokt (= Krasny Vostok). The differences between these isolects are phonetic. The main feature which allows us to differentiate the Tapanta subdialects (besides some minor lexical peculiarities) is the reflexes of Common Abkhaz labialised sibilants and dental stops. In all Tapanta subdialects CAbx **d°* **t°* **t‴* merged with the labialised affricates, which then in some subdialects delabialised. Besides, in certain subdialects labialised middle sibilants merged with back sibilants, which in some isolects became delabialised.

The Tapanta consonant inventory (cf. Lomtatidze 1976: 218-9)

	Stops			Affricates			Spirants		Resonants		Glides
Labials	*b*	*p*	*p'*				*v*	*f*	*m*		*w*
Dentals	*d*	*t*	*t'*	*ʒ*	*c*	*c'*	*z*	*s*	*n*	*r*	
Alveolars				*ǯ*	*č*	*č'*	*ž*	*š*			
labialised				*ǯ°*	*č°*	*č‴*	*ž°*	*š°*			
palatalised				*ǯ'*	*č'*	*č''*	*ž'*	*š'*			
Palatals											*j*
Laterals									*l*		
Velars	*g*	*k*	*k'*								
labialised	*g°*	*k°*	*k‴*								
palatalised	*g'*	*k'*	*k''*								
Uvulars		*q*	*q'*				*γ*	*χ*			
labialised		*q°*	*q‴*				*γ°*	*χ°*			

palatalised	*q'ˊ*	*γˊ*	*x̌ˊ*
Pharyngals	*ʔ*	*ħ̄*	*ħ*
labialised		*ħ̄°*	*ħ°*

Comments to the chart:

(a) The present chart is actually a representation of Standard (Literary) Abaza, as even within one village one can find different reflexes of CAbx labialised sibilants and dentals. I shall describe these correspondences in the next chapter.

(b) Besides the original consonants presented in the chart, Tapanta borrowed some Circassian consonants: labiodental *f'*, the velars *x* (often pronounced as *[ç]*, i.e. as ich-Laut) and *x°*, the laterals *λ* (which is pronounced as *[λ]* or, more commonly, like *[ç]*) and *L* (realized as palatalised *[lʲ]*). In Russian loans velar *x* is pronounced without palatalisation, while the Circassian *x* is rendered as *[xˈ]*, because Circassian *x* is more front than Russian *x*. In older loans Russian *g* is pronounced as a voiced velar spirant (e.g. *ĝaz* 'gas'), which probably reflects the southern Russian spirant pronunciation of */g/*. Unlike Lomtatidze 1976, I don't include these borrowed consonants in the Tapanta phonemic chart.

1.4. CONSONANT DISTRIBUTION AND CLUSTERS

The Abkhaz-Abaza dialects are characterised by statistical dominance of resonants, semivowels and dental stops over other groups of consonants. The statistical analysis of 10 pages of the Abkhaz literary magazine *"Alašara"* showed that the most frequent consonants are *j, r, n, l, w, z, d, m, x̌, t*. A similar analysis of three pages of a Bzyp folklore text showed a somewhat different picture: *n, j, r, d, z, w, t', l, ħ°, m*. The rarest phonemes are *f, f', v, ʒ°, d°*. There are no noticeable limitations as to consonantal distribution. The rare instances of certain constraints is the labialised affricate *ʒ°*, which can be found word-finally in one word, provided its final vowel is reduced, cf. *aʒ°ə́* 'one (man)', *rə́-w-aʒ°ə//rə́-w-aʒ°* 'one of them (hum)', and only in this case can it contact other consonants: *aʒ°ə́//aʒ° də́-q'a-w-p'* 'there is one man', *rə́-w-aʒ°-k'* 'one of them (hum)'.

Strong dynamic stress caused the appearance of numerous consonant clusters, especially in Bzyp. Usually clusters are found in anlaut and inlaut positions. On morphemic junctures clusters are numerous and can contain from two to five elements, but most usual are bi- and three-consonantal groups. Cf. LAbx *á-pxə-n* 'summer', *a-ps+tá* 'ravine', *a-z-pš-rá* 'waiting for X'. Combinations of five consonants are rare, cf. *aj+z-k°k°-wá* 'to collect (of drops)', *bžˊ-ps-x̌°ə-rá-k'* 'seven funeral repasts', *jˊ°-č-pxtə-k'* 'two mangy horses'; in the latter examples

clusters may be split up by shwa: *ej+zə-kʷkʷ-wá*, *bəž'-ps-xʷə-rá-k'*, *j°-čə-pxtə-k'*. Within a morpheme the number of consonants in a cluster does not exceed three. In principle, most of the consonant groups, under certain phonetic conditions, can be broken up by means of shwa. The rule governing this process is *CC* —> *CVC__C*, cf. *a-xš* 'milk' - *xəš-c'ás* 'like milk' (DG 57), *a-mxə-xʷč'ə* 'small corn-field' - indef.sg. *məx-xʷč'ə-k'* (DG 229), *a-mš* 'day' - indef.sg. *məš-k'ə* 'one day' (DA V: 79), *a-pħ°-bγ'ə* 'straw' - *pəħ°-bəγ'-c'as* 'like straw', etc. This rule is, however, optional, cf. such parallel forms as *x(ə)š-c'ás*, *mx-xʷč'ə-k'*, *mšə-k'* (IM).

1.5. VOCALIC SYSTEM

Abkhaz possesses only two phonemic vowels, */a/* and */ə/*, which differ from each other by the feature 'open' (*a*) vs. 'closed' (*ə*). This elementary vocalic system caused a heated discussion, which crossed the boundaries of Caucasology. Some authors (Genko, Kuipers, Allen) suggested that the Abkhazo-Adyghean languages represent a unique monovocalic type or, according to another version of this theory, that these languages are completely lacking the universal dichotomy between vowels and consonants (see the discussion of this issue in Genko 1955, Allen 1965, Kuipers 1960; 1976, Halle 1970, Kumaxov 1973)! It is true that in Abkhaz for some positions (first of all, for the unaccented syllable) it is possible to state the irrelevance of vocalic contrasts (cf., for example, in Bzyp Abkhaz such possible phonetic variants for 'turkey', as *aśʲəśʲəj//aśʲaśʲəj//aśʲśʲəj*, where in the unstressed syllable the opposition between */a/*, */ə/* and ø (zero) is neutralised). But in the position of maximal phonemic contrast (for Abkhaz and Ubykh it is the stressed syllable) the presence of bi- and (in Circassian) even three-vocalic systems is beyond doubt.

Cf. the following examples of phonemic contrast between the two vowels and zero (ø) in Literary Abkhaz:

/á/ ~ /ə́/ : *a-ć'ʷá* 'apple' vs. *a-ć'ʷə́* 'little stick';
/ø/ ~ /a/ ~ /ə́/ : *as* 'thus' vs. *ása* 'sword' vs. *asə́* 'snow';
/ø/ ~ /a/ ~ /á/ ~ /ə́/ : *aǎ* 'wine sediment' vs. *áǎa* 'stick supporting plants' vs. *aǎá* 'but' vs. *a-ǎə́* 'head'.

Distributional constraints

Contrary to the distribution of */a/*, which can be found in all positions in the word (initial, medial, final, before and after all consonants), there are some constraints as to the distribution and phonotactics of */ə/*. First, it is never found at the beginning of the word except in some (phonetically reduced) verbal forms

like, for example, *á-raxʷ ə-ma*, in fact *{jə-jə-ma}* "the cattle (*a-raxʷ*) it(ø)-he(*ə-* < *jə-*)-having(*ma*)". In South Abkhaz */ə/* is rare after */ħ/*, but it is less rare in Ashkharywa and Tapanta, cf. Bz, Abzh *aħá-k'* vs. Ash, Tap *aħə́-k'* 'one prince'. Besides the segmental phoneme */ə/*, Abkhaz also employs shwa to split and/or syllabize inconvenient combinations of consonants (see above).

Other vocalic sounds found in Abkhaz and Abaza do not have phonemic status, as they are of positional character. The vowel *[o]* is a result of the contraction of the diphthongs */aw/*, */wa/*, or the triphthong */awa/*. Sometimes its appearance is conditioned by contact of */a/* with labialised consonants, cf. LAbx */mamáw/* = *[mamó(w)]* 'no', */jəsk'wájt'/* = *[jisk'ójt'//jisk'wójt']* 'I catch it', */scawájt'/* = *[scojt'//scwojt']* 'I go', */ʒʷəxʷ/* = *[ʒʷoxʷ]* 'fifteen'. The vowel */a/* may be realized as *[e]* in contact with */j/* and */jʷ/*, cf. */aj/* = *[ej]*, */ja/* = *[je]*, */jʷa/* = *[jʷe]*, */ajʷ/* = *[ejʷ]*. Examples: */scajt'/* = *[scejt']* 'I went', */jacə́/* = *[jecə́]* 'yesterday', */ajʷáž'/* = *[ajʷéž']* 'yellow', */abzə́jabajʷ(ə)/* = *[abzíabejʷ]* 'amateur'. *[e]* appears also in combinations of palatalised consonant plus */a/*, cf. */ak'aráxʷ/* = *[ak'eráxʷ]* 'revolver'. The sound *[i]* appears in combinations */jə/*, */əj/*, cf. */abrə́j/* = *[abrí]* 'this', */jəgá/* = *[jigá]* 'take this!'. The vowel *[u]*, finally, is a result of contractions of diphthongs */wə/*, */əw/*, cf. */wəbrə́j/* = *[ʷubrí]* 'this', */wəpq'atʷə́wəp'/* = *[ʷupq'atʷúp']* 'you should be beaten'. All diphthongs in Abkhaz and Abaza are biphonemic sequences.

The phonemic status of aa

The phonemic status of the Abkhaz vocalic sound usually rendered by digraph *aa* is rather controversial, as specialists still hesitate whether it must be classified as a long unit phoneme */ā/* or as a vowel cluster */a+a/*. In phonetic descriptions authors often restrict themselves to comment that Abx *aa* is a reflex of an old pharyngal which, of course, cannot be regarded as a synchronic presentation. Here I would like to touch upon this problem in greater detail.

Historically Abkhaz *aa* has different sources. In most cases it comes from old combinations of epiglottalised **ħ* with *a* or *ə*, which are preserved in Tapanta and, partially, in Ashkharywa, cf. Tap *aħbá*, Bz *aabá* 'eight', Tap *ħájra*, Bz *aájra* 'to come', Tap *áħan*, Bz *áan* 'at that time', Tap *aħə́la*, Bz *aárla* 'hardly'. Judging from whether stress falls on the first, or on the second part of *aa*, it is possible to restore the respective position of the pharyngal and the vowel (i.e. **ħV́* or **V́ħ*): stress indicates the original place of the vowel. This is not possible, however, when Abx *aa* is unstressed. Besides, without consulting Tapanta we cannot say with certainty, whether the original vowel was **a* or **ə*.

Another large group of words containing *aa* are loans from Turkish. Here *aa* most

probably reflects the Ottoman Turkish pronunciation of *â* as a long vowel, cf. Abx *a-k'aamét* 'doomsday', 'sth terrible' < OTu *kıâmet*, Abx *a-maalək'* 'angel' < OTu *melâik*, Abx *a-paaj(ə)mbár* 'prophet' < OTu *peyâmber*, etc.

Long *aa* is often met in baby talk, where it serves to stylistically mark the phonetic shape of the words belonging to this jargon, e.g. *taatí* 'good(ly), pretty', *baabí* 'hot', *naaní* '(to) sleep!', *maamí* 'bad, dirty, disgusting', *bəkaa* '(to) fall!' (cf. Chirikba 1992). It is interesting that *aa* can be found in the baby talk of Tapanta as well, cf. Abx *maamí*, Tap *mħami//maami*.

There are also some other (irregular) sources for *aa*.

(1) Sometimes it may appear from the combination of voiceless *ħ* with a vowel, cf. Tap *a-k'ənħara*, SAbx *a-k'ələara//a-k'əlħara* 'slot, opening', SAbx *a-c'áa(-c'la)*, cf. Tap *c'əħ* 'birch(-tree)', Abzh *a-taaĉ°a*, cf. Bz *a-taħĉ°a* 'family'.

(2) It appears in two loan words in place of the original sequence *-ana-*, cf. *a-maát* 'rouble' < Geo *manati*, Bz *a-ləmaát* 'lemonade' < Rus лемонад *[limanát]*.

(3) *aa* may be a free allophone of the sequence *Vq'a*, especially in allegro speech, cf. */jəq'alazəj/* = *[jɛ́ʔalazij//jáalazij]* 'what's happened?', */jəq'ajc'ájt'/* = *[jæʔajc'éjt'// jaajc'éjt']* 'he made sth', */aj°nəq'a/* = *[aj°náʔa//aj°náa]* 'homewards', */anáq'a/* = *[anáʔa//anáa]* 'thither', etc.

(4) Lomtatidze 1977: 27, with reference to V. Kondzharia, cites Bzyp forms (which I failed to observe), where *aa* appears in place of the sequence *aza* in the conditional suffix *-zar*, cf. */jaájwazar/* = *[jaajwaar]* 'if they come', */jəẑ°bawázar/* = *[jəẑ°bwaar]* 'if you see'.

(5) Sometimes *aa* comes from the combination of *γ* with a vowel, cf. Bz *ablaám*, Abzh *a-blaám-ʒ* 'vomit with bile' < Geo *balγam-i* 'pus' + Abx *ʒə* 'water', Bz *ag°aánǯ'* 'spite' < Abx *a-g°ə* 'heart' + Meg *γanǯ-i* 'rust'.

(6) The appearance of *aa* sometimes is the result of contraction of the triphthong *aja*, cf. *ajáj//* > *aáj* 'yes' (Lomtatidze 1977: 28).

(7) In some cases the reasons for the presence of *aa* are obscure, cf. Abx *a-q°əraán* 'crow' < Geo *q'oran-i*, Abx *a-maaxə́r* 'blackberry', Ash *maqər* 'currants', Abx *(a)dáara*, Sa *adára*, Tap *dára* 'very', Abx *pš'ála*, beside *pš'aála* 'little by little' (in the last two cases it can be probably explained as a means of emphasis), etc.

If we apply Trubetzkoy's (1960) rules for determining the mono- or biphonemic status of this sound, we arrive at the following results.

(a) *aa* cannot be distributed over different syllables, cf. *a-maa-xə́r* 'blackberry', *aj-maá* 'shoes', *áa-pən* 'spring', etc.

(b) *aa* has a single articulation. In accordance with the position of stress, it can be pronounced in three different ways: like a long *[ā]* in unstressed syllables (e.g.

aará 'to come'), like *[áă]*, with stress falling on the first element (e.g. *áa* 'yew-tree'), and like *[ăá]*, with the second element stressed (e.g. *jaág* 'bring it here!'). Thus, phonetically speaking, this vowel can be best described as a diphthong with a unitary realisation. In Ashkharywa the situation is somewhat different: here *aa* is pronounced not as a diphthong, but like a true long vowel both in stressed and in unstressed positions, cf. Ash *āmbstá* 'nobleman' (cp. Abzh *[ām(ə)stá]*), *jəšāʒa* 'before the daylight' (cp. SAbx *[jəšáăʒa]*), *wā́j* 'you(man) come here!' (cp. SAbx *[wăáj]*). Note that the older speakers of Ashkharywa often preserve the pharyngeal pronunciation: *wħaj* 'come here!'.

(c) The length of *aa* does exceed that of other phonemes, but this rule was regarded by Trubetzkoy as less important.

(d) Abkhaz lacks any vocalic clusters; the combination of two vowels on morphemic junctures always yields one vowel: */a + a/* and */ə + a/* always result in single */a/*. Combinations */aa + a/*, */a + aa/* and */aa + aa/* yield only */aa/*. The same holds for Tapanta, which doesn't have any morphemes containing sequences *VV*, and in which morphemic junctions combinations *V + V* are always realized as *V*. Accordingly, we can conclude that South Abkhaz *aa* is not a combination */a + a/*.

(e) The fact that *aa* is not a combination */a+a/* is also proved by the way of its realization: no part of it undergoes the narrowing effect caused by adjoining *j*, which otherwise is quite a usual phenomenon when */a/* contacts */j/*, e.g. *rčáajbərtan* 'they took their weapons', *jaajlač°áž°an* 'they talked to each other', *jərzáajg°apxar* 'if they like it', *awaá-ejk°ac°a* 'black people', *jaájt'* 'they came', *dšaajgáz* 'how he brought him'. This can be compared with sequences */a+j/*: */ajg°ə́š°/* = *[ejg°úš°]* 'small axe', */scajt'/* = *[scejt']* 'I went', */alájš°a/* = *[aléjš°a]* 'character, moral code', etc. A similar situation is found in the sequence *ħaj*, in which *a*, due to the lowering effect of *ħ*, is not fronted by *j*, cp. *[s-ejg°úš°]* 'my axe' vs. *[ħ-ajg°úš°]* 'our axe'.

The Common Abkhaz correlation **ĥ* - **ħ°* was destroyed in South Abkhaz: **ħ°* lost its paradigmatic connection with the voiceless counterpart *ħ°* to form a new alliance with *j*, which in effect became its non-labialised correlate. But the fate of **ĥ* > *aa* was different: it still seems to preserve its original correlational alliance with the voiceless *ħ*. This is evident from the following example. In Abkhaz there is a morphophonemic rule which states that the voiceless consonant of a personal prefix is voiced before the initial voiced consonant of a transitive verb, e.g. *s-cawajt'* (itr./dyn.) 'I go' vs. *jə-z-gawajt'* (tr./dyn.) "it-I-take", *z-* being the voiced allophone of *s-*, cp. *s-gə́lawajt'* (itr./dyn.) 'I stand up'. The 1st person plural prefix is *ħ-* (*ħ-cawajt'* 'we go'), which before the voiced initial

consonant of transitive verb changes into *aa* (*j-aa-dɜ́rwajt'* 'we know it'), and remains voiceless in the same position before the intransitive verb (*ħ-gɜ́lawajt'* 'we stand up'). This proves that *aa* serves as a voiced allophone of *ħ* and, subsequently, phonologically it should be regarded as a voiced correlate of *ħ*.

I propose the following solution to the problem of the phonemic attribution of *aa* in South Abkhaz. On a deep phonemic level *aa* is to be regarded as a combination of voiced pharyngal *ʕ* with a vowel, thus *ʕ* being an underlying phoneme (cf. Chirikba 1994: 334-335). A similar suggestion was made by Genko 1928: 54; from more recent works cf. also Colarusso 1981: 516-518 and Hewitt 1987: 19. At the same time on the surface phonemic level it is more convenient to classify *aa* as a vocalic diphthong (*/aa/* = */aᵃ/*, */ᵃa/*). Of course, we have a transitional situation, in which the consonant has already been transformed phonetically (in this case it lost its epiglottalic focus, which happened with its labialised correlate as well), but still preserves its former paradigmatic correlation.

Vocalic clusters

As mentioned above, in Abkhaz vocalic clusters are not allowed and combinations of two vowels always yield only one vowel. Cf. the following examples:

(a) */a + a/ —> [a]* : SAbx *a-gˑɜ́rýa* 'joy' + *á-čˇčˇara* 'laugh' > *agˑərýačˇčˇara* 'having a jolly time'; Tap *ába* 'father' + *ašˇšˇá* 'sister' > *abašˇšˇa* 'aunt';

(b) */ə + a/ —> [a]* : SAbx *a-čɜ́* 'horse' + *á-kˑtʷara* 'to sit on top' > *a-čákˑtʷara* 'to mount a horse'; Tap *qˑapšˇɜ́* 'red' + *akˑəršˇəˑ* 'dark' > *qˑapšˇakˑəršˇəˑ* 'deep-red';

(c) */aa + a/ —> [aa]* : SAbx *acˑaa* 'birch' + *ácˑla* 'tree' > *acˑaácˑla* 'birch-tree';

(d) */a + aa/ —> [aa]* : SAbx *atáca* 'bride' + *aagará* 'to bring hither' > *atácaagara* 'bringing the bride';

(e) */ə + aa/ —> [aa]* : SAbx *agˑɜ́* 'heart' + *aanagara* 'to mean' > *agˑáanagara* 'opinion';

(f) */aa + aa/ —> [aa]* : SAbx *awaá* 'people' + *aagará* 'to bring hither' > *awaágara*.

The juxtaposition of two vowels can be preserved only in cases where they belong to two words that are regarded as separate units, and not as parts of a compound, cf. LAbx *azə acarta* 'river-current' (*-ə + a- > -ə#a-*), *abžˇɜ́qˑa áw* 'long vowel' (*-a + a- > -a#a-*), Tap *lapšə akˑəršˇˑara* 'to bewitch (with evil eye)' (*-ə + a- > -ə#a-*), *aγˑra alarta* 'a part of bridle without rein' (*-a + a- > -a#a-*), SAbx *(l-cˑa) daatʒɜ́ʒaa-aatʒɜ́ʒaajt'* 'she started trembling' (*-aa + aa- > -aa#aa-*). Even when

orthography allows a combination of two vowels, phonetically this should mean only *V#V*, cf. Tap (orthographic) *mcaac'qəjarta* 'windless place where it is possible to light a camp fire' (AbR 281) = *mca#ac'qəjarta*.

1.6. PROSODY

Abkhaz is characterized by strong dynamic stress. In two- and three-syllabic words stress can fall on any syllable: *a-ʒɘ́* 'water, river', *árma* 'left', *á-fa-ra* 'to eat', *a-gá-ra* 'cradle', *a-ba-rá* 'to see'. Words consisting of more than three syllables can have also secondary stress: LAbx *a-wə-x̌a-n-tʷ́á-ra-k'* 'the whole night', *àacx̌apɘ́c* 'the wisdom-tooth'. Sometimes in long words two syllables may be equally stressed: *áj-ta-na-j-aá-jə-r-ta* 'the place of meeting', Abzh (Ku) *áank'ɘ́lara* 'to keep, delay', *áask'ágara* 'to lead smb hither', Bz (Dzh, Bl) *áacx̌apɘ́c* 'the wisdom-tooth'.

There is much local and dialectal variation as to the place of the stress. The differences in stress position between different South Abkhaz isolects are mainly due to the influence of the generic article *a-*, which often attracts the stress from the stem onto itself. The accentual picture is especially variable when this article occurs with the directional prefix *aa-* 'hither'. From the point of view of the position of the stress, the most divergent dialect is Tapanta, lacking the generic article *a-* which causes the shift of stress in other Abkhaz dialects. Ashkharywa often shows parallel forms, close either to South Abkhaz, or to Tapanta. Cf. SAbx *áapsara*, Tap *ĥapsará* 'to be tired', SAbx *áapən*, Sa *áapna*, Ash *āpnɘ́*, Tap *ĥapnɘ́* 'spring', SAbx *áašəš'*, Tap *ĥašɘ́š'* 'badger', SAbx *áamta*, Tap *ĥamtá* 'time', Bz *ábx̌ʷ́nda*, Abzh *ábx̌ʷ́nda*, Ash *ábqʷ́nda*, Tap *abqʷ́nd* 'brother-in-law', Bz *ábʒ'ar*, Ash *abʒ'ár*, Tap *abʒ'ár* 'weapon(ry)', SAbx *á-px̌'a-ra*, Ash *á-px̌'a-ra//a-px̌'a-rá*, Tap *a-px̌'a-rá* 'to read', 'to study', Bz *áẑʷ́a*, Abzh *áẑʷ́a*, Ash *aẑʷ́á*, Tap *aẑʷ́á* 'word', etc. As Tapanta does not have the generic article *a-*, it often preserves the original stress-place in the so-called "dictionary forms". But the original stress can be restored in different Abkhaz word-forms as well, compare the Tapanta words given above with such South Abkhaz forms as *s-aapsá-jt'* 'I am tired', *aapnɘ́-k'* 'one spring', *aamtá-k'* 'one time', *aamtá-la* 'in time', etc.

The difference in stress does not only occur between the dialects of South Abkhaz (cf. Bz *áač'ʔ(a)*, Abzh *aač'ʔá* 'small leather strap', Bz *a-wáp'a*, Abzh *a-wp'á* 'felt cloak', Bz *a-ć'ára*, Abzh *a-c'ará* 'education', Bz *a-bgɘ́ʒ*, Abzh *á-bgəʒ* 'kind of jackal') but also between isolects of one and the same dialect. Cf. in Abzhywa: Ku *aájgʷ́a*, Dzhg *áajgʷ́a* 'the near', Ku *áank'ɘ́lara*, Dzhg *áank'ɘ́lara* 'to stop sth or smb', Ku *áaptra*, Dzhg *aaptará* 'the winter residence of the herdsmen', Ku *aás*, Dzhg *áas* 'underwood'). Cf. in Bzyp: *a-q'azš'á//á-q'azš'a* (Ahch *a-q'azɘ́š'a*)

'character, behaviour', *ábnacʷ//abnácʷ* 'deer', *ášʷapəžʼap//ašʷapəžʼap* 'trees, plants'.

In some cases certain isolects show more similarity in stress position to another dialect than to isolects of the same dialect, cf. Bz *aaptrə́*, Dzhg Abzh *aaptará* vs. Ku Abzh *áaptra* 'winter stand of herdsmen', Bz *áaś* (BD 35), Dzhg Abzh *áas* vs. Bz *aás* (Uslar 1887: 95), Xu Bz *aáś*, Ku Abzh *aás* 'the underwood', SAbx *áa*, Ash *áa*, Gum Tap *añ* vs. Psyzh Tap *añá* 'leather strap', Bz *áajgʲa* (Marr 2), Dzhg Abzh *áajgʲa* vs. Ku Abzh *aájgʲa* vs. Bzp *aajgʲá*, Gum Tap *ajgʲá* 'the near'. Sometimes one and the same word shows a different accentuation depending on its syntagmatics, cf. Dzhg Abzh *aándak'ra*, Bz *aándk'ra* 'to (make) fence', Dzhg Abzh *aandak'rá ħcawájt'*, Zw Bz *aandk'rá ħcawájt'* 'we go to make a fence'.

Stress in Abkhaz plays an important role in differentiating many otherwise homophonic words, cf. *áčʼa* 'quail' - *a-čʼá* 'wheat; bread', *á-la* 'eye' - *a-lá* 'dog', *áħʷa* 'sword' - *a-ħʷá* 'pig', *á-cʷa* 'sleep' - *a-cʷá* 'skin', *á-ca* 'granary' - *a-cá* 'hot', *áčʼa* 'cup' - *a-čʼá* 'new', *áγa* 'bellows' - *aγá* 'enemy', *á-ħʷara* 'to ask, prey' - *a-ħʷará* 'to say', *á-pa-ra* 'to jump' - *a-pára* 'money' - *a-pa-rá* 'to weave', etc.

Stress often serves to differentiate words derived from the same root, but either belonging to different parts of speech (cf. *á-ž-ra* 'ditch' - *a-ž-rá* 'to dig', *a-čʼá-ra* 'feast' - *a-čʼa-rá* 'to feast', *a-nχá-ra* 'farm' - *a-nχa-rá* 'to work'), or representing different word-forms, cf. *jə́-z-dər-wa* 'what I know' - *jə-z-də́r-wa* 'the one who knows', *jə́-z-ba-wa* 'what I see' - *jə-z-ba-wá* 'the one who sees'.

Abkhaz stress was studied by Shinkuba (1954), Bgazhba (BD 134-142), Lomtatidze (1974; 1976: 307-309), Arshba (1979) and some other authors. An important contribution to this field was made by Dybo (1973; 1977; 1989; cf. also Dybo et al. 1978) and Spruit (1985; 1986: 37-79), who developed Dybo's ideas in greater detail. Cf. also Trigo 1992. The results of Dybo's and Spruit's works may be summarized as follows. Every syllable in Abkhaz can be assigned a certain valency: high or low or, in other terms, dominant (D) vs. recessive (R). The general rules are: stress always falls on the last syllable in a sequence of two or more dominant (= high valency) syllables (D+D => DD́). In combinations of a dominant and a recessive syllable stress falls on the dominant one (D+R, R+D => DŔ, RD́). In combinations of two or more dominant syllables, divided by recessive syllable(s), stress falls on the first dominant syllable (cf. Dybo 1977: 43; 1989: 12; Spruit 1986: 38). These rules, however, do not predict the place of stress in the succession of only recessive syllables (Spruit, ibid.).

The segment which is a bearer of an accentual valency is either a syllable (*CV*, *V*), or a single consonant (*C*). Dybo talks about "morphemes" which is, however, not appropriate for such polysyllabic morphemes as *labá* 'stick', *wasá*

'sheep', etc., each syllable of which is a bearer of a certain valency. Spruit calls such segments "elements". I prefer to define them as "syllables", which is true not only for segments *CV* and *V*, but for morphemes of the structure *C* as well, as the latter, under certain phonetic conditions, can also be realized as *CV* (in principle, any monoconsonantal morpheme in Abkhaz can be regarded as underlyingly *CV*).

1.6.1. *Tapanta tonal system*

Tones in Tapanta were discovered by Starostin in 1977. According to the brief account of the results of his examination, Tapanta, which possesses a system of paradigmatic accent which is on the whole identical to that of South Abkhaz, has in the stressed syllable a distinction between two tones: high and low (cf. Dybo et al. 1978; Dybo 1989: 43-44). My Tapanta informant (Natasha Lixova, hereafter referred to as NL, from the Tapanta village of Gumlokt), with whom I had the opportunity to work during a two-day session in 1983, distinguished three tones. With her help I managed to intone about 100 Tapanta words and word-forms. Unfortunately, I didn't have the opportunity to re-check the recorded material with the same informant. Attempts to find other informants distinguishing tones in the Tapanta and Ashkharywa villages in Karachaj-Cherkessia were not successful. That is why the description of the Tapanta tonal system presented below must be regarded as preliminary only. Unfortunately, Starostin's recording has not been published.

NL has a system of 3 syllabic tones: high (H), low (L) and mid (M). Every syllable in a word, regardless of the position of stress, bears a tone. To illustrate tonal contrasts I will start with minimal pairs. The tone symbols are separated from the word by a slash; tone variants are marked by double slash. Examples of minimal pairs: *la*/H 'dog', def. *a-lá*/MH vs. *la*/M 'eye', def. *á-la*/HM; *ba-rá*/MH 'to see' vs. *ba-rá*/ML 'you (woman)', *ʒə*/H 'boiled', def. *a-ʒə́*/MH vs. *ʒə*/L 'cow', def. *á-ʒ́*/H; *śa-rá*/HL//ML 'you (pl.)' vs. *śa-rá*/LH 'to pay'; *sa-rá*/ML 'I' vs. *sa-rá*/MH 'to cut (material)'; *ś-ra*/M//L 'abscess' vs. *ś-ra*/H 'to gather a head (of boil); to ripen'; *ś-ra*/M//L 'abscess' vs. *ś-ra*/H 'to get cold, to become numb (with cold)'; *baǎ*/H 'steam', def. *a-báǎ*/MH vs. *baǎ*/M 'dry', def. *a-báǎ*/MH, *ʒ́úʒ́u*/MH 'small turkey' (SBL) vs. *ʒ́ú-ʒ́ú*/HH 'call for (small) turkeys'.

Phonetic characteristics of the tones

NL's personal impressions of the three tones she distinguished are as follows: a) high tone segments are relatively short; b) low tone makes the impression of being leisured; c) middle tone is intermediate between the first two, possibly being high-low (rise-fall?). NL remarks that sometimes there is fluctuation

between L and M, and that polysyllabic words are more difficult to intone, which is connected, probably, with tonal combinatorics.

Analysis of tones and their combinatorics

To analyse the Tapanta tonal system it is essential to distinguish between stem and affixal morphemes, as the combination of these eventually determines the tonal picture of the word-forms.

(1) Monosyllabic (nonderived) words with the structure C(C)V can bear any of the three tones: *la*/H 'dog', *ʒa*/M 'rib', *źə*/L 'cow'.

(2) Tonal combinations in disyllabic words, which are mostly derivatives, are as follows: HL, HM, MH, ML, LH, LM.

As far as the combination of tone and stress is concerned, in disyllabics the picture is as follows (the stressed syllable is shown by the acute sign placed after the tone symbol):

HM : H᷄M, HM᷄ MH : M᷄H, MH᷄ LH : LH᷄
HL : H᷄L, HL᷄ ML : M᷄L, ML᷄ LM : LM᷄

Prohibited combinations are: L᷄H, L᷄M.

These data show that in disyllabic words combinations of identical tones (at least on the surface level) are prohibited: HH, MM, or LL are not possible. In combinations of L with H or M, the stress always falls on the highest tone (H or M). I have one example of HH, commented below.

(3) The three-syllabic words in my recordings (including various verb-forms) had combinations of the following tones: HML, HLM, HLH, HMM, MHM, MHL, MMH, MLH, LMH.

The only possible (surface) combination of the same tones here is MM. The combinations HHH, LLL, MMM are prohibited, and HMH, HLL, HLH, MML in my materials are absent. There cannot be more than a single low tone in a word, which is also characteristic of the four-syllabics (see below).

Combinations of tone and stress in three-syllabics in my materials are as follows:

HMM : H᷄MM	MHM : MH᷄M	LMH : L᷄MH, LMH᷄
HML : H᷄ML, HML᷄	MHL : MH᷄L	LHM : LH᷄M
HLM : H᷄LM	MMH : MMH᷄	
	MLH : MLH᷄	

(4) Four-syllabic words can have the following tone patterns: HLMH, MLHM, LMHM, MHML. The stress possibilities for these words are as follows:

H᷄MML MLH᷄M LMH᷄M
H᷄LMH MH᷄ML ?L᷄MH*

(*By mischance I did not record the tone of the first syllable.)

Data presented above in many cases reflect only the surface representation of certain tones conditioned by tonal combinatory rules.

The examination of the Tapanta tonal system shows a remarkable parallelism with the results of the accentological works by Dybo and Spruit. In many cases the dominant morphemes/elements described by these authors have a high tone in Tapanta, while the recessive elements have a low tone. But the actual picture of correlation between tone and stress in Abkhaz and Tapanta is not always as straightforward. First, it is evident that a third, middle tone should be taken into consideration. Second, in some cases there is the reverse dependence of the tonal level on the stressed or unstressed character of the given syllable. Therefore it is not always possible to establish a one-to-one correspondence between the position of stress and the particular tone of a certain syllable. More detailed investigation of the Tapanta tonal system may throw more light on this problem.

Some of my Abkhaz informants claimed tonal, or intonational differences on the word level, distinguishing either rising or falling intonation on the stressed syllable. Though this has to be checked additionally, it is possible that in some Abkhaz isolects a degenerated tonal system might have given rise to a pitch accent.

2. PHONOLOGICAL DESCRIPTION OF UBYKH

Before their total deportation from Ubykhia by the Tsarist administration in 1864, the Ubykhs used to occupy the territory between the river Shakhe on the west, where they bordered on Circassians (Hakutsw Shapsyghians) and the river Khosta (//Khamysh) on the east, where their neighbours were Sadz Abkhazians. In Turkey ethnic Ubykhs can be found in such locations as the villages of Yanık (prov. Sakarya, sub-prov. Sapanca), Karlı (prov. Samsun, sub-prov. Alaçam), Bukçuvaz, Karapınar, Karlı, Yeni Toptepe (prov. Samsun, sub-prov. Kavak), Avdanköy, Kumazköy (prov. Sinop, sub-prov. Karalı), Hacı Osman Köyü, Hacı Yakup Köyü (prov. Balıkesir), etc. Since the death in 1992 of Tevfik Esenç, the last speaker of Ubykh, the language is extinct.

The phonemic inventory of Ubykh, containing as many as 80 consonantal segments, has much in common with that of Bzyp Abkhaz and Bzhadygh Adyghe. A unique feature of Ubykh is the presence of pharyngealised consonants.

The Ubykh consonant inventory (cf. HV, p. 13)

	Stops			Affricates			Spirants		Resonants		Glides
Labials	*b*	*p*	*p'*				*f*		*m*		*w*
pharyng.	*b̲*	*p̲*	*p̲'*				*v̲*		*m̲*		*w̲*
Dentals	*d*	*t*	*t'*	*ʒ*	*c*	*c'*	*z*	*s*	*n*	*r*	
labialised	*dˢ*	*tˢ*	*tˢ'*								
Dent.-alveol.				*ʒ́*	*ć*	*ć'*	*ź*	*ś*			
labialised				*ʒ́ˢ*	*ćˢ*	*ćˢ'*	*źˢ*	*śˢ*			
Alveolars				*ǯ*	*č*	*č'*	*ž*	*š*			
labialised							*žˢ*	*šˢ*			
palatalised				*ǯ́*	*č́*	*č́'*	*ž́*	*š́*			
Laterals					*ƛ'*		*L*	*ƛ*			
Palatals											*j*
Velars							*ĝ*	*x*			
labialised	*gˢ*	*kˢ*	*kˢ'*								
palatalised	*ǵ*	*ḱ*	*ḱ'*								
Uvulars		*q*	*q'*				*γ*	*χ*			
labialised		*qˢ*	*qˢ'*				*γˢ*	*χˢ*			
palatalised		*q́*	*q́'*				*γ́*	*χ́*			
Pharyng. uvulars		*q̲*	*q̲'*				*γ̲*	*χ̲*			
labialised		*q̲ˢ*	*q̲ˢ'*				*γ̲ˢ*	*χ̲ˢ*			
Laryngals							(*h*)				

Comments to the chart:

(a) Labialisation in Ubykh is of close bilabial type.

(b) The phonemic attribution of the Ubykh sounds, transcribed in HV by the signs *žˢ zˢ* and *šˢ sˢ* (and represented by the minimal pairs *žˢa* 'deer' ~ *zˢa* 'sky', *šˢa*

'sea' ~ *s°a* 'white', respectively), has not yet reached an unequivocal solution. This question has been discussed by a number of authors (Leroy, Paris 1974; Lucassen 1984; Hewitt 1986; Chirikba 1986a). Some of them regard the pairs *š°*, *ž°* and *s°*, *z°* as back labialised (in Vogt's terms - dental labialised) vs. middle (Vogt's hissing labialised) spirants (Leroy, Paris 1974: 286; Dumézil 1975: 12; HV, p. 13). Actually, the West Caucasian sibilant systems show the presence (in Abkhaz and Adyghe) of only two kinds of labialised sibilant fricatives: middle (in Bzyp, Ashkharywa, Tapanta and Adyghe) and back (in Abkhaz and Tapanta) types. The corresponding labialised affricates also belong to these two types: either middle *ǯ° ć° ć'°* (in South and Western Abkhaz, some Tapanta isolects and Adyghe) or back *ǯ° č° č'°* (in a part of Tapanta isolects). Typologically, therefore, it is difficult to suppose the presence of a third, intermediary, articulation in Ubykh. Acoustically Ubykh sounds do not make an impression of being something different from the Abkhaz and Adyghe pairs *ž° š°* and *ǯ° ǯ°*.

According to Dumézil, the bilingual (Ubykh-Adyghe) Tevfik Esenç equalled Ubykh *z° s°* (in Vogt's notation) with Adyghe *ž° š°*, and distinguished the latter from the Ubykh *ǯ° ǯ°* (Dumézil 1960: 13). The same conclusion can be reached from an examination of Adyghe and Abkhaz loans in Ubykh. The Adyghe middle labialised spirants in words borrowed by Ubykh, are rendered by *z° s°*, cf. Ad *x°ərəś°* 'sheepskin' > Ub *x°ərəs°a* 'a kind of leather cap', Ad *ś°āš* 'attire' > Ub *s°āša*, Ad *wənāś°a* 'speech' > Ub *wənās°a*, Ad *ʔ°əž°ə* 'thick, dense' > Ub *wəz°* (ZL 62). On the other hand, the Abkhaz back spirants are rendered by Ubykh *ǯ° ǯ°*, cf. Abx *a-warbaǯ°* 'kite' > Ub *warbaǯ°ə* 'a kind of eagle, griffon', Abx *a-lajǯ°a* 'character, manners, moral' > Ub *lajǯ°a*, Abx *a-ǯ°q'°ə*, Ahch *a-ǯ°aq'a* 'book; document' > Ub *ǯ°aq'a* (Chirikba 1986a).

Typological, phonetic and phonological considerations prove that in Ubykh, just as in Bzyp Abkhaz, it is necessary to distinguish between middle labialised spirants *ž° ś°* (*ž°a* 'sky', *ś°a* 'white', corresponding to *z° s°* in Vogt's notation), correlates of the plain *ź ś*, and back labialised spirants *ǯ° ǯ°* (*ǯ°a* 'deer', *ǯ°a* 'sea'), correlates of the plain *ǯ ǯ* (cf. Chirikba 1986a: 5; Hewitt 1986: 28).

(c) In the perfective suffix *-q'a* the uvular *-q'* can be realized as a glottal stop (HV, p. 21).

(d) Aspiration and glottalisation in Ubykh, as in Abkhaz, are not strong.

(e) Sometimes a variation between *b̲* and *d°* is observed: *ś°ab̲a* ~ *ś°ad°a* 'thigh', *k'ab̲ə* ~ *k'ad°ə* 'wolf', *b̲əb̲-* ~ *d°əd°-* 'to thunder'; cf. also variation between *p* and *t°* : *c'apá* ~ *c'at°á* 'manure'.

(f) Sometimes a fluctuation "pharyngealised vs. non-pharyngealised" can be observed (cf. HV, p. 19-20). It is clear that pharyngealisation in Ubykh is in

complementary distribution with palatalisation.
(g) Laryngal *h* is found only in a very limited number of words.

2.1. CONSONANT DISTRIBUTION AND CLUSTERS

The most frequent consonants in Ubykh, according to Vogt (HV, p. 34-35), are: *n, q', j, w, γ, d, g', m, z, L, s, b, š', γ°, t, k', λ, t', p, γ'*. The pharyngealised consonants are characterized by the lowest frequency.

As in Circassian, the elements of Ubykh consonant clusters are characterised by one and the same laryngeal feature: voiced segments are always followed by voiced, and voiceless segments by voiceless ones, the only possible exception being combinations of resonants with both voiced and voiceless consonants. In clusters with stops and affricates the consonants are either all glottalised or non-glottalised (HV, p. 29).

The initial components of anlaut consonant groups are often bilabials or dentals. On the level of the word Ubykh permits consonant groups including from two to five members (like Abkhaz, but unlike Circassian); e.g. *bź-* (*bźa* 'tongue'), *nc*ʷ*g'* (*anc*ʷ*g'əγən* 'for the first time'), *jnš°p'ć'* (*zanajnš°p'ć'aq'aLa* 'a noble young man'). However, on the level of the morpheme the number of consonants in a group does not exceed three.

2.2. VOCALIC SYSTEM AND PROSODY

The Ubykh vocalic system comprises two segments: *a, ə*. Ubykh *a*, like *a* of Abkhaz, is characterized by a somewhat front articulation, which is retracted after velars and postvelars. As in its sister languages, Ubykh *ə* is not found in initial position (with one exception when it serves as a personal prefix).

The vowels *[o, ō, u, e, i]*, also found in Ubykh, are either realisations of combinations of *a* or *ə* with the semivowels *w* and *j*, or positional allophones of the basic vowels in contact with labialised or palatalised consonants.

Unlike Abkhaz and Circassian, where the combination */a + a/* always results in a single */a/*, in Ubykh such combination yields a long *[ā]*, cf. *ad(ə)ĝá* 'Circassian', *ā́dəĝa* = */á-adəĝa/* 'the Circassian', *šāg'a* 'stupid', from *ša* 'head' and *ag'a* 'stupid', *γābγ'a* 'his nest', from *γa-* 'his' and *abγ'a* 'nest', etc.

Phonetically stress in Ubykh is not as strong as in Abkhaz, but it has phonological significance, cf. for example, *wánʒa* 'puppy' ~ *wanǯá* 'secret', *á-š°a* 'year' (def.) ~ *aš°á* 'sickle' (def.), *sə́-t°* 'my father' ~ *sə-t°ə́* 'I am father'. Ubykh has root morphemes which have fixed accent position and roots which have mobile stress when combined with other morphemes (mostly affixal).

A remarkable resemblance of the Ubykh accentual system with that of

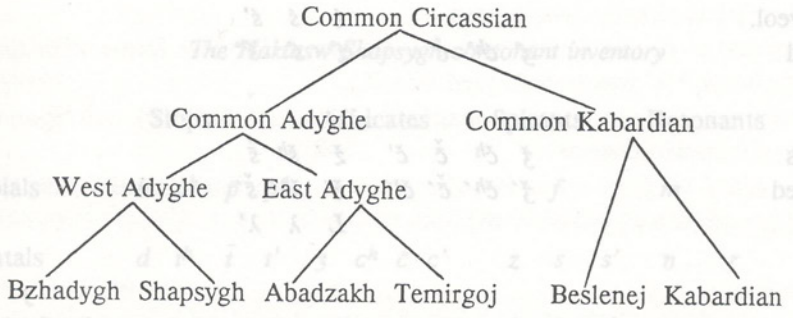
Abkhaz (and Abaza) was already noticed by Vogt (HV, p. 33), and confirmed by Dybo (1989: 40-42). Comparing the Abkhaz and Ubykh accentual systems, Dybo concluded that both exhibit not only typological, but also genetic affinity. He suggested a tonal origin of the West Caucasian accentual system (ibid: 43-44).

When visiting the last Ubykhophone, Tevfic Esenç, in Turkey in 1991, I tried to check whether he distinguished any tonal differences in the prepared list of mono- and disyllabic homophones, extracted from Vogt's dictionary, but Esenç denied the presence of any (tonal, intonational, or whatever) differences between the proposed pairs of homophones.

3. PHONOLOGICAL DESCRIPTION OF THE CIRCASSIAN DIALECTS

The Circassian group consists of two dialectal subgroups: West Circassian, or Adyghe, and East Circassian, or Kabardian. West Circassian has four dialects: Bzhadygh, Shapsygh, Abadzakh and Temirgoj (the latter serving as a basis for Literary Adyghe). Smeets 1988 adds to this list also Ubykh Circassian, i.e. the form of West Circassian as spoken by Ubykhs. Adyghe speakers live in the Republic of Adyghea of the Russian Federation and in the adjoining Krasnodar region. Kabardian is subdivided into Kabardian proper (with a number of subdialects) and the archaic Beslenej dialect. Kabardians are living in the Kabarda-Balkar and Karachaj-Cherkes republics of the Russian Federation. The majority of the Circassians (mostly Adyghe) live, however, in diaspora, in Turkey and some Arab countries, where they fled following the Russian invasion in the middle of the last century.

Internal Subgrouping of Circassian dialects



Despite the fact that at present West and East Circassian are regarded as distinct languages with their own literary forms, the difference between them is not that great, and they can both be safely styled as dialects of one, Circassian language. I shall start the description with the phonetically more conservative Adyghe dialects.

3.1. WEST CIRCASSIAN (ADYGHE)

West Circassian can be subdivided into two groups: western (Bzhadygh and Shapsygh) and eastern (Abadzakh and Temirgoj).

3.1.1. *Bzhadygh*

This dialect is located within the borders of the contemporary Republic of Adyghea of the Russian Federation, and is characterized by the preservation of the historically important contrast between strong and lax obstruents, lost in other Circassian dialects, except Shapsygh. The Bzhadygh consonant system includes 65 segmental consonants.

The Bzhadygh consonant inventory (cf. Kumaxov 1981: 110)

	Stops				Affricates				Spirants		Resonants		Glides
Labials	*b*	*pʰ*	*p̄*	*p'*					*f*		*m*		*w*
labialised				*pʷ*									
Dentals	*d*	*tʰ*	*t̄*	*t'*	*ʒ*	*cʰ*	*c̄*	*c'*	*z*	*s*	*n*	*r*	
labialised				*tʷ*									
Dent.-alveol.									*ź*	*ś*	*ś'*		
labialised					*ʒ°*	*cʰ°*	*c̄°*		*ź°*	*ś°*	*ś'°*		
Alveolars					*ǯ*	*čʰ*	*c̆*	*č'*	*ž*	*šʰ*	*š*		
palatalised					*ǯ'*	*čʰ'*	*c̆'*	*č''*	*ž'*	*šʰ'*	*š'*		
Laterals									*L*	*λ*	*λ'*		
Palatals													*j*
Velars									*ĝ*	*x*			

	Stops	Affricates	Spirants	Resonants	Glides
labialised	g° $k^{h\circ}$ $\bar{k}^{\circ}$ k'°				
Uvulars	q^h $\bar{q}$		γ $\check{x}$		
labialised	$q^{h\circ}$ $\bar{q}^{\circ}$		γ° $\check{x}^{\circ}$		
Pharyngals	ʔ		ħ		
labialised	ʔ°				

Comments to the chart:

(a) The opposition "lax ~ tense" in Bzhadygh and Shapsygh is realized phonetically as "aspirated vs. unaspirated". This aspiration is much stronger than the concomitant aspiration of voiceless consonants in the other West Caucasian languages. This opposition has a strong tendency to disappear.

(b) Labialisation in Bzhadygh, as in the other Circassian dialects, is of a bilabial close type. The pronunciation of t'° is, however, more peculiar, as it is realised as *[t'u^w]*, i.e. as a combination of glottalised *t'* with a diphthongoid u^w.

3.1.2. *Shapsygh*

In the Caucasus the speakers of this dialect nowadays occupy only a tiny portion of their original habitat, which is explained by their mass exodus in the middle of the XIX century. While the number of Caucasian Shapsyghs is nowadays about 20.000, in Turkey and in the Middle East countries they, together with the Abadzakhs, constitute the main bulk of the Circassian diaspora.

Shapsygh is divided into two subdialects: Kuban and Hakutsw, which are very close to each other. The Hakutsw consonant inventory presented below, which includes 62 phonemes, is similar to that of Bzhadygh in its retention of the old opposition "lax ~ tense".

The Hakutsw Shapsygh consonant inventory

	Stops	Affricates	Spirants	Resonants	Glides
Labials	b p^h $\bar{p}$ p'		f	m	w
Dentals	d t^h $\bar{t}$ t'	$ʒ$ c^h $\bar{c}$ c'	z s s'	n r	
Dent.-alveol.			$ź$ $ś$ $ś'$		
labialised		$ʒ́^{\circ}$ $ć^{h\circ}$ $\bar{ć}^{\circ}$	$ź^{\circ}$ $ś^{\circ}$ $ś'^{\circ}$		

Alveolars				ʒ	čʰ	č̌	č'	ž	šʰ	š̌
Laterals							L	λ	λ'
Palatals									j
Velars							ĝ	x	
labialised	g°	kʰ°	k̄°	k‴				x°	
palatalised	g´	kʰ´	k̄´	k´´					
Uvulars		qʰ	q̄	q'			γ	χ	
labialised		qʰ°	q̄°	q‴			γ°	χ°	
Pharyngals								ħ	

Comments to the chart:

(a) The present chart is deduced from the material presented in ShD; cf. also Kumaxov 1981: 110. I did not include in this chart the consonants *p‴*, *t‴*, *f°*, *ć‴*, *ʔ*, *ʔ°*, present in Kumaxov's work, as they are in complementary distribution with the more archaic *p'q‴*, *šx°*, *ʒ°*, *q'*, *q‴*, respectively, found in Hakutsw Shapsygh. Cf. the description of other forms of Shapsygh in DA I: 91-92, Paris 1974a: 19 and Smeets 1984: 77, 111, 453.

(b) In Shapsygh the original non-palatalised back sibilants merged (except for some isolects) with the palatalised series. On the other hand, this dialect preserves the palatalised velar stops, merged with back affricates in other West Circassian dialects.

(c) The opposition "lax ~ tense" in many Shapsygh isolects both in the Caucasus and in Turkey has already disappeared.

(d) The spirant *x°* can be found only after sibilant *š*. In other forms of Shapsygh the CCirc cluster **čx°* was transformed into *f°*.

(e) Glottalised *s'*, present in many Shapsygh isolects (cf. ShD 40), corresponds to *c'* in other Circassian dialects.

(f) In the place of *ʒ°* in other Adyghe dialects (including Hakutsw Shapsygh), Kuban Shapsygh has *ć‴* (cf. ShD 36).

3.1.3. *Temirgoj*

The phonemic system of Temirgoj is simpler than that of the previously described dialects, which was obviously the reason why it was chosen as the basis for

literary Adyghe. The Temirgoj consonant inventory includes 55 segments.

The Temirgoj consonant inventory (cf. Kumaxov 1981: 113)

	Stops	Affricates	Spirants	Resonants	Glides
Labials	*b p p'*		*f*	*m*	*w*
labialised	*p°*				
Dentals	*d t t'*	*ʒ c c'*	*z s*	*n r*	
labialised	*t°*				
Dent.-alveol.			*ź ś ś'*		
labialised		*ʒ° c°*	*ź° ś° ś°*		
Alveolars		*ǯ č č'*	*ž š*		
palatalised		*ǯ´ č´ č´'*	*ž´ š´*		
Laterals			*L λ λ'*		
Palatals					*j*
Velars			*ĝ x*		
labialised	*g° k° k°*		*x°*		
Uvulars	*q*		*γ χ*		
labialised	*q°*		*γ° χ°*		
Pharyngals	*ʔ*		*ħ*		
labialised	*ʔ°*				

Comment to the chart:

In Temirgoj the velar spirant *x°* can be found in the cluster *šx°* only.

3.1.4. *Abadzakh*

The speakers of Abadzakh (also called Abdzakh or Abzakh) were, like the speakers of Shapsygh, very numerous prior to the Russian conquest of the

Western Caucasus. During the exodus, nearly all Abadzakhs fled to the Ottoman empire; its speakers in Adyghea can now only be found in two small villages, while in the Circassian diaspora abroad they constitute the majority, together with the Shapsygh.

The Abadzakh consonant inventory (cf. Kumaxov 1981: 115)

	Stops	Affricates	Spirants	Resonants	Glides
Labials	*b p p'*		*f*	*m*	*w*
labialised	*p°*				
Dentals	*d t t'*	*ʒ c c'*	*z s*	*n r*	
labialised	*t°*				
Dent.-alveol.			*ź ś ś'*		
labialised		*ʒ° ć°*	*ź° ś° ś°*		
Alveolars			*ž š (š')*		
palatalised		*ǯ' č' č''*	*ž' š' (š'')*		
Laterals			*L λ λ'*		
Palatals					*j*
Velars			*ĝ x*		
labialised	*g° k° k°*		*x°*		
Uvulars	*q*		*γ ǩ*		
labialised	*q°*		*γ° ǩ°*		
Pharyngals	*ʔ*		*ħ*		
labialised	*ʔ°*				
palatalised	*ʔ'*				

Comments to the chart:

(a) Kumaxov's chart misses the spirants *z* and *s*, obviously due to typographical error.

(b) The Abadzakh consonant system underwent certain innovations partially unknown to other Circassian dialects. Non-palatalised back affricates merged with the palatalised ones (as in Shapsygh and Kabardian). The unique feature of Abadzakh is the presence of the universally rare (and unknown to the phonemic inventories of other Caucasian languages) opposition between non-palatalised and palatalised glottal stop: *ʔ ~ ʔ'*. The palatalised glottal stop is a reflex of the glottalised affricate **č''*, and (in some cases) of its non-palatalised counterpart **č'*. Apart from Abadzakh, this consonant can only be found in Armavir Adyghe (see below). The same affricates (**č'*, **č''*) in other Abadzakh isolects were transformed to form an unusual phonemic contrast between non-palatalised and palatalised glottalised back spirant (*š'* ~ *š''*). It should be noted that the palatalised glottal stop and glottalised back spirants (palatalised or not) are partially in complementary distribution, as they both represent the reflexes of the affricate *č''*, and only sometimes those of *č'*.
(c) The inconsistent reflexes of the back sibilants in different Abadzakh isolects suggest that the speech of present-day Abadzakh (both in the Caucasus and abroad) is in fact a merger of at least two, or perhaps even more subdialects.

3.1.5. *Armavir Adyghe*
The form of West Circassian spoken in the town of Armavir and around it belongs to the Circassianized Armenians who almost lost their native tongue, though preserving their old Christian religion, despite Muslim surroundings. According to Nabokova 1964: 16, the Circassian speech of Armavir Armenians does not coincide with any of the Adyghe dialects. The general impression of the phonetic system of this dialect is that it represents a mixture of various Adyghe and even Kabardian isolects. The mixed nature of Armavir Adyghe is evident from the numerous phonetic variants of one and the same phoneme. For example, Adyghe *ž* can be represented here as *ž, ž', ź, ź"* (so-called "semi-palatalised *ž"*), *č* as *č, č', š, ć*, etc. (ibid.: 7). From a comparative point of view, the Armavir data are not of great importance.

3.2. EAST CIRCASSIAN (KABARDIAN)
3.2.1. *Beslenej Kabardian*
Beslenej (also called Besnej) represents a rather archaic form of East Circassian, or Kabardian. Its speakers were rather numerous before the Russo-Caucasian war, but nowadays in the North Caucasus there can be found only two Beslenej villages in Karachaj-Cherkessia (namely, Beslenej and Vako-Zhile), and several villages in Adyghea. More considerable numbers of Beslenej live in Turkey and

some Middle East countries.

The Beslenej phonemic inventory (cf. Kumaxov 1981: 117)

	Stops	Affricates	Spirants	Resonants	Glides
Labials	*b p p'*		*v f f'*	*m*	*w*
Dentals	*d t t'*	*ʒ c c'*	*z s*	*n r*	
Dent.-alveol.			*ź ś (ś')*		
Alveolars		*ǯ č č'*	*ž š*		
palatalised		*ǯ' č' č''*	*ž' š'*		
Laterals			*L λ λ'*		
Palatals					*j*
Velars			*ĝ x*		
labialised	*g° k° k'°*		*x°*		
palatalised	*g' k' k''*				
Uvulars	*q q'*		*γ χ*		
labialised	*q° q'°*		*γ° χ°*		
Pharyngals	*ʔ*		*ħ*		
labialised	*ʔ°*				

Comment to the chart:

In a Turkish Beslenej isolect described by Paris 1974, labialised *h°* replaced the original *x°*. In the same isolect the non-palatalised back sibilants merged with their palatalised counterparts. According to Kumaxov 1981: 116, in his recordings of Beslenej the informants, instead of the original *ś'*, normally absent from this dialect, pronounced either the middle spirant *ś*, or the middle affricate *ć'*. This dialect, like Black Sea Shapsygh or Abadzakh, in all probability represents in fact a merger of different Beslenej subdialects, with strong Adyghe influence. The latter circumstance might have helped Beslenej to retain certain Common

Circassian features, lost by other forms of East Circassian.

3.2.2. *Kabardian proper*

Kabardian proper consists of a number of very close dialects (or subdialects), which can be subdivided into two groups: dialects of Great and of Little Kabarda. The Great Kabarda (sub)dialects are: Zolsky (Kabardians of the Zolsky region of Kabarda-Balkaria, including a part of the village Malka), Baksan (villages of the Baksan, Chegem, and Proxladnensky regions), Aushiger (Sovetsky region), Lesken (villages Lesken II, Stary Lesken, Erokko, Urukh, Stary Urukh, Argudan of the Urvan region). The Little Kabarda dialect is found on the territory of the Tersky region of Kabarda-Balkaria and of the Mozdok region of North Ossetia (cf. Berbekov 1986). The consonant system of Standard Kabardian is the most modest of all West-Caucasian languages, as it comprises only 47 segmental phonemes. The literary form of Kabardian is based on its Baksan dialect.

The Kabardian phonemic inventory (cf. Kumaxov 1981: 121)

	Stops	Affricates	Spirants	Resonants	Glides
Labials	*b p p'*		*v f f'*	*m*	*w*
Dentals	*d t t'*	*ʒ c c'*	*z s*	*n r*	
Dent.-alveol.			*ź ś ś'*		
Alveolars		*ǯ č č'*	*ž š*		
Laterals			*L ɬ ɬ'*		
Palatals					*j*
Velars			*ĝ x*		
labialised	*g° k° k'°*		*x°*		
palatalised	*(g´ k´ k'´)*				
Uvulars	*q q'*		*γ χ̌*		
labialised	*q° q'°*		*γ° χ̌°*		
Pharyngals	*ʔ*		*ħ*		
labialised	*ʔ°*				

Comments to the chart:
(a) Some Kabardian dialects retain the old triad *g´ ~ k´ ~ k'´* as allophonic variants of the affricates *ǯ ~ č ~ č'*. In the given chart I put them in brackets (as they are not included in Kumaxov's chart). In most Circassian dialects (except for Shapsygh) the palatalised velars merged with alveolar affricates.
(b) In Mozdok Kabardian (Little Kabarda) Common Kabardian **ś'* was replaced either by the middle affricate *ć'*, or by the front *c'* (Ocherki 125-126).
(c) In the Malka subdialect the middle spirants in the speech of one group of the speakers merged with the phonetically palatalised back spirants, while the other group of speakers pronounce them as palatalised front spirants (Ocherki 291). Front palatalised spirants in place of the middle spirants are also found in Lesken Kabardian (cf. Utizhev 1981: 109).
(d) The older representatives of the Babugoj subdialect of the Kuban dialect of Kabardian (situated on the territory of Adyghea), preserve the original system of non-palatalised velar stops (*g ~ k ~ k'*), which can sporadically be replaced by their palatalised allophones (Kumaxov 1981: 116).
(e) In the speech of many Kabardians the uvular stop *q'* in the negation suffix *-q'əm* is replaced by the glottal stop (i.e. > *-ʔəm*).

3.2.3. *Cherkes (Kuban-Zelenchuk) Kabardian*
This is a cover term for various forms of East Circassian situated on the territory of Karachaj-Cherkessia. These isolects actually represent a merger of different East Circassian dialects with strong West Circassian and even Abaza influence (the latter is more prominent in a couple of villages with a strong Abaza substratum, namely, Abazakt and Psauche-Dakhe). The most noticeable peculiarities of Cherkes speech concern the middle sibilants and velar stops. In some isolects the middle spirants merged with the back ones (e.g. in the speech of the village of Pervomayskoe), while *ś'* in some isolects (e.g. in the village of Psauche-Dakhe) has *ć'* or *š'* as its variants. Another feature of many Cherkes isolects is the retention of the original velar stops *g´ ~ k´ ~ k'´*, which are in allophonic variation with affricates *ǯ ~ č ~ č'*.

From a historical point of view most important are the data of Beslenej and Kabardian proper, while many other East Circassian isolects represent systems which are on the whole secondary to these two, though in some instances they do provide interesting phonetic and especially lexical archaisms.

3.3. CONSONANT DISTRIBUTION AND CLUSTERS
Essentially there are no constraints as to the distribution of Circassian

consonants. A rare example is Adyghe *x°*, found only after voiceless sibilants (usually in the cluster *šx°*. Note that in some Hakutsw isolects this cluster was changed to *f°*, while in other positions *x°* was transformed into *f*. The general phenomenon is the modification of the personal verbal prefix *w(ə)-* into *p-*, *p'-*, *b-* in the position before voiceless, glottalised and voiced consonants, respectively. In some Kabardian verbal forms (e.g. in the present forms) an alternation *w* ~ *b* takes place, cf. *woś'* ~ *boś'* 'you do it'. The most frequently used consonants (in the order of decreasing frequency) in Adyghe (according to Balkarov 1970: 100) are: *r*, *γ*, *m*, *s*, *z*, *ś*, *n*, *q*, *p*. Cf. the corresponding data for Standard Kabardian (in the same order): *m*, *r*, *s*, *n*, *ś*, *z*, *q'*, *t*, *d*, *ž* (cf. Balkarov 1970: 99).

Both on the level of the morpheme and of the word, Circassian does not have consonant clusters consisting of more than three elements. Within clusters made up of obstruents all elements obtain one and the same laryngeal feature (aspirated, voiced, or glottalised), determined by the laryngeal feature of the final member (Kuipers 1963: 63). The rule does not involve resonants and those sibilants which cannot be glottalised. The same applies to Ubykh, but not to Abkhaz, where combinations of consonants with different laryngeal features are quite possible.

Circassian initial clusters typically contain bilabials as their first element, e.g. *ps*, *pś*, *p'ś'*, *pč*, *p'č'*, etc. Medial clusters are more numerous and various in Adyghe than in Kabardian, which is explained by the usual loss of final vowels in the latter. Like the initial clusters, the medial ones also usually contain labials as the first element, cf. *px*, *pχ*, *pχ°*, *pλ*, *ps*, *pś*, *p'c'*, *p'λ'*, etc. Frequent are inlaut combinations with initial *n* or *r*, cf. *nč''*, *nt*, *nt'*, *nź*, *rt*, *rt'*, *rg°*, *rk°*, etc. The auslaut clusters are mostly recent innovations due to final vowel elision. They are more numerous in Kabardian than in Adyghe, where this process took place on a smaller scale. The few anlaut combinations of three consonants are *psk*, *pst* (Ad), *pśt* (Kab), *pśh* (Kab), *pšt* (Ad), *stχ* (Tem). The three-consonantal final groups in Kabardian are: *psk'*, *pśk'°*, *mbγ°*, *ntx°*, *ntχ*. In Adyghe they are less numerous: *pśh*, *psk*, *ntχ*.

3.4. VOCALIC SYSTEM AND PROSODY

The Circassian vowel system consists of three segments: *a* ~ *ă* ~ *ə*, the distinctive feature being the grade of openness, ranging from maximally open *a*, to minimally open *ə*, with the intermediate *ă*. The phonemic status of these three vocalic segments is beyond any doubt, cf. such minimal pairs as Ad *dă* 'to sew' (itr.) ~ *də* 'to sew sth' (tr.), *jəšʼa* 'to bring, carry to somewhere' ~ *jəšʼə* 'to bring, carry from somewhere', *wəna* 'is it a house?' ~ *wənă* 'it is a house', etc.

Other vocalic sounds, such as *[i, e, o, u]*, like in Abkhaz and Ubykh, represent biphonemic combinations "vowel plus semivowel *j*, or *w* ". Cf. in Kabardian:

(a) */əj/, /jə/ > [i]*: */sabəj/ = [sabi(j)]* 'child', *jəz [jiz]* 'full';
(b) */ăj/ > [ej]* : */ʔăj/ = [ʔej]* 'bad'; */jă/ > [je]* : */jăfă/ = [jefă]* 'to drink sth';
(c) */ăw/, /wă/ > [o]* : */psăw/ = [pso]* 'whole, all', */wə-z-ăw-ħ/ = [wəzoħ]* 'I carry you';
(d) */əw/, /wə/ > [u]* : */ǯădəw/ = [ǯădu]* 'cat', */wənă/ = [^{w}ună]* 'house', etc.

Phonotactics and distribution of vowels

In what follows I shall analyse the distribution of Circassian vowels in sequences not longer than *CVCV*. In the notation *C* stands both for a single consonant and for a cluster *CC*, while the symbol # designates the absolute beginning or the absolute end of the word.

The initial sequence (*#VC-*) in the modern dialects can have the following possibilities: *#aC#, #ăC#, #aCă#, #ăCă#, #aCə#, #aCV-, #əCV-*. As some authors report, the sequence *#VC-* is preceded either by prothetic *[h]*, or *[ʔ]*. It seems though, that this is not strictly observed in all dialects. Thus, according to Jakovlev and Ashxamaf 1941: 409, the Adyghe initial */#a-/* is realised as *[^{h}a-]* or *[^{h}ă-]*, and */#ə-/* as *[^{h}ə]*. Kumaxov 1981: 44-45 also cites the Adyghe forms with the automatic *h*, while Kuipers in PC (p. 83) provides only Kabardian forms with the prothetic laryngal, citing at the same time all Adyghe examples without prothesis. The optional character of the prothesis is seen, for example, from Syrian Abadzakh, where the initial sequence */#aC-/* can be alternatively realized as *[aC-]*, *[ʔaC-]*, or *[ʔăC-]* (cf. Paris 1989: 161). According to Kumaxov (ibid.), the Common Circassian sequence **[#haC-]* was regularly changed into *[#hăC-]* in Kabardian and only occasionally in Adyghe. The same applies to the sequence **[#ʔaC-]* (see further).

There is a certain controversy concerning the Circassian initial vowels. It is usually assumed, that only the vowel *a* is possible in the absolute initial position (cf. Jakovlev 1948: 341; Rogava, Kerasheva 1966: 21; Kuipers 1960: 38). Urusov 336-337, on the contrary, argues that only *ă* can be found in the initial position, with the exception of the interjection *aʔă* 'no' (cf. also Turchaninov, Tsagov 1940: 26; cp. Jakovlev, Ashxamaf 1941: 409, cited above, about the realisation of Adyghe */#a-/* either as *[^{h}a-]* or *[^{h}ă-]*). Urusov also denies the presence of the prothetic laryngal before the initial vowels (p. 337). As the question needs further investigation, here I shall follow the traditional view, as expressed in Jakovlev 1948.

(1) *Sequences #aC(-):*
(a) *#aC#* : Ad *a-r* 'that' (nom.), *a-ś'* 'that' (erg.), Ad *aLp*, Kab *aλp* 'mythical powerful horse' (< Turkic), Ad *aw* 'there';
(b) *#aCă#* : Kab *abγ°ă* 'nest', Tem *adă* 'tumor, swelling', Bzh *aś°ă* 'coat of mail', *ačă* 'billy-goat', Ad, Kab *adă* 'there', Kab *ană* 'mother';
(c) *#aCə#* : Tem *apsə* 'wooden bowl' (< Arm), Bzh *apč'ə* 'glass' (< Oss), Sh *aγ°ə* 'tree-bark basket'.

Comments to the sequences #aC(-):
In part of the cases initial *a-* is due to the loss of a preceding glide (*j-*) or glottal stop (*ʔ*). A substantial part of the remaining cases includes words of foreign origin. In verbal forms of some Adyghe dialects the agentive plural prefix *a-* can appear in initial position, cf. Ad *ø-a-λăγ°ə-γ* vs. Kab *j-a-λăγ°-a-ś* 'they saw it', Ad *ø-a-txə* vs. Kab *j-a-tx* 'they are writing it', Ad *ø-a-šă* vs. Kab *j-a-šă* 'they are leading it', etc. Another instance of the initial *a-* in Adyghe has to do with the distinction between inalienable and alienable possession, realised in the 3 p. pl. by the respective prefixes *a-* vs. *j+a-*, cf. Ad *a-nă-xă-r* 'their eyes', *a-ʔă-xă-r* 'their hands', *a-px°ə* 'their daughter', *a-š* 'their brother', *a-c'ă* 'their name', *a-dаž'* 'beside them', *a-bγ°ə* 'from their side' vs. *j+a-txəλ* 'their book', *j+a-γ°ənăγ°* 'their neighbour', *j+a-wənă* 'their house', *j+a-ħač'ăš'* 'their guest-house'.

(2) *Sequences #ăC(-):*
(a) *#ăC#* : Kab *[hă-r]* 'that';
(b) *#ăCă#* : Kab *[hădă]* 'father', *[hăfă]* 'coat of mail', *[hăžă]* 'billy-goat', *[hăwă]* 'but'.

(3) *The sequence #əCV-:*
(a) The initial *ə-* appears in some Adyghe dialects due to the elision of the preceding *j-* in the marker of 3d p.sg. (*jə-*). This is obviously a rather late innovation, as the corresponding forms in other Circassian (including some Adyghe), dialects show the original situation. Cf. Tem, Bzh *ə-λăγ°ə-γ* vs. Sh *jə-λăγ°ə-γ*, Kab *jə-λăγ°-a-ś* "it-(s)he/it-saw", Tem, Bzh *ə-šta-γ* vs. Sh *jə-šta-γ* "it-(s)he/it-took", Tem *ə-txə-γ*, Kab *jə-tx-a-ś* "it-(s)he-wrote", etc. In the non-initial position *j-* remains, cf. Ad *t-jə-š'a-γ*, Kab *d-jə-ša-ś* "us-(s)he/it-led".
(b) Another instance of initial *ə-* in Adyghe is the 3 p. sg. marker of inalienable possession as opposed to the prefix *j+ə-*, expressing alienable possession, cf. *ə-nă* 'his eye', *ə-š* 'his brother', *ə-px°ə* 'his daughter', *ə-c'* 'his name', *ə-bză* 'his tongue', *ə-nəbž'* 'his age', *ə-bγă* 'his bosom', *ə-paśħă* 'before him' vs. *j+ə-txəλ* 'his book',

j+ə-dăxaγ 'its beauty', *j+ə-γ°ənaγ°* 'his neighbour', *j+ə-waχtă* 'its time'.

(4) Monosyllabic words can be made up of closed or open syllables: *#CVC#*, *#CV#*.
(a) *#CVC#* can be *#CaC#*, *#CăC#*, or *#CəC#*.
(aa) #CaC# : Tem *paλ* 'as if' (cf. Kab *paλă* 'similar, same'), Kab *baš* 'stick' (cf. Bzh *baš^{h}ə* 'id.', Tem *băš´*), Ad *źaw* (cf. Kab *źawă*) 'shadow', Ad *psaγ* 'aim, target' (cf. Ub *psaγă* 'id.' < Ad), Kab *saq'* '(to be) careful' (cf. Bzh *saqə*), Kab *žan* 'sharp, energetic' (cf. Bzh *č'anə*), Kab *žaL* 'withers (of horse)' (cf. Bzh *ǯ'aLă*), Ad, Kab *baz* 'bet', Tem *baj* 'rich', Ad *qaš´* 'cross', etc. This model includes words with irregular vocalic developments (like *paλ*, *baš*) or, most commonly, loanwords (as the rest of the mentioned examples).
(ab) *#CăC#* is found mostly in Kabardian due to elision of the final *ə*. Cf. Kab *păbž* 'equal' (Tem *păpčə* 'every time'), *păpλ* 'red-nosed' (Tem *păpλə*), *năp'c'* 'false, deceptive' (Bzh *nap'c'ə*), *măz* 'forest' (Bzh *măzə*), *wărq'* 'nobleman' (Tem *wărqə*), etc.
(ac) *#CəC#* is found in Kabardian due to elision of the final *ə* (see the examples further, in (5) (i)).
(b) *#CV#* can be *#Ca#*, *#Că#*, and *#Cə#*.
(ba) *#Ca#* is found in Kabardian participial forms: *da* 'sewn', *txa* 'written', *va* 'boiled'; cf. also the baby word *ba* 'kiss'.
(bb) *#Că#* : Bzh *p^{h}ă*, Kab *pă* 'nose', Bzh, Kab *p'ă* 'bed', Bzh, Kab *bă* 'much', Bzh *št^{h}ă*, Kab *śtă* 'flint', Bzh *tă*, Kab *dă* 'we', etc.
(bc) *#Cə#*: Ad, Kab *t'ə* 'ram', Bzh *c^{h}ə*, Kab *cə* 'hair, wool', Ad, Kab *źə* 'old', Ad, Kab *psə* 'water'.

(5) Disyllabic words (*#CVCV#*) have the following possibilities: *CaCa*, *CaCă*, *CăCa*, *CaCə*, *CăCă*, *CăCə*, *CəCa*, *CəCă*, *CəCə*.
(a) *CaCa* is found in some Adyghe verbal forms with the final interrogative suffix *-a* (cf. *ma-k^{w}-a* 'is he going?', *ma-ǯ´-a* 'is he reading?', *k^{w}a-γ-a* 'did he go?') and in pronouns, cf. Ad *tara*, Kab *dara* 'which?'.
(b) *CaCă* : Bzh, Kab *daxă* 'beautiful', Bzh *pš^{h}ap^{h}ă*, Kab *pšapă* 'dusk', Bzh *mat^{h}ă*, Kab *mată* 'basket', Bzh *ħaś°ă*, Kab *ħafă* 'rubber', etc.
(c) *CaCə* : Bzh *bajə* (cf. Kab *băj*) 'rich', Bzh *cāħə* (Tem *cəħă*, Kab *zəh(ă)*) 'faith, confidence', Bzh *psawə* 'healthy' (Kab *psăw*), Bzh *saqə* '(to be) careful', Bzh *č'anə* 'sharp, energetic', Tem *ʔaLə* 'wild' (Kab *ʔăL*), Bzh *ʔap'λ'ə* 'embrace' (Kab *ʔăp'λ'ă*), Tem *ʔag°ə*, *š'ag°ə* 'courtyard', etc. This model contains either irregular vocalic developments (as in *cāħə*, *psawə*, *ʔaLə*, *ʔapλ'ə*, *ʔag°ə*, *š'ag°ə*), or loanwords

(the rest of the examples). A rare Kabardian example is *dabə* 'where'.
(d) *CăCa* is found either in interrogative forms (*-a* being the interrogative suffix), cf. Ad *xăt-a* 'who?', *j-ă-ʒʼ-a* 'is he reading?', *j-ă-ɦ-a* 'is he carrying?', *j-ă-tx-a* 'is he writing?', Kab *Lăź-a* 'did he work?', *śə-s-a* 'did he sit?' or, in Kabardian, in past participles, cf. *Lăź-a* 'the one who was working', *băn-a* 'the one who was fighting', *psălʲ-a* 'the one who was speaking'. Here also belong forms with the emphatic particle *-ba*: Ad *kʷă-ba* 'do go!'.
(e) *CăCă* is rarely met in substantives, pronouns, or verbal forms, cf. Kab *bźăpă*, beside *bźapă* 'the top of the protuberance, hill', Ad, Kab *să-šxʷă* 'sword', Kab *kʲăsă* 'beardless' (< Tu), Kab *dănă* 'where?', Ad *zăčʼă* 'all', *gʷără* 'anybody/anything', Bzh *wădă* 'thither', *tʰădă* 'where (to)?'. On the other hand, *ă* in Kabardian is regular in the penultimate syllable after glottal stop (or the prothetic *h*, see above), cf. *ʔăbLă* 'arm' (Ad *ʔabLă*), *ʔănă* 'small three-legged table' (Ad *ʔană*), *ʔăxʷă* 'herdsman of cattle' (Ad *ʔăxʷă*), and so on (the only exception seems to be the Kabardian interjection *ʔaγ*). In the verbal forms this model is somewhat more common, cf. Ad *jă-ʒʼă* 'read it!', *s-ă-kʷă* 'I go', *qă-kʷă* 'he is coming here', Kab *kʷă-čʼă* 'manner of walking', *bză-čʼă* 'manner of cutting'.
(f) *CăCə* is mostly found in Adyghe, as Kabardian lost the final *ə*; see the examples above, in (4) (ab). A rare Kabardian example is the pronoun *jăzə* 'himself'.
(g) *CəCa* is met in the Adyghe interrogative forms: *səd-a* 'what?', *wən-a* 'is it a house?'.
(h) *CəCă*: Bzh *ɨ̄əγă*, Kab *dəγă* 'sun', Bzh *nəq̄ʷă*, Kab *nəqʷă* 'half', Bzh, Kab *məγʷă* 'poor, unfortunate', Ad, Kab *wənă* 'house'.
(i) *CəCə* is preserved mainly in Adyghe, while in Kabardian it was reduced to *CəC*: Bzh *pʰəźə* 'hedgehog' (Kab *pəź* 'blackthorn'), Ad *bəʒə* 'woman's breast' (Kab *bəʒ*), Sh *ɨ̄əwə* 'grain storehouse' (Kab *dəw*), Ad *dədə* 'awl' (Kab *dəd*), Ad *cʼəźʲə* 'bug, beetle' (Kab *cʼəv*), Bzh *wəzə* 'pain, disease' (Kab *wəz*) etc. The rare Kabardian example is *məbə* 'this, that'.

Vocalic clusters

As in Abkhaz, vowel clusters are not allowed in Circassian. Combinations */V + V/* always yield a single *[V]*, which can be seen from the following examples (the Shapsygh examples are from Smeets 1984: 196, 197):

(a) */ă + a/ —> [a]* : Kab *dăx-a-ś* 'was beautiful', from *daxă* 'beautiful', perfective *-a-* and copular *-ś*; *wănaśʼă* 'saddler', from *wană* 'saddle', connective *-a-* and *śʼă* 'to do, make';

(b) */ă + ă/ —> [ă]* : Ad (Sh) *wənăp* 'it is not a house', from *wənă* 'house' + *ăp* negation marker; Kab *xăkʷadă* 'disappears', from *xă-* prev. 'in the mass', *-ă-* present marker, *kʷadă* 'to get lost';

(c) */a + ă/ —> [a]* : Ad (Sh) *ø-jaś'ə* 'they are doing it', with *ø-* 'it', *j+a-* 'they', *ś'ə* 'to do';

(d) */ə + a/ —> [a]* : Ad *măL-a-x̌ʷă* 'shepherd', from *măLə* 'sheep' + connective *-a-* and suf. *x̌ʷă* < *x̌ʷə* 'to pasture'; *măqʷ-a-wă* 'mower', from *măqʷə* 'hay' + connective *-a-* + *wă* 'to beat, strike';

(e) */ə + ă/ —> [ă]* : Ad *s-ă-kʷă* 'I am going', with *sə-* 'I', the present marker *ă* and *kʷă* 'to go'.

(f) */ə + ə/ —> [ə]* : Ad (Sh) *ś°əzəjk'* 'and a woman', from *ś°əzə* 'woman', *-əjk'* conjunctive suffix.

Thus, in sequences */VV/*, */ă/* always assimilates to */a/*, and */ə/* always assimilates to */a/* or */ă/*. The rare exception is reported for Adyghe by R. Smeets, cf. */ă + ə/ —> [ə]*, provided *ə* is the initial vowel of a suffix, e.g. Sh *dăpšəɣ* 'you have led it out of it', containing *šă* 'to lead' and the elative suffix *ə* (Smeets 1984: 196-7). In combinations of two independent words ending and beginning with a vowel, the output can be *[V#ʕ#V]* or *[V̄]* (cf. Smeets 1984: 130).

Prosody

Stress in Circassian is very weak and its phonological relevance is arbitrary. Words may possess fixed or mobile stress. Some affixes, as in Abkhaz and Ubykh, have an ability to retract stress, cf. Kab. *ś'áLă* 'boy' ~ *ś'aLá-ɣă* 'youth', *λ'ə́-šx°ă* 'a big man' ~ *λ'ə-šx°á-śă* 'a very big man' (Kardanov 1955: 998).

Though stress does not play any important role in Circassian, one can sometimes find even minimal pairs differing by the place of stress, cf. Ad *wă+šx́ə* 'rain' ~ *wắ+šxə* 'you are laughing', *qa-štắ* 'take hither' ~ *qá-ştă* 'they are taking hither' (BB 292), *daná́* 'silk' ~ *dá-nă* 'sticks inside', *ś°a-ś'ắ* 'harness-maker' ~ *ś°-á-ś'ă* 'they know you' (Vodozhdokov 1963: 41, 46; cf. also Smeets 1984: 129). The rare examples of minimal pairs in Kabardian are: *wənắ-k'ă* 'back part of a house' ~ *wə́nă-k'ă* 'house' (instr.), *a-dắ-r* 'that nut' (nom.) ~ *á-dă-r* 'father' (nom.) (Kuipers 1960: 46).

Adyghe preserved the original accentual situation better than Kabardian. To demonstrate the Adyghe stress patterns one has to distinguish between the predicative and non-predicative forms of the words. Depending on the presence or absence of the final vowel in one of these two forms, all words can be subdivided into four groups: (1) words which preserve the final vowel in both

predicative and non-predicative forms, (2) words which lose the final vowel in predicative form, (3) words which lose the final vowel in non-predicative form, and (4) words which lose the final vowel in both predicative and non-predicative forms. A detailed picture of Adyghe stress patterns in comparison with Kabardian is given below, in Chapter IV, paragraph 7.

CHAPTER III

THE RECONSTRUCTION OF THE COMMON ABKHAZ PHONEMIC SYSTEM

Genko 1934 (published in 1955) and 1935 (published in 1957) was the first to demonstrate a close affinity between all Abkhaz-Abaza dialects on a wide lexical material, with detailed classification of subdialects, based on phonetic criteria. The phonetic correspondences were accompanied by examples and a comparative table of non-derived roots, though Genko did not undertake the reconstruction of Common Abkhaz phonemes. Of importance are also Lomtatidze 1976 and Bgazhba 1964 (BD); cf. also Serdiuchenko 1949. As for the reconstruction of Common/Proto Abkhaz, there are two versions, one of which was proposed by Starostin 1978 (cf. also NS 193-197), and another by Chirikba 1992a.

From the point of view of phonemic reconstruction the most important are the Bzyp data, the latter being the only dialect to preserve the full set of middle sibilants. Tapanta, Sadz, Abzhywa and Ashkharywa, in their turn, help to reconstruct the set of back labialised affricates. The voiced pharyngals are preserved in Tapanta and Ashkharywa. Ashkharywa and Sadz often retain the full vocalic grade of the root morphemes. Tapanta marginally preserves the old tonal system lost by other dialects. And, certainly, all the dialects add up to the reconstruction of the Common Abkhaz lexicon.

The proposed reconstruction differs from that of NS in that it contains the consonants **p°* and **(v)*, missing in the inventory elaborated in NS. It is not clear whether we should reconstruct the glottal stop (present in NS inventory as **ʔ*) as a full value phoneme, because as such it is present only in Tapanta, where its distribution is very limited; historically it can only represent a positional variant of **q'*.

1. COMMON ABKHAZ PHONEMIC INVENTORY

Consonant System

	Stops			Affricates		Spirants	Resonants	Glides
Labials	*b*	*p*	*p'*			*(v)* *f*	*m*	*w*

labialised			p°							
Dentals	d	t	t'	$ʒ$	c	c'	z	s	n	r
labialised	d°	t°	t'°							
Dent.-alveol.				$ʒ́$	$ć$	$ć'$	$ź$	$ś$		
labialised				$ʒ^{\circ}$	$ć^{\circ}$	$ć'^{\circ}$	$ź^{\circ}$	$ś^{\circ}$		
Alveolars				$ǯ$	$č$	$č'$	$ž$	$š$		
labialised				$ǯ^{\circ}$	$č^{\circ}$	$č'^{\circ}$	$ž^{\circ}$	$š^{\circ}$		
palatalised				$ǯ'$	$č'$	$č''$	$ž'$	$š'$		
Palatals										j
Laterals									l	
Velars	g	k	k'							
labialised	g°	k°	k'°							
palatalised	g'	k'	k''							
Uvulars		q	q'				γ	$\check{x}$		
labialised		q°	q'°				γ°	$\check{x}^{\circ}$		
palatalised			q''				γ'	$\check{x}'$		
Pharyngals							$\hbar$	h		
labialised							$\hbar^{\circ}$	h°		

Vocalic System

a $ə$

2. DEVELOPMENTS IN DIALECTS

Developments common to several dialects

I. Bzyp, Abzhywa, Ahchypsy, Sadz, Ashkharywa:
$*ʒ^{\circ}$, $*č^{\circ}$ $> v, f$

II. Bzyp, Abzhywa, Ahchypsy, Sadz, Tapanta:
$*p^{\circ}$ $> p'$

III. Abzhywa, Ahchypsy, Sadz, Ashkharywa, Tapanta:
*ʒ, *ć, *ć' > ʒ, c, c'
*ź, *ś > z, s

IV. Bzyp, Abzhywa, Ahchypsy, Sadz:
*ĥ, *ĥ° > aa, j°

V. Abzhywa, Sadz, Ashkharywa:
*č‴ > f' (Sadz > f)

VI. Abzhywa, Sadz:
*ź°, *ś° > ž°, š° (only in Khaltsys Sadz)
*q, *q° > x̌, x̌°

VII. Bzyp, Ahchypsy:
*q, *q° > χ̌, χ̌°

Developments in individual dialects

I. Ashkharywa:
*d°, *t°, *t‴ > d(°), t(°), t'(°) (Aps, Kuv) or b, p, p' (Ulyap)

II. Tapanta:
*d°, *t°, *t‴ > ʒ°/ʒ, č°/č, č‴/č' or ʒ°/ʒ, ć°/ć, ć‴/ć'
*ʒ°, *č°, *č‴ > ʒ, c, c'
*ź°, *ś° > ź°, ś° or ž°, š°
*ž°, *š° > ž, š or ź°, ś°

Comment:
p' as a reflex of *č‴ is the main allophone of Tswydzhy Sadz, while f is used rarely; Khaltsys Sadz has only f as the reflex of *č‴.

3. INTER-ABKHAZ CONSONANTAL CORRESPONDENCES

The most conservative of the Abkhaz dialects proves to be Bzyp, which retains the complete system of the plain middle sibilants, lost by all other dialects, the reflexes of the Common Abkhaz uvular stops, lost by Abzhywa and Sadz, and the velar voiceless fricative, lost by nearly all the rest of the Abkhaz dialects. Ahchypsy is close to Bzyp in preserving the whole set of the labialised middle sibilants (the same is true also for Ashkharywa, Tswydzhy Sadz and Tsabal), as well as the velar voiceless fricative. Comparison of South Abkhaz with Tapanta allows us to restore the set of back labialised affricates.

Table of inter-Abkhaz correspondences

CAbx	Bz	Abzh	Ahch	Sa	Ash	Tap
*b	b	b	b	b	b	b
*p	p	p	p	p	p	p
*p'	p'	p'	p'	p'	p'	p'
*p‴	p'	p'	p'	p'	p‴	p'
*d	d	d	d	d	d	d
*d°	d°	d°	d°	d°	d(°)/b	ʒ°/ʒ°/ǯ/ʒ
*t	t	t	t	t	t	t
*t°	t°	t°	t°	t°	t(°)/p	č°/ć°/č/ć
*t'	t'	t'	t'	t'	t'	t'
*t‴	t‴	t‴	t‴	t‴	t'(°)/p'	č‴/ć‴/č'/ć'
*g	g	g	g	g	g	g
*g´	g´	g´	g´	g´	g´	g´
*g°	g°	g°	g°	g°	g°	g°
*k	k	k	k	k	k	k
*k´	k´	k´	k´	k´	k´	k´
*k°	k°	k°	k°	k°	k°	k°
*k'	k'	k'	k'	k'	k'	k'
*k'´	k'´	k'´	k'´	k'´	k'´	k'´
*k‴	k‴	k‴	k‴	k‴	k‴	k‴
*q	x̌	x̌	x̌	x̌	q	q
*q°	x̌°	x̌°	x̌°	x̌°	q°	q°
*q'	q'	q'	q'	q'	q'	q'/ʔ
*q'´	q'´	q'´	q'´	q'´	q'´	q'´
*q‴	q‴	q‴	q‴	q‴	q‴	q‴
*ʒ	ʒ	ʒ	ʒ	ʒ	ʒ	ʒ
*c	c	c	c	c	c	c
*c'	c'	c'	c'	c'	c'	c'
*ʒ́	ʒ́	ʒ	ʒ	ʒ	ʒ	ʒ
*ʒ°	ʒ°	ʒ°	ʒ°	ʒ°	ʒ°	ʒ°/ǯ°/ʒ
*ć	ć	c	c	c	c	c
*ć°	ć°	ć°	ć°	ć°	ć°	ć°/č°/ć
*ć'	ć'	c'	c'	c'	c'	c'
*ć‴	ć‴	ć‴	ć‴	ć‴	ć‴	ć‴/č‴/ć'
*ǯ	ǯ	ǯ	ǯ	ǯ	ǯ	ǯ
*ǯ´	ǯ´	ǯ´	ǯ´	ǯ´	ǯ´	ǯ´
*ǯ°	v	v	v	v	v	ʒ

*č	č	č	č	č	č	č
*č´	č´	č´	č´	č´	č´	č´
*č°	f	f	f	f	f	c
*č'	č'	č'	č'	č'	č'	č'
*č'´	č'´	č'´	č'´	č'´	č'´	č'´
*č'°	p'	f'	p'	f	f'	c'
(*v)	v	v	v	v	v	v
*f	f	f	f	f	f	f
*z	z	z	z	z	z	z
*s	s	s	s	s	s	s
*ź	ź	z	z	z	z	z
*ź°	ź°	ź°	ź°	ź°/ź°	ź°	ź°/ź°/ź
*ś	ś	s	s	s	s	s
*ś°	ś°	ś°	ś°	ś°/ś°	ś°	ś°/ś°/ś
*ž	ž	ž	ž	ž	ž	ž
*ž´	ž´	ž´	ž´	ž´	ž´	ž´
*ž°	ž°	ž°	ž°	ž°	ž°	ž/ž°/ź
*š	š	š	š	š	š	š
*š´	š´	š´	š´	š´	š´	š´
*š°	š°	š°	š°	š°	š°	š/ś°/ś
*γ	γ	γ	γ	γ	γ	γ
*γ´	γ´	γ´	γ´	γ´	γ´	γ´
*γ°	γ°	γ°	γ°	γ°	γ°	γ°
*x̌	x̌	x̌	x̌	x̌	x̌	x̌
*x̌´	x̌´	x̌´	x̌´	x̌´	x̌´	x̌´
*x̌°	x̌°	x̌°	x̌°	x̌°	x̌°	x̌°
*ħ	aa	aa	aa	aa	ħ/ā	ħ
*ħ°	j°	j°	j°	j°	ħ°	ħ°
*h	h	h	h	h	h	h
*h°	h°	h°	h°	h°	h°	h°
*m	m	m	m	m	m	m
*n	n	n	n	n	n	n
*r	r	r	r	r	r	r
*l	l	l	l	l	l	l
*w	w	w	w	w	w	w
*j	j	j	j	j	j	j

Identical correspondences

The major part of the correspondences between the dialects of the Abkhaz group, present in the native material, is identical and, obviously, goes directly back to the corresponding Common Abkhaz phonemes. These are as follows: *b, p, p', d, t, t', g, k, k', g°, k°, k°, g', k', q', q°, q'', ʒ, c, c', ʒ, č, č', ǯ, č', č'', v, f, z, s, ž, š, ž', š', γ, x̌, γ°, x̌°, γ', x̌', ħ, ħ°, m, n, r, l, w, j.* I will give only one example to each correspondence.

**b* : SAbx *a-bába*, Ash, Tap *bába* 'fluffy, shaggy'
**p* : SAbx *a-pá*, Ash *a-pá*, Tap *pa* 'son'
**p'* : SAbx *a-č'a-p'áp'a-ra* 'to paste all over (the face, facade) with sth (e.g. with flies)', Tap *r-p'áp'a-ra* 'to ram, flatten'
**d* : SAbx, Ash, Tap *da-rá* 'they'
**t* : SAbx, Ash *á-ta-ra*, Tap *á-t-ra* 'to give'
**t'* : SAbx *a-t'át'a*, Tap *t'át'a* 'soft, mild'
**g* : SAbx *a-ga-rá*, Ash, Tap *ga-rá* 'to carry, bring'
**k* : Bz *a-káms*, Abzh *á-kamsa*, Tap *kámsa* 'shaggy'
**k'* : Abzh *á-k'ata*, Tap *k'atá* 'net'
**g°* : SAbx *a-g°ə́*, Ash, Tap *g°ə* 'heart'
**k°* : SAbx *a-k°á*, Ash, Tap *k°á* 'rain'
**k°* : SAbx *á-k°aba-ra*, Tap *k°aba-rá* 'to wash, bathe'
**g'* : SAbx *a-g'ag'á*, Tap *g'ag'a* 'circle', 'round'
**k'* : Bz *a-k'ál*, Abzh *a-k'ála*, Ash, Tap *k'ála* 'hut'
**k''* : SAbx *á-k'əš°-k'əš°-ra* 'top, summit', Tap *k'əš°-ra* 'elevation, eminence'
**q'* : SAbx *á-q'aq'a-ra*, Tap *q'aq'-rá* 'to chew'
**q°* : SAbx *a-q°ánda* 'warm', Tap *q°áda-ra* 'to become warm (of water)'
**q''* : SAbx *a-q''áq'a*, Tap *q'áq'a* 'flat, even'
**ʒ* : SAbx *a-ʒə́*, Ash, Tap *ʒə* 'water, river'
**c* : SAbx *a-cá*, Ash, Tap *ca* 'granary, barn'
**c'* : SAbx *a-c'a-rá*, Tap *c'a-rá* 'to lay eggs'
**ǯ* : Bz *a-x̌ə́ǯ*, Tap *qəǯ* 'stump, stub'
**č* : SAbx *a-čə́*, Ash, Tap *čə* 'horse'
**č'* : SAbx *a-č'ə́*, Ash *a-č'á*, Tap *č'a* 'mouth'
**ǯ'* : SAbx *a-ǯə́k'a*, Tap *ǯ(ə́)k'a* 'salt'
**č'* : SAbx *a-čá-rá*, Ash, Tap *čá-rá* 'to eat'
**č''* : SAbx *a-č''áč''a*, Ash, Tap *č''áč''a* 'kidney'
*(*v)* : Sabx *á-vər-vər-ħ°a*, Tap *vər-vər-ħ°a* 'sound of swiftly turning round'
**f* : SAbx, Ash *á-fa-ra*, Tap *fa-rá* 'to eat'

*z : SAbx, Tap *zkʼə* 'thousand'
*s : SAbx, Ash, Tap *sa-rá* 'I'
*ž : SAbx *á-ža*, Ash *ža-tʼə́*, Tap *ža-čʷə́* 'ash-tree'
*š : SAbx *a-ša-rá*, Ash, Tap *ša-rá* 'to divide, share'
*žʼ : SAbx *a-žʼa-rá*, Ash, Tap *žʼa-rá* 'to lie, deceive'
*šʼ : SAbx, Ash *a-šʼá*, Tap *šʼa* 'blood'
*γ : SAbx *a-γáγa*, Tap *γaγa* 'spread, branchy'
*x̌ : SAbx *a-x̌a-rá*, Tap *x̌a-rá* 'to wear out'
*γ˚ : SAbx *a-γ˚ə́*, Ash, Tap *γ˚ə* 'board, plank'
*x̌˚ : SAbx *á-x̌˚a*, Tap *x̌˚a* 'worm'
*γʼ : SAbx *á-γʼa-ra*, Tap *γʼa-rá* 'to scratch, scrape'
*x̌ʼ : SAbx *a-x̌ʼa-rá*, Tap *x̌ʼa-rá* 'to milk'
*ħ : SAbx *a-ħá*, Ash, Tap *ħa* 'pear'
*ħ˚ : SAbx *a-ħ˚á*, Ash, Tap *ħ˚a* 'swine'
*m : SAbx *á-mra*, Ash *á-mara*, Tap *marə́* 'sun'
*n : SAbx *a-nɔ́c˚*, Tap *nɔ́č˚a* 'hemp'
*r : SAbx *á-rax˚*, Ash, Tap *rax˚ə́* 'cattle'
*l : SAbx *a-lá*, Ash, Tap *la* 'dog'
*w : SAbx, Ash, Tap *wa-rá* 'you (hum/male, nonhum)'
*j : SAbx, Ash, Tap *ja-rá* 'he (hum/male), it'

Non-identical correspondences

(1) Stops

(1.1) Bilabial: *p*

CAbx *p* > SAbx *pʼ* : Ash *p* : Tap *pʼ*

The glottalised labialised bilabial is preserved in one morpheme (*pʷə*) only, and then in the speech of the older speakers of Ashkharywa: cf. SAbx *a-šʼa-pʼə́*, Ash *šʼa-pʷə́*, Tap *šʼa-pʼə́* 'foot', SAbx *a-na-pʼə́*, Ash *m-pʷə*, Tap *na-pʼə́* 'hand'. Lomtatidze 1976: 235 restores the original form of the morpheme *pʼə* as **qʷə* < **qʷa*, but it is possible that the original form could contain also the initial labial: **p(ʼ)qʷə*.

(1.2) Dentals: *d˚, *t˚, *tʼ

CAbx *d˚ > SAbx *d˚* : Ash *d(˚)//b*
CAbx *t˚ > SAbx *t˚* : Ash *t(˚)//p*
CAbx *tʼ > SAbx *tʼ* : Ash *tʼ(˚)//pʼ*

Examples:

**d°* : SAbx *wə-d°ə́-l-c'*, Ash *wə-d(°)ə́-l-c'* 'you (hum/male, nonhum) go out!';

**t°* : SAbx *a-t°á*, Ash *t(°)a* 'hey', SAbx *a-t°ərγ°ə́*, Ash *tərγ°ə́* 'wooden spade, shovel', SAbx *á-t°ħ°a*, Ash *á-tħ°a* 'charm, exorcism';

**t°* : SAbx *a-t°a-rá* : Ash *t'(°)a-rá* 'to sit (down)', SAbx *á-fa-t°*, Ash *a-fa-t'(°)a* 'food'.

Comment:

Labialised *d° t° t°* are preserved only sporadically in the speech of the older speakers of Ashkharywa, otherwise they lost labialisation. In Ashkharywa speech of Adyghea (the village of Ulyap), **d° *t° *t°* merged with *b, p, p'*, respectively (Lomtatidze 1976: 282-3).

(1.2.1) In Tapanta the picture of reflexes of *d° *t° *t°* is different, which is demonstrated in the table given below. To designate the subdialects I use the names of the Tapanta villages. The figure before the name of the subdialects designates different isolects within one village. The name of the village Krasnovostochny is given in its Tapanta form (Gumlokt). The speech of Kubina is practically identical with that of Indzhyg-Chkun. The abbreviation Tapn in the tables denotes not the Tapanta dialect as a whole, but only the subdialect of the village Tapanta (to distinguish from Tap, i.e. the Tapanta dialect).

*Reflexes of CAbx *d° *t° *t° in Tapanta subdialects*

CAbx		Tapn		1 Psyzh		2 Psyzh		Kub		Gum
**d°*	>	*ʒ°*	:	*ʒ°*	:	*ʒ́*	:	*ʒ́*	:	*ʒ́*
**t°*	>	*č°*	:	*ć°*	:	*č́*	:	*ć́*	:	*č́*
**t°*	>	*č°*	:	*ć°*	:	*č'*	:	*ć'*	:	*č'*

Examples:

**d°* : Tapn *wə-ʒ°ə́-l-c'*, 1 Psyzh *wə-ʒ°ə́-l-c'*, 2 Psyzh *wə-ʒə́-l-c'*, Kub *wə-ʒə́-l-c'*, Gum *wə-ʒə́-l-c'* 'you (hum/male, nonhum) go out!';

**t°* : Tapn *č°a*, 1 Psyzh *ć°a*, 2 Psyzh *ča*, Kub *ć'a*, Gum *ča* 'hey';

**t°* : Tapn *wə-č°á*, 1 Psyzh *wə-ć°á*, 2 Psyzh *wə-č'á*, Kub *wə-ć'á*, Gum *wə-č'á* 'you (hum/male, nonhum) sit down!'.

(1.3) Uvulars: **q, *q°*

CAbx **q* > Bz, Ahch, Tsab *χ́* : Abzh, Sa *χ́* : Ash, Tap *q*

CAbx **q°* > Bz, Ahch, Tsab *χ́°* : Abzh, Sa *χ́°* : Ash, Tap *q°*

Examples:

*q : Bz, Ahch, Tsab *a-x̌ə́*, Abzh *a-x̌ə́*, Sa *a-x̌á*, Ash, Tap *qa* 'head'; Bz, Ahch, Tsab *á-x̌a-ra*, Abzh, Sa *á-x̌a-ra*, Ash *á-qa-ra*, Tap *á-q-ra* 'to pull'; Bz *a-x̌amə́*, Abzh *a-x̌amə́*, Ash, Tap *qamə́* 'fur-coat';

*q° : Bz, Ahch, Tsab *á-x̌°da*, Abzh, Sa *á-x̌°da*, Ash, Tap *q°da* 'neck'; Bz, Ahch, Tsab *á-x̌°a*, Abzh *á-x̌°a*, Ash *á-q°a*, Tap *q°a* 'ashes'; Bz, Ahch *a-x̌°bla-rə́*, Abzh *a-x̌°əblə́*, Ash *q°əblə́*, Tap *q°əmblə́* 'cross-beam of the house'.

(1.4) Glottal stop: **ʔ*

Though Starostin 1978 and Nikolayev and Starostin (NS) reconstruct a glottal stop for Proto-Abkhaz, as a full fledged phoneme this sound is only found in Tapanta, where it corresponds to *q'* in other dialects. The distribution of *ʔ* in native Tapanta vocabulary is limited to pre-, and intervocalic position (beside one case in final position in the interjection of disapproval *jaʔ*), which may indicate that originally it only was a positional allophone of **q'*. Note that on the allophonic level the glottal stop is a usual substitute of *q'* in all Abkhaz dialects. That is why I refrain from reconstructing a glottal stop at least for the Common Abkhaz level.

(2) Affricates

(2.1) Middle affricates

(2.1.1) Plain middle affricates **ʒ́*, **ć*, **ć'* can be reconstructed only on the basis of Bzyp:

CAbx		Bz		Other dialects
**ʒ́*	>	*ʒ́*	:	*ʒ*
**ć*	>	*ć*	:	*c*
**ć'*	>	*ć'*	:	*c'*

Examples:

*ʒ́ : Bz *a-ʒ́-rá*, Abzh, Ahch, Sa *a-ʒ-rá*, Ash, Tap *ʒ-ra* 'to roast'; Bz *a-ʒ́ámj°a*, Abzh *a-ʒ́ámj°a*, Ash, Tap *ʒ́ámʰ°a* 'cheek'; Bz *á-ʒ́ən*, Abzh *á-ʒən*, Sa *á-ʒna-ra* 'winter', Ash *ʒnə//á-ʒən* 'winter' (Kuv), 'autumn' (Aps), Tap *ʒnə* 'autumn';

*ć : Bz *a-ća-rá*, Abzh, Ahch, Sa *a-ca-rá*, Ash, Tap *ca-rá* 'to go'; Bz *a-ćg°ə́*, Abzh, Ahch, Sa, Ash *a-cg°ə́*, Tap *cg°ə* 'cat'; Bz *a-ćx̌ə́raa-ra*, Abzh *a-cx̌ə́raa-ra*, Tap *cqrəʰa-ra* 'to help';

*ć' : Bz *á-ć'a*, Abzh, Ahch, Sa *á-c'a*, Ash, Tap *c'a* 'louse'; Bz *á-ć'aa*, Abzh *a-c'aá*, Ash *c'aá*, Tap *c'ʰa* 'salty'; Bz *a-ć'ə́s*, Abzh *a-c'ə́s*, Ash *a-c'ə́s*, Tap

c'ǝjs 'bird'.

(2.1.2) Labialised middle affricates: **ʒ°, *č°, *ć"*

The affricates **ʒ°, *č°, *ć"* are preserved in all dialects of the Abkhaz group, though in subdialects of Tapanta and Ashkharywa they underwent certain changes, which are demonstrated by the following table. 1Ash designates the speech of the older, and 2Ash — the speech of the younger Ashkharywa generation.

*Reflexes of *ʒ° *č° *ć" in Tapanta and Ashkharywa subdialects*

CAbx	1Ash	2Ash	Tapanta	Psyzh	Kubina	1 Gumlokt	2 Gumlokt
**ʒ°* >	*ʒ°*	*ʒ*	*ʒ°*	*ʒ°*	*ʒ*	*ʒ°*	*ʒ°*
**č°* >	*č°*	*ć*	*č°*	*č°*	*ć*	*č°*	*č°*
**ć"* >	*ć"*	*ć'*	*č"*	*ć"*	*ć'*	*č"*	*ć"*

Examples:

**ʒ°* : SAbx, 1Ash *aʒ°ǝ*, 2Ash *aʒǝ*, Tapn, 1Gum *(z-)aʒ°ǝ*, Psyzh *(z-)aʒ°ǝ*, Kub, 2Gum *(z-)aʒǝ* 'one (hum)'; SAbx *a-ʒ°ʒ°a-ra*, 1Ash *ʒ°aʒ°a-ra*, 2Ash *ʒaʒa-ra*, Tapn, 1Gum *ʒ°ʒ°a-ra*, Psyzh *ʒ°ʒ°a-ra*, Kub, 2Gum *ʒʒa-ra* 'to wash'; Bz *a-ʒ°(a)-ra*, Abzh *a-ʒ°a-ra*, 1Ash *ʒ°a-ra*, 2Ash *ʒa-ra*, Tapn, 1Gum *ʒ°a-ra*, Psyzh *ʒ°a-ra*, Kub, 2Gum *ʒa-ra* 'to vomit';

**č°* : SAbx *a-č°*, 1Ash *č°ǝ*, 2Ash *ćǝ*, Tapn, 1Gum *č°ǝ*, Psyzh *č°ǝ*, Kub, 2Gum *ćǝ* 'bull'; SAbx *a-č°a-ra*, 1Ash *č°a-ra*, 2Ash *ća-ra*, Tapn, 1Gum *č°a-ra*, Psyzh *č°a-ra*, Kub, 2Gum *ća-ra* 'to sleep'; SAbx, 1Ash *a-č°a*, 2Ash *a-ća*, Tapn, 1Gum *č°a*, Psyzh *č°a*, Kub, 2Gum *ća* 'skin, hide, shell';

**ć"* : SAbx *a-ć"a*, 1Ash *ć"a*, 2Ash *ć'a*, Tapn, 1Gum *č"a*, Psyzh *ć"a*, Kub, 2Gum *ć'a* 'apple'; SAbx *a-ć"ǝwa-ra*, 1Ash *a-ć"ǝwa-ra*, 2Ash *a-ć'ǝwa-ra*, Tap, 1Gum *č"ǝw(a)-ra*, Psyzh *ć"ǝw(a)-ra*, Kub, 2Gum *ć'ǝw(a)-ra* 'to cry, weep'; SAbx *a-g°ać"á*, 1Ash *g°ać"á*, 2Ash *g°ać'á*, Tapn, 1Gum *č"a*, Psyzh *ć"a*, Kub, 2Gum *ć'a* 'liver'.

Comment:

The back affricates *ʒ° č° č"* in the speech of the villages Tapanta and Gumlokt are secondary as compared to the similar Common Abkhaz affricates reconstructed on the basis of other material (see 2.2.). The plain middle affricates *ʒ ć ć'* in the subdialects of Tapanta and Ashkharywa are also secondary as compared to the corresponding Bzyp sibilants.

(2.2) Back labialised affricates: *ǯᵒ, *čᵒ, *čʼᵒ

CAbx		Bz	Abzh	TswSa	KhalSa	Ash	Tap
*ǯᵒ	>	*v*	*v*	*v*	*v*	*v*	*ʒ*
*čᵒ	>	*f*	*f*	*f*	*f*	*f*	*c*
*čʼᵒ	>	*pʼ*	*fʼ/pʼ*	*f/pʼ*	*f*	*fʼ*	*cʼ*

Lomtatidze, who first established the correspondence, reconstructs here the middle labialised affricates, but then it becomes unclear where the present-day Abkhaz *ǯᵒ*, *čᵒ*, *čʼᵒ* come from. That is why I follow Starostin in reconstructing here the back sibilants, the absence of which in Common Abkhaz and, as a matter of fact, in South Abkhaz, is structurally unmotivated. In Khaltsys Sadz glottalisation is lost, and in Tswydzhy Sadz *pʼ*, not *f* is a usual reflex of **čʼᵒ* (*f* being only a variant).

Examples:

**ǯᵒ* : SAbx, Ash *á-va*, Tap *ʒa* 'side';

**čᵒ* : SAbx, Ash *f-ba*, Tap *c-ba* 'six', SAbx, Ash *a-fə́*, Tap *cə* 'lightning';

**čʼᵒ* : Bz, Ahch *a-pʼá*, Abzh *a-pʼá//a-fʼá*, TswSa *a-pʼá//a-fá*, KhalSa *a-fá*, Tap *cʼa* 'thin'.

Comment:

Only the second correspondence can be illustrated by more than one example.

(3) Spirants

(3.1) Labiodental spirants: **v*, **f*

I have only a few examples for reconstruction of the spirant **v*, all onomatopoeic by origin. Its voiceless counterpart *f* is found in normal lexicon, but then only in a few roots.

Examples:

**v* : SAbx *a-vər-vər-ħᵒa*, Tap *vər-vər-ħᵒa* '(the sound of) quick turning of sth' (*-ħᵒa* 'saying'); Tap *avva*, Abx *avva-ħᵒa* 'descr. of high tone sounds, produced, for example, by insects'; Tap *qə-vva-l-ra* 'to start talk or weep to much, to do sth incessantly';

**f* : SAbx *a-fa-ra*, Tap *fa-ra* 'to eat', Bz *a-x̌ə-r-ffa-ra*, Tap *qə-r-ffa-ra* 'to cut, trim, shorten (hair, twigs, etc.)' (*x̌ə/qə* 'head', *-r-* caus.); Bz *a-fər-x̌aćʼa*, Tap *fər(-qacʼa)* 'hero' (*x̌aćʼa//qacʼa* 'man'); **fərə* can originally be onomatopoeic, cf. SAbx *á-fər-ħᵒa* 'quickly, swiftly'.

(3.2) Middle spirants

(3.2.1) Middle plain spirants **ź*, **ś* are preserved only in Bzyp, while in other dialects they merged with the front spirants.

Examples:

**ź* : Bz *a-źə́*, SAbx, Ash, Tap *a-zə́* 'for'; Bz *a-źj°á*, SAbx *a-zj°á*, Tap *zh°a* 'illness'; Bz *a-źáźa*, SAbx *a-záza*, Tap *záza* 'clumsy, sluggish';

**ś* : Bz *a-śə́*, SAbx *a-sə́*, Ash, Tap *sə* 'snow'; Bz *a-śə́-ś*, SAbx, Ash *a-sə́-s*, Tap *sə-s* 'lamb'; Bz *śənt"á*, Abzh *sənt"á*, Ash *sənt'á*, Tap *sənč"a* 'this year'.

(3.2.2) Middle labialised spirants **ź°*, **ś°*

Common Abkhaz spirants **ź°*, **ś°* are preserved in Bzyp, Tsabal, Ahchypsy, Tswydzhy Sadz, Ashkharywa, and in part of subdialects of Tapanta. In Abzhywa, Khaltsys Sadz, and in other Tapanta subdialects they merged with the back labialised spirants. In the speech of the younger Ashkharywa speakers they underwent delabialisation.

*1. Reflexes of *ź°, *ś° in South Abkhaz and Ashkharywa*

CAbx	Bzyp	Abzh	Ahch	KhalSa	TswSa	1Ash	2Ash
**ź°* >	*ź°*	: *ź°*	: *ź°*	: *ź°*	: *ź°*	: *ź°*	: *ź*
**ś°* >	*ś°*	: *ś°*	: *ś°*	: *ś°*	: *ś°*	: *ś°*	: *ś*

*2. Reflexes of *ź°, *ś° in Tapanta subdialects*

CAbx	Tapn	1 Psyzh	2 Psyzh	Kub	1Gum	2Gum
**ź°* >	*ź°*	: *ź°*	: *ź°*	: *ź*	: *ź°*	: *ź*
**ś°* >	*ś°*	: *ś°*	: *ś°*	: *ś*	: *š°*	: *ś*

Examples:

**ź°* : Bz, Ahch, TswSa, 1Ash, Tap (Tapn, Psyzh) *ź°-ba*, Abzh, KhalSa, Tap (1Gum) *ž°-ba*, 2Ash, Kub, 2Gum *ź-ba* 'nine'; Bz, Ahch, TswSa *a-ź°*, Abzh, KhalSa *a-ž°*, 1Ash, Tap (Tapn, Psyzh) *ź°ə*, Tap (1Gum) *ž°ə*, 2Ash, Kub, 2Gum *źə* 'cow'; Bz, Ahch *ź°ax̌á*, TswSa *ź°ax̌á*, Abzh, KhalSa *ž°ax̌á*, 1Ash, Tap (Tapn, Psyzh) *ź°aqá*, Tap (1Gum) *ž°aqá*, 2Ash, Kub, 2Gum *źaqá* 'night before yesterday';

**ś°* : Bz, Ahch, TswSa, 1Ash, Tap (Tapn, Psyzh) *ś°a-rá*, Abzh, KhalSa, Tap (1Gum) *š°a-rá*, 2Ash, Kub, 2Gum *śa-rá* 'you (pl.)'; Bz, Ahch, TswSa *a-ś°-rá*, 1Ash, Tap (Tapn, Psyzh) *ś°-ra*, Abzh, KhalSa *a-š°-rá*, Tap (1Gum) *š°-ra*, 2Ash, Kub, 2Gum *ś-ra* 'to swell (of abscess)', 'to ripe (of fruit)'; Bz, Ahch,

TswSa *a-šʷə-x̌-ra*, Abzh, KhalSa *a-šʷə-x̌-ra*, 1Ash, Tap (Tapn, Psyzh) *šʷə-x̌-ra*, Tap (1Gum) *šʷə-x̌-ra*, 2Ash, Kub, 2Gum *śə-x̌-ra* 'to put off (clothes)'.

(3.3) Back labialised spirants **žʷ*, **šʷ*

These sibilants are preserved without alternations in all dialects but in Tapanta, which can be seen from the following table:

*Reflexes of *žʷ, *šʷ in Tapanta subdialects*

CAbx		Tapn		1 Psyzh		2 Psyzh		Kubina		1 Gum		2 Gum
*žʷ	>	*žʷ*	:	*žʷ*	:	*ž*	:	*ź*	:	*ž*	:	*ž*
*šʷ	>	*šʷ*	:	*šʷ*	:	*š*	:	*ś*	:	*š*	:	*š*

Examples:

**žʷ* : SAbx, Ash *žʷa-ba*, Tap: Tapn, 1 Psyzh *žʷa-ba*, Kub *źa-ba*, Gum *ža-ba* 'ten'; Bz, Abzh *a-žʷlar*, Ahch, Ash *a-žʷla-ra*, Tap: Tapn, 1 Psyzh *žʷla-ra*, Kub *źla-ra*, 2 Psyzh, Gum *žla-ra* 'people, nation'; SAbx, Ash *ažʷ*, Tap: Tapn, 1 Psyzh *ažʷə*, Kub *aźə*, 2 Psyzh, Gum *ažə* 'old';

**šʷ* : SAbx *ašʷ*, Ash *šʷə*, Tap: Tapn, 1 Psyzh *šʷə*, Kub *śə*, 2 Psyzh, Gum *šə* 'door'; SAbx *a-šʷa-rá*, Ash *šʷa-rá*, Tap: Tapn, 1 Psyzh *šʷa-rá*, Kub *śa-rá*, 2 Psyzh, Gum *ša-rá* 'to be afraid'; SAbx, Ash *šʷ-k'ə*, Tap: Tapn, 1 Psyzh *šʷ-k'ə*, Kub *ś-k'ə*, 2 Psyzh, Gum *š-k'ə* 'hundred (nonhum)'.

(3.4) Voiced pharyngeal spirants

(3.4.1) Plain voiced pharyngal **ħ* is preserved in Tapanta and in (the speech of the older generation of) Ashkharywa. In the latter it is used indiscriminately together with its allophone *ā*. In other dialects this sound was phonetically modified into diphthong *aa* (underlyingly *ħa*, or *aħ*, see Chapter II, in 1.5.).

Examples:

**ħ* : SAbx *aa-bá*, Ash *ā-ba//aħ-ba*, Tap *aħ-ba* 'eight' (nonhum); SAbx *aa-ʒ/za-ra*, Ash *ā-za-ra*, Tap *ħ(a)-za-ra* 'to bring up, rear, raise'; SAbx *áamta*, Ash *āmta*, Tap *ħamtá* 'time'.

(3.4.2) Labialised voiced pharyngal **ħʷ* is found only in Tapanta and Ashkharywa, while in other dialects it was transformed into a labiopalatal spirant *jʷ*.

Examples:

*ĥ° : SAbx *j°-ba*, Ash, Tap *ĥ°-ba* 'two (nonhum)'; SAbx *a-j°-ra*, Ash, Tap *ĥ°-ra* 'to run'; SAbx *a-j°nə*, Ash *ĥ°(ə)nə*, Tap *ĥ°na* 'house, home'.

Irregular correspondences

These are not numerous. I will deal here more with the irregularities between Abkhaz and Tapanta than with irregularities within South Abkhaz (for these cf. BD: 94-133) or Tapanta themselves.

(1) *š´ : s*

(a) Bz *a-lab-č'ʼasa*, Abzh *a-lab-č'ʼaš´* 'little log';

(b) SAbx *a-k°č'ʼəš´*, Tap *k°č'ʼəs* 'chicken'; the plural form of the word (SAbx *k°č'ʼ-ara(-k°a)*, Tap *k°č'ʼ-ara*) proves that SAbx *-š´* is the result of assimilation by the preceding *č'ʼ* of the usual diminutive suffix *-s* (< CAbx **-śə* 'small, little'), regularly replaced by *-ara* in the plural, cf. Bz *a-ʒ́ə-ś* 'goatling', pl. *a-ʒ́-ara*, *a-ć'ə-ś* 'bird', pl. *a-ć'-ara(-k°a)*, etc. Tap *-s* is therefore a regular reflex of CAbx **ś*.

(2) The interrogative-relative particle *š(ə)* in all dialects of the group corresponds to *ś/ź(ə)* in Bzyp (though some Bzyp isolects also have *š(ə)* as a main variant). I will discuss the possible explanations of this irregularity later, while dealing with the Abkhaz-Circassian correspondences.

(3) The finite dynamic verbal endings **-t'ə* and **-p'ə* show different levels of weakening in the dialects:

(a) CAbx **-t'ə* > SAbx *-t'* : Ash *t'/ø* : Tap *d* — SAbx *s-ca-j-t'*, Ash *s-ca-j(-t')*, Tap *s-ca-d* 'I went';

(b) CAbx **-p'ə* > SAbx *-p'* : Ash *-p'* : Tap *b* — SAbx *s-ca-p'*, Ash *s-ca-p'*, Tap *s-ca-b* 'I will go'.

(4) Polysyllabic compounds (often containing sibilants) show tendencies to assimilations, dissimilations, or metathesis.

(a) 'year' : Bz *a-śək°ś//a-šk°ś*, Abzh *a-šək°s*, Ash *šək°sa*, Tap *sk°šə* < **śə-k°šə* (cf. **śə-n-t°a* 'this year');

(b) 'ant' : Bz *a-śəśk'(l)amś//a-šəśk'(l)amś*, Abzh *a-šəšk'ams*, Bat (Sam) *a-šəšk'alams*, Ash *čk'(ə)lams*;

(c) 'mole' : Bz *a-ć°əsləmp'ər* (Dzh), *a-ć°əmsa/ərp'əl* (Xu, Jash, Dzh), *a-ć°ləmsap'ər* (Zw), *a-ć°əmərsap'əl* (Kld), *a-čəmsərp'əl* (Lyx), *a-ć°əslamp'ər*, *a-ć°lasamp'ər* (Dirr 18), *a-ć°lamsərp'əl*, *a-čləmsərp'ər*,

a-šlamsarp'ər, a-cˀləmsarp'ər, a-cˀəlsəmp'ər (BD 103), Abzh: *a-cˀəslamp'ər, a-šəslamp'ər* (BD 103), *a-cˀəšlamp'ór* (Ku) 'mole';

(d) 'lizard' : Bz *ajanćʷəš//ajˀənćʷəš*, Abzh *ajnćˀəš*, Tap *arcəš* (BD 113);

(e) 'wasp' : Bz *a-x̌pšənćˀay´, a-x̌pšəmćˀay´, a-x̌əpšəćˀay´*, Abzh *a-šx̌ərćˀay´*;

(f) '(bone-)marrow': Bz *a-bləjˀšə//a-bəljˀəšə//a-bjˀalšə//a-bjˀəlašə*, Abzh *a-bajˀlaša*, Tap *bəfiˀlaša* (BD 103);

(g) 'rough wax' : Bz *a-bəyćˀəmsə//a-bayćˀləmsə//a-bayćˀəmsə*, Abzh *a-bəyćˀləmsa* (BD 103);

(h) 'threshold' : Bz *a-šˀx̌amś//a-śx̌amšˀ*, Abzh *a-šˀx̌əmsa*, Tap *šˀqəmsa* < **ašˀə-qa-mśa*;

(i) 'bullfinch' : Bz *a-čˀəbg(ˀ)ə*, Abzh *a-kʷəčˀba* (AB II: 478, BD 80).

(5) In few cases the uvular glottalised stop in one dialect corresponds to velar stop in another dialect, and the original sound is not clear:

q' : *k'* : SAbx *a-q'armá*, Ash *k'armá* (Aps), *q'armá* (Kuv) 'hop', Tap *k'arma* 'snowball tree';

qʷ : *kʷ* : Bz *a-ćˀkʷənś'a-ra*, Abzh *a-ćˀqʷənś'a-ra* 'to husk nuts'; SAbx *a-kʷəbrə*, Tap *qʷəbər* 'mosquito'.

(6) *ħˀ* > *qʷ* : Bz *a-pħˀa-śa*, Ash, Tap *ħˀa-sa*, Sa *a-qʷa-sa* 'alycha (a kind of damson)'.

(7) Labialised vs. non-labialised:

(a) SAbx *a-šˀqʷə*, in Abzh subdialects *a-šˀqʷə//a-šˀq'ə*, cf. Ash *šˀaq'a/ə*, Tap *šˀʔa* 'book' < **šˀaq'a*; labialisation of *q'* is caused by influence of *šˀ*;

(b) Bz *a-pśqʷə//a-pśq'ə*, Abzh *a-psq'ə* 'rudder', 'helm'; Bzyp is probably preserving the original labialisation;

(c) Bz *a-čˀəmsqʷəl*, Abzh *a-čˀəmsq'əl* 'big wooden spoon'.

(8) Glottalised vs. non-glottalised:

(a) Bz *a-šat'a-ra*, Abzh *a-šata-ra* 'to spare, show mercy' (< Circ, cf. Ad *šata* 'to try out, check');

(b) SAbx *a-šˀta-la-ra*, Ash, Tap *a-šˀt'a-l-ra* 'to lie (down)';

(c) Bz *a-c(ˀ)əγ*, Abzh *a-cəγ*, Tap *cˀəγ* 'marten';

(d) Abzh *a-cˀx̌*, Bz *a-c(ˀ)x̌*, Tap *c(ˀ)x̌ə* 'night';

(e) Bz *a-ćən/mx̱ˀ-ra*, Abzh *a-cən/mx̌ˀ-ra*, Bat (Angis) *a-mcx̌ˀ-ra*, Ash *a-cˀənqˀə*, Tap *cənqˀə* 'instead, in place of'.

In (a) Bzyp and in (c) Bzyp and Tapanta have secondary glottalisation, while the cases in (b), (d), (e) are unclear.

(9) Affricate vs. spirant:

(a) SAbx *a-mza*, Tap *mzə*, Ahch, Sa, Ash *a-məʒ* 'moon, month' (cf. Ub *məʒa* 'id.');
(b) SAbx *a-x̌(ə)ʒ*, Ash *x̌əzə*, Tap *x̌zə* 'name';
(c) Bz *a-raʒnə*, Abzh *a-raznə*, Ash *razna*, Tap *rəzna* 'silver';
(d) Bz *a-ʒla//a-zla* 'sweet', Abzh *a-zla* 'bitter';
(e) SAbx *aa-ʒa-ra*, in Bzyp subdialects *aa-za-ra*, Ash *aa-za-ra*, Tap *ĥa-za-ra* 'to bring up, raise, grow' (containing root *ʒa* 'to reach', cf. Ub *-ʒa* 'to reach');
(f) SAbx *a-pxəʒ//a-pxəz*, Tap *pxəz* 'dream'.

It seems that in most of the cases the affricate is original, which can partly be proved by external (in this case Ubykh) evidence.

(10) Back vs. front/middle affricate:

(a) SAbx *aa-(n-)č'a-s-ra*, Tap *ĥa-č'a-s-ra* ~ Bz (isol.) *aa-n-c'a-s-ra* 'to make a stop, to stay';
(b) SAbx *a-č'arp'ən* ~ SAbx (isol.) *a-c'arp'ən*, Tap *c'arp'əna* 'flute';
(c) SAbx *a-č'əc*, Tap *č'əc* 'new' ~ Bz *a-č'əć//a-ć'əć*;
(d) SAbx *a-č'ša* ~ Bz *a-č'ša//a-c'ša*, Tap *c'ša* 'female (of animals)' (< **č'a-ša*).

In the last three cases the back affricate is original, as it comes from **č'a* 'new, young'. The same is true for the first case, in which the preverb *č'a-* comes from *č'a* 'mouth'.

4. THE STRUCTURE OF THE ROOT MORPHEME

The main structural models of the unanalysable roots in Common Abkhaz are as follows: *VC(C)V, (C)CV, CVC, CVC(C)V.*

Examples:

aCa : **aba* 'father', **ada* 'frog', **aga* 'fool', **aqa* 'night', **ača* 'other', **ač'a* 'glass, goblet', **ač'a* 'quail', **aẑ°a* 'word', **až'a* 'hare', **aśa* 'sword';

aCə : **abə* 'castrated ram', **ak°ə* 'to be', **aʃ°ə* 'one (hum)', **aẑ°ə* 'old', **aś°ə* 'the North Caucasus plain', **aš°ə* 'cheese', **aĥə* 'prince', **aĥ°ə* 'back';

aCCa : **abĥa* 'skinny', **abĥa* 'fortress', **apśa* 'bayonet', **ag°qa* 'Circassian', **aɣ°ra* 'bridle', **amĥa* 'handle', **ajta* 'again', **ajk°a* 'trousers';

aCCə : **apśə* 'Abkhazian', **apš'ə* 'big, strong, powerful', **apš'ə* 'red', **arpə* '(male) youth';

Ca : **ba* 'you (hum/fem)'; 'to see', **šˀa* 'to be afraid', **šʼa* 'blood', **qa* 'head', **kʷa* 'bosom', **čʼa* 'mouth', **ra* 'nut', **la* 'dog', **ca* 'granary', **pa* 'son', **kˀa* 'rain';

Cə : **šˀə* 'hundred', **ʒə* 'water', **qˀə* 'share, portion', **tˀə* 'full', **tʼə* 'owl', **kˀə* 'top, roof', **kʼə* 'to catch, take', **śə* 'snow', **šʼə* 'to kill', **žʼə* 'meat';

CCa : **tˀħˀa* 'to blow (by mouth)', **pħa* daughter', **rqa* 'plain, valley', **šʼqa* 'mountain', **γra* 'speckled', **psa* 'fir-tree', **pša* 'wind', **tśˀa* 'narrow';

CCə : **śˀtə* 'flower', **žžə* 'to flow (of water)', **ššə* 'to complain', **psə* 'soul', **pšʼə* 'four', **mxə* 'cornfield', **źźə* 'to bellow', **mćə* 'lie', **mčʼə* 'timber';

CaCa : **baga* 'fox/jackal', **baća* 'twig used for wattling', **tʼatʼa* 'soft, mild', **čada* 'donkey', **zakˀa* 'back', **matˀa* 'clothes', **γˀaγˀa* 'scum, film';

CaCə : **lakʷə* 'fairy-tale', **raxˀə* 'cattle', **jašə* 'squirrel', **qamə* 'fir-coat', **maħˀə* 'son-in-law', **šˀanə* 'Svan', **matə* 'snake', **mačʼə* 'little', **lasə* 'light';

CəCa : **tʷəħˀa* 'horn', **nəqʷa* 'to walk', **nəxa* 'icon; vow', **šəša* 'fat', **gəla* 'to stand', **kəta* 'village', **kʼəkʼa* 'nipple, teat', **čʼəčʼa* 'to laugh';

CəCə : **kˀənə* 'flax', **gˀərə* 'needle', **śˀəśˀə* 'to whistle', **šəšə* 'to wattle', **γ(ʼ)əčʼə* 'to steal', **dədə* 'thunder', **təjə* 'to sell', **təɟə* 'house', **šˀəbə* 'hoar-frost';

CaCCa : **gˀarta* 'herd, flock', **rapħa* 'lungs', **damra* 'grave', **kamsa* 'shaggy', **qʼarma* 'hop', **cʼapxa* 'key, lock', **čʼamħa* 'maple', **čʼʼapšʼa* 'to guard'.

The most usual model is *CV*, the *C* being mostly an obstruent (ca. 47 roots; *C* as a resonant is found in approximately 5 roots). On the other hand, resonants are usual in clusters (both as the first or the second component). Only in cases of *CV* and in many cases of *CVCV* is it safe to assume that we are dealing with historically uncompounded roots. Other roots may well be the result of derivation or composition (cf. especially the *CaCCa* type). Roots like **ššə-* 'to complain' may have resulted either from expressive gemination of the root consonant (**šə* > **ššə*), or from expressive duplication of the whole root with subsequent syncope of the first (unstressed) vowel (**šə* > **šəšə* > **ššə*). Roots like **tʼatʼa* 'soft, mild' represent reduplication of the *CV*-root.

Other root models are not common. They represent mainly either compounds or loans:

aCəCa : **arəma* 'left', **ajəba* 'orphan', **ajəšˀa* 'three-legged table', **aćʷəća* 'glass; crystal';

aCCaC : **abžʼar* 'weapon(s)' (< Geo), **abragʼ* 'abrek, brigand' (< Circ), **ajnar* 'Ajnar' (mythological smith);

aCCəC : **adgʾəl* 'land' (< Geo), **agməg* 'ugly', 'silly' (< Oss);
aCCəCa : **apšˇəma* 'host, master of the house' (< Oss), **ardˇəna* 'blackbird', **arćəna* 'hen', **arx̌ʾəna* 'thrush', **ampʾələ* 'ball';
aCCCa : **ajmsa* 'to sneeze', **ajmħa* 'shoes', **ajmħˇa* '(to) cough';
aCCCə : **ajmsə* 'felt boots', **ajmx̌ˇə* 'beads';
CəCCa : **təbħa* 'broad', **ləmħa* 'ear', **nəmħˇa* 'sheaf of straw', **rəcħa* 'poor';
CəCCə : **kʷəmźˇə* 'Caucasian coat', **qˇəšˇə* 'medicine, remedy', **qˇəblə* 'beam over the hearth', **qʾərqʾə* 'throat', **bərgə* 'old'.

Apart from a small group of loans (e.g. **abžʾar* < Geo, **abragʾ* < Circ, **adgʾəl* < Geo, **agməg* < Oss), native Common Abkhaz roots, just as in other sister-languages, ended in open syllables only.

*Roots with initial *a- < *aj-/*ja- (VCV, VCCV, VCCCV)*
A vocalic anlaut is not characteristic for Circassian and Ubykh, but in Common Abkhaz it is, surprisingly, quite common. In part of the roots with the initial segment *aj-* the latter may be regarded as a desemanticised reciprocal prefix (**ajkˇa* 'trousers', **ajća* 'to be distorted', **ajmsa* 'to sneeze', **ajmsə* 'felt boots', **ajmx̌ˇə* 'beads', **ajmħa* 'shoes', **ajmħˇa* 'cough'). In Tapanta *j-*, or the whole segment *aj-*, is usually deleted, cf. Tap *ać-k'-ra* 'to change to worse', *amsa-ra* 'to sneeze', *amsə* 'felt boots', *mx̌ˇə* 'beads', *amħa* 'shoes', *amħˇa* 'cough'. It cannot be ruled out that in some other cases the initial *j* may be epenthetic (to avoid the vowel anlaut). Another possibility for the initial *aj-* is that it is a result of metathesis, i.e. *aj-* < **ja-*.

Apart from the supposedly reciprocal character of *aj-* in the lexemes mentioned above, there are others for which this explanation is not obvious:
(1)
Abzh *ajaħˇa*, Tap *aħˇ* 'wooden trough';
Abzh *ajgˇəšˇ*, Tap *gˇašˇ* 'small axe';
Abzh *ajkʷaγa*, Tap *kʷaγa* 'small axe'.

(2) In the majority of cases South Abkhaz dialects preserve the segment *aj-* better than Tapanta, but sometimes the reverse is observed:
Bz *aʒa*, Tap *ajʒa* 'raw, fresh, unripe';
SAbx *aša*, Tap *ajša* 'bitter'.
(3) In other instances both South Abkhaz and Tapanta retain the initial **aj-* :
SAbx *aj(ə)šˇa*, Tap *ajšˇa* 'three-legged round table';

SAbx *ajk°a*, Tap *ajk°a* 'trousers';
SAbx *ajx̌a*, Tap *ajx̌a* 'iron'.

5. COMMON ABKHAZ CONSONANT CLUSTERS

On the level of the word the make-up of Abkhaz clusters differs substantially from that of Circassian: as in Ubykh, they may contain more than three components (sometimes up to six). Abkhaz clusters may contain combinations of segments with different laryngeal features: voiced, glottalised, voiceless, whereas in Circassian and Ubykh all elements of a cluster are characterised by one and the same laryngeal feature. But on the level of the morpheme Abkhaz, and especially Common Abkhaz, shows remarkable parallels to Circassian and Ubykh both with regard to the number of segments constituting a cluster, and to the uniformity of their laryngeal features. The exceptions to this pan-West Caucasian rule are not numerous, and I will discuss them below.

The maximum number of consonants in a cluster on the morpheme level is, as in Circassian, three and, in unique cases, four, though the most usual are bi-consonantal units. Unlike Circassian, many Common Abkhaz clusters arose from expressive gemination, or from reduplication of the root with subsequent elision of the vowel.

In principle, correspondences of consonants in clusters are practically identical with those of single consonants, though there are some exceptions.

Examples of one-to-one correspondences:

CAbx	Bz	Abzh	Ash	Tap	
**t°ħ°*	> *t°ħ°*	: *t°ħ°*	: *tħ°*	: *č°ħ°*	— SAbx *a-t°ħ°a-ra*, Ash *a-tħ°a-ra*, Tap *a-č°ħ°a-ra* 'to blow (by mouth)';
**mś*	> *mś*	: *ms*	: *ms*	: *ms*	— Bz *a-mśa*, Abzh *a-msa*, Ash, Tap *msa* 'corn, callosity, horn substance';
**š́q*	> *š x̌*	: *š x̌*	: *š́q*	: *š́q*	— Bz *a-š x̌a*, Abzh *a-š x̌a*, Tap *š́qa* 'mountain', etc.

Some examples of Common Abkhaz clusters which appeared due to expressive gemination:

**ĥ°ĥ°* : **bəĥ°ĥ°ə* 'to bellow (of bulls, cows)';
**g°g°* : **g°g°a* 'noisily, producing noise';
**ħ°ħ°* : **ħ°ħ°a* 'to shout, yell' (cf. **ħ°a* 'to speak').

Irregular correspondences in clusters

One of the most common phenomena is the elision of a component of a cluster.

(1) Cases with the first component of the cluster lost:

bž : *ž* — Bz *a-bžaħ°a-ra*, Abzh *a-žaħ°a-ra*, Tap *žaħ°a-ra* 'to ruminate';

bγ : *γ* — SAbx *a-bγaγa-ra* 'to reel, stagger', Tap *bγabγa-ra* 'to trot (of horse)';

bħ° : *ħ°* — SAbx *abj°a*, Ash *ħ°a-t'a*, Tap *ħ°a* '(red) copper';

ps : *s* — SAbx *a-psasəj-ra* 'to start melting (of snow)', Tap *sasəj-ra* 'to melt';

pš´ : *š´* — Abzh *a-ǯapš´a-ra*, Bz *a-ǯaš´a-ra* 'lactation';

pǯ´ : *ǯ´* — SAbx *pǯa´//ǯ´a* prev. 'back(wards)';

pħ° : *ħ°/q*ʷ — Bz *a-pħ°aśa*, Sa *a-q*ʷ*asa*, Ash, Tap *ħ°asa* 'alycha, kind of damson';

rt' : *t'* — SAbx *q'ət'*, Tap *q'ərt'* 'descr. of a sound produced by man'.

(2) Cases where the second element is deleted are not numerous:

SAbx *a-bər-ra*, Tap *bərt-ra* 'to stagger, reel';

Bz *a-bać°//a-brać°*, Abzh *a-bać°* 'medlar';

Abzh *a-t*ʷ*γ°ərpsa-ra*, Bz *a-t*ʷ*ərpsa-ra* 'to grow thick, bush out'.

(3) Cluster CC_1C_2 —> CC_2:

SAbx *a-ǯ'əmš'ə*, Ash *ǯ'əmš'ə*, Tap *ǯ'əmš'ə* (AbR 211, Ps, Gum) vs. the older form, preserved in Tapanta isolects (Gum, Kara-Pagua) *ǯ'əmpš'ə* < CAbx **ǯ'əm-pš'ə* 'onion' (**pš'ə* 'red').

(4) In clusters containing elements with different laryngeal features assimilation or, on the contrary, dissimilation often takes place:

bq' : *p(')q'* — Abzh *a-p'q'a-ra*, Bz *a-pq'a-ra*, Tap *p'q'a-ra//bq'a-ra* 'to beat, strike, slap' < **bəq'a* ?;

bg : *p'g* — Abzh *a-bga-ra//a-pga-ra*, Tap *bga-ra*, Bz *a-p'ga-ra* 'to fall in/on, crash down, collapse' < **p'əga* ?;

bk' : *pk'* — Tap *bk'-ra* 'to pinch', SAbx *a-pk'-rá* 'to pinch the edge of cook' < **bək'ə*;

bč'' : *p'č''* — Abzh *a-bč''ə*, Bz *a-p'č''ə*, Ash *bč''ə//p'č''ə*, Tap *bč''ə//p'č''ə* 'measles' < **bəč''ə*; SAbx *a-q*ʷ*əbč''a* 'neat, orderly, tidy', Tap *q*ʷ*əp'č''//ʔ°əp'č''* 'clear, certain' < **q*ʷ*əp'č''a*;

bħ° : *pħ°* — Bz *a-pħ°a//a-bħ°a*, Abzh *a-bħ°a* 'prune' < **pħ°a*;

bč´ : *pč´* — Bz *a-bč´araħ//a-pč´araħ* 'the leader of hunters', Tap *pč´arəħ*

'good shot, marksman' < **pčʼarəħə*;

rd : *rt* — Bz *a-pśard*, Abzh *a-psard* 'scissors for cutting the sheep wool', Tap *psart* 'scissors' < **pśardə*;

γs : *x̌s* — SAbx *a-tʼaγsa*, Tap *tʼax̌sa* 'weak, not strong' < **tʼax̌sa*;

x̌d : *x̌t* — Abzh *a-jax̌da*, Bz *a-jax̌ta* 'the back knee of animal';

śtγ/śdγ/źdγ : *stx̌* — Bz *a-kʷaśdγa//a-kʷaźdγa//a-kʷaśtγa*, Abzh *a-kʷastγa//a-kʷastx̌a*, Tap *a-kʷastx̌a* 'fire-brand'.

At least three of the above examples are loans, cf. Ad *ʔʼəpʼčʼ(ă)*, HakSh *qʷəpʼčʼ(ă)*, Kab *ʔʼəpʼśʼ* 'clear, certain' (CCirc **qʷəpʼčʼa*), Ad *pśarəħ* 'young man serving the older men', Kab *pšarəħ* 'hunter's bag' (CCirc **pčʰa-rə-ħa*), Bzh *tʼax̌sa* 'vulnerable, weak' < CCirc **tʼasx̌a* (in Kabardian 'shaky, not solid'), Ad *q̄ʼantx̌ə*, Kab *qʷantx̌ə* (CCirc **q̄ʼantx̌ə*) 'spoil, trophy'. The fifth and the seventh examples show voicing in South Abkhaz (**pčʼ* > *bčʼ*, **x̌s* > *γs*).

(5) In clusters with two glottalised segments the first one often tends to be deglottalised, which is especially characteristic for Ashkharywa and Tapanta:

(a)

kʷtʼ : *kʼtʼ* — SAbx *a-kʷtʼə*, Ash, Tap *kʼtʼəw* 'hen';

kʷčʼʼ : *kʼčʼʼ* — SAbx *kʷčʼə-šʼ*, Ash, Tap *kʼčʼə-s* 'chicken';

cʼkʼ : *ckʼ* — Abzh *a-cʼkʼə*, Bz *a-c(ʼ)kʼə*, Ash *ackʼə* 'dress', Abzh *a-cʼkʼar*, Bz *a-ckʼar* 'edge'; cf. also Bz *aćʼkʼ(ʼ)əś//aćkʼ(ʼ)əś*, Abzh, Tap *a-cʼkʼəs//a-ckʼəs* 'than';

čʼkʷ : *čkʷ* — SAbx *a-čʼkʷən*, Ash *a-č(ʼ)kʷən*, Tap *čkʷən* 'boy, youth; small'.

(b) Deglottalisation occurs also before voiceless fricatives:

kʼš : *kš* — Abzh *a-kʼša-ra*, Bz *a-k(ʼ)ša-ra*, Tap *kša-ra* 'to strike';

cʼx̌ : *cx̌* — Abzh *a-cʼx̌*, Bz *a-c(ʼ)x̌*, Tap *c(ʼ)x̌ə* 'night'.

(c) Cf. also deglottalisation on morpheme boundaries: SAbx *la-kʼə-cʼa*, Tap *la-k-ca* < **la-kʼə-cʼa* 'eye-socket'(**la* 'eye', **kʼə* 'to hold, take', **cʼa* 'bottom'), Abzh *a-la-kʼ-ta*, Ash *la-kʼ-ta*, Bz *a-la-k(ʼ)-ta*, Tap *la-k-ta* 'eye-socket' (**la* 'eye', **kʼə* 'to hold, take', **ta* 'location'), Tap *kačkʼə* 'naughty, mischievious', *kačkʼ-ra* 'to be naughty' < ? **kačʼə*, cf. SAbx *a-kačʼaa* 'wood-goblin', **kʼə* 'to hold, catch, take'.

(6) Affricatisation:

škʼ* > *čkʼ* — SAbx *a-škʼəl*, Tap *škʼla*, Ash *čkʼəla* 'stirrup' (šʼa* 'foot', **kʼəla* 'hole, opening');

**šx̌* > *čx̌* — SAbx *a-šx̌a*, Tap *šx̌a*, Ash *čx̌a* 'bee'.

(7) Metathesis:

rd : *nd* — SAbx *a-wardən*, TuAbx *a-wandər*, Tap *wandər* 'cart' < CAbx **wardən* (< Oss);

rj : *jr* — SAbx *a-marja* ready', Sa, Tap *majra* 'easy';

jk˚ : *k˚aj* — SAbx *ajk˚a*, Ash *k˚aj-ćʷa*, Tap *k˚aj-čʷa* 'dark, black', but cf. Tap *mɣ-r-ajk˚a* 'blackberry', lit. 'the black thorn' (*mɣə* 'thorn', *-r-* connective).

Cf. also metathesis of morphemes: Bz *a-k˚-ć˚*, Abzh *a-ć˚-k˚a* 'top, head (of tree, mountain)', Abzh *a-kʼanc'əc'əra*, Ash *kʼanc'əra*, Tap *c'ənkʼra* 'wart', Bz *a-g˚ə-ħ˚-pə*, Abzh *a-g˚ə-p-ħ˚ə* 'bosom, breast', Bz *a-x̌-pəsta-ra*, Abzh *a-x̌ə-r-pasta* 'to disappear', Bz *a-x̌-s(m)aqʷ*, Abzh *a-x̌ə-msaqʷ* 'block (to sit on)', Bz *a-ʒ-j˚ə-r-ra*, Abzh *a-ʒə-r-j˚-ra*, Tap *ʒə-r-ħ˚-ra* 'to listen', Abzh *a-x̌aħ˚*, Ash, Tap *ħaq˚ə* < CAbx **ħa-q˚ə* 'stone'.

(8) *PS* > *mS*

A characteristic phonetic phenomenon is the shift of the initial bilabial obstruent of a cluster with a final spirant to a homorganic resonant. This process should be taken into consideration when considering West Caucasian sound correspondences as well.

bž´* > *mž´* : Bz *a-g˚əmž́ać́ʷ//a-g˚əmž́ać́ʷ*, Abzh *a-g˚əmž́ać́ʷ* 'chisel' (g˚ə* 'heart, centre', **bž́a* '(in) between', **ć́ʷa* 'to break');

ps* > *ms* : SAbx *a-qʼə/amsar* 'rubbish' < **qʼə-psa-r* (qʼə* 'dirt, excrement', **psa* 'to throw around, pour', *-r* nominal suf.);

pš* > *mš* : Abzh *a-kʼapš*, Bz *a-kʼamš* 'crooked, squint' (kʼə* 'crooked', **pšə* 'look');

pʼx̌* > *mx̌* : Abzh *a-šʼap'x̌əc*, Ash *šʼap'x̌əsa*, Tap *šʼamx̌əc* 'nail, claw' (šʼa-pʷ-x̌ə-śa*);

**px̌´* > *mx̌´* : Bz *a-px̌´ənʒa-x̌//a-mx̌´anʒa-x̌*, Abzh *a-px̌´anʒa-ra-x̌* 'part of stomach of ruminant animals';

**pħ* > *mħ* : SAbx *a-r(ə)pħa*, Tap *rapħa*, Ash *a-ramħa* 'lungs';

**nps* > *ms* : SAbx *a-j˚əmsag*, Ash *ħ˚əmsarga*, Tap *ħ˚əmsaga* 'besom, broom' (< **ħ˚əna* 'house, home', **psa* 'to sweep', *-r-* connective, **ga* instr. suf.). The etymologically transparent Bzyp form *a-j˚nəpsag* is attested in U 69;

*$p^{\circ}q$ > *mq* : Abzh *a-šʹamxə*, Ash, Tap *šʹamqa* 'knee' < **šʹa-p*$^{\circ}$*ə* 'foot', **qa* 'head'.

(9) Epenthetic sounds

The most usual epenthetic sounds are the resonants *m*, *n*:

m : SAbx *a-pəlgdə*, Tap *pləmgdə* 'thigh (-bone, femur), hip'; Bz *a-x̌ažləkʹ*, Abzh *a-x̌amžləkʹ* 'kiddy'; Abzh *a-x̌*$^{\circ}$*əblə*, Ash *q*$^{\circ}$*əblə*, Tap *q*$^{\circ}$*əmblə* 'cross-beam of the house'; Bz *a-x̌s(m)aq*$^{\circ}$, Abzh *a-x̌əmsaq*$^{\circ}$ 'block (for sitting)' (< **qə* 'head', *sa* 'to cut', **q*$^{\circ}$*ə* 'bent'); Bz *a-žʹ*$^{\circ}$*əjʹ*$^{\circ}$*šʹ*$^{\circ}$*aqʹa*, Abzh *a-žʹ*$^{\circ}$*əjʹ*$^{\circ}$*šʹ*$^{\circ}$*aqʹa*// *a-žʹ*$^{\circ}$*jʹ*$^{\circ}$*əmšʹ*$^{\circ}$*aqʹa*, Ash *a-źʹ*$^{\circ}$*hʹ*$^{\circ}$*əmsaqʹa*, Tap *žʹ*$^{\circ}$*hʹ*$^{\circ}$*əmsaqʹa* 'shoulder-blade'; Ash *šʹamcʹa*, Tap *šʹacʹa* 'flint', Bz *a-mckʹla-ś-ra* 'to peck' (**cə* 'tooth', **kʹəla* 'hole', **śə* 'to strike');

n : Abzh *a-qʹantʹaz*, Tap *qʹatʹamaz* 'naked'; Abzh *a-x̌*$^{\circ}$*a(n)ga*, Tap *x̌*$^{\circ}$*aga* 'shadow, silhouette'; SAbx *a-q*$^{\circ}$*ənžʹ*, Tap *q*$^{\circ}$*əžʹ* 'rough remnants of straw'; SAbx *a-q*$^{\circ}$*anda*, Tap *q*$^{\circ}$*ada* 'warm (of liquid)'; Abzh *a-šʹanc'a*, Tap *šʹacʹa* 'flint'.

(10) Alternation of segments in clusters

This type of irregularities occurs mainly with resonants:

mćʹ ~ *nćʹ* : Bz *a-g*$^{\circ}$*amćʹ*//*a-g*$^{\circ}$*anćʹ*, Abzh *a-g*$^{\circ}$*amcʹ* 'hot-tempered'; Ash *šʹamcʹa*, Bz *a-šʹanćʹ(a)*, Abzh *a-šʹancʹa* 'flint';

mžl ~ *mžr* : Abzh *a-x̌amžləkʹ*//*a-x̌amžrəkʹ* 'kiddy';

ntx̌ʹ ~ *rtx̌ʹ* : Abzh *a-jʹ*$^{\circ}$*antx̌ʹ*, Tap *ħʹ*$^{\circ}$*artx̌ʹ* 'very dry, dried up';

ngʹ ~ *rgʹ* : Abzh *a-gʹangʹaš*, Bz *a-gʹangʹaš*//*a-gʹargʹaš* 'insidious, cunning (man)';

ngʹar ~ *rgl* : SAbx *a-psa/əngʹarəj*, Tap *psərgla* 'anvil';

nk$^{\circ}$ ~ *mk*$^{\circ}$ ~ *lk*$^{\circ}$: Bz *a-psənk*$^{\circ}$*a*//*a-psəmk*$^{\circ}$*a*, Abzh *a-psənk*$^{\circ}$*a*//*a-psəlk*$^{\circ}$*a* 'bumble-bee';

nq$^{\circ}$ ~ *mq*$^{\circ}$: Bz *a-ćən/mx̌*$^{\circ}$*-ra*, Abzh *a-cən/mx̌*$^{\circ}$*-ra*, Bat (Angis) *a-mcx̌*$^{\circ}$*-ra*, Ash *a-cʹ*$^{\circ}$*ənq*$^{\circ}$*ə*, Tap *cənq*$^{\circ}$*ə* 'instead, in place of';

lkʹ ~ *rkʹ* : Bz *a-kʹarkʹalamšʹ*$^{\circ}$//*a-kʹalkʹalmšʹ*$^{\circ}$ 'kind of small lizard';

tx̌ ~ *tħ* : Bz *a-q*$^{\circ}$*atħa*, Abzh *a-ħ*$^{\circ}$*atx̌a*, Tap *q*$^{\circ}$*atx̌ə* 'trophy, booty' < Circ, cf. Kab *q*$^{\circ}$*entx̌*, Adyghe *q*$^{\circ}$*antx̌ə* 'id.';

žćʹ$^{\circ}$ ~ *γćʹ*$^{\circ}$: Abzh *a-žćʹ*$^{\circ}$*a*, Bz *a-γćʹ*$^{\circ}$*a* 'spittle'.

Structure of Consonant Clusters in Common Abkhaz

Apparently, the structure of Common Abkhaz clusters, as compared to the modern Abkhaz dialects, was closer to that in Common Circassian and Ubykh, though even the modern dialects preserve, on the whole, the same tendencies.

Initial Clusters

(1) Two-segment clusters

(1.1) Obstruent as the first element

(1.1.2) Obstruent stop plus obstruent

The most common clusters of this type have a bilabial stop as the first component with a following obstruent stop/affricate (PT) or fricative (PS):

(a) clusters PT			*(b) clusters PS*	
voiced T	voiceless T	ejective T	voiced	voiceless
	pt		*bz*	*ps*
bg		*bk'*		*pś*
		p'q'	*bž*	*pš*
		bć'	*bž´*	*pš´*
		bč''	*bγ*	*pχ*
	pč´	*pč''*	*bγ´*	*pχ´*
			bħ	*pħ*
			bħ°	*pħ°*

Comments on PT clusters:

(a) The cluster *pg*, though present in South Abkhaz, is found in etymologically unclear material and has no parallels in Ashkharywa or Tapanta: Abx *a-pga-ra* 'to disorder, shatter', 'to untune (music.)' (AB II: 32), which is probably a variant of **bga* 'to destroy' (cf. also Bz *a-p'ga-ra* 'id.' in BD 151), and Abx *a-pgapč'a* 'spare, easily available or used' (AB II: 32), apparently a compound;

(b) **pt* is found in one South Abkhaz root (*a-pta* 'cloud'), probably a compound;

(c) **pč´* is found in **pč´arəhə* 'hunters' leader' (< Circ); cf. also the etymologically obscure Abzh *a-pč´atla* 'lash on legs for husking maize';

(d) **pč''* is found in etymologically unclear SAbx *a-pč''ač''ar* 'topknot', 'temporal hair'.

Comparison of tables (a) and (b) shows the defective nature of the initial clusters with stop or affricate as second component, whereas the combinations with final spirants are nearly completely symmetrical (lacking only *bź*).

Other structural models include: dental or velar obstruent stop plus obstruent (TT, TS):

(c) clusters TT

voiced	voiceless	ejective
		t't'
		t'q''
		k'k'
g°g°		*k"k"*
		q'q'
	ck'	
		c'k'
		c'k''
		c'k"
	cc	*c'c'*
	ć t°	
		ć"ć"
	čč	
	č k°/x°	
		č k"
		č' k"
		č' q"
ǯǯ'		*č'č''*

(d) clusters TS

voiced T	voiceless T	ejective T
	ts°	
	tx̌	
	tf̂	
	tħ	
	t°ħ°	
		k'š
	cx̌	*c'γ*
	cf̂	
	cħ	
	č k°/x°	
		č'f̂
	č ħ	

Comments to TT clusters:

(a) **t'q''* is found in one South Abkhaz lexeme (*a-t'q'ap* 'slime, mud').

(b) **g°g°* occurs in the onomatopoeic root (SAbx, Tap *a-g°g°a-ħ°a* 'descr. of noise').

(c) **q'q'a* is found in one root (SAbx *a-q'q'a* 'pattern, tracery', *a-q'q'a-ra* 'to make pattern on wood').

(d) **c'c'* is found in one, probably onomatopoeic root: Ash *c'c'-ra* 'to gnaw, eat (seed, nuts)', Tap *c'c'a-ħ°a* 'to eat noisily'.

(e) **c'k''* is found in SAbx *a-c'k'əc'k'a-ra* 'to be squeamish'.

Comment to TS clusters:

tx̌* is found in the Circassian loan (tx̌aǯə* 'to eat one's full', 'to prosper').

As the tables demonstrate, initial clusters with voiced segments, except for the clusters with the initial bilabial stops, are extremely rare. The only two examples (*g°g°*, *ǯǯ'*) represent roots with geminated root consonant (**g°g°a* 'description of

noise' (onomat.), **ǯǯ'a* 'gladly, exultantly'), which could be derived from the full grade forms **g°ag°'a* and **ǯ'aǯ'a*.

As mentioned before, Common Abkhaz deviates from the West Caucasian model, as it contains combinations of segments with different laryngeal features, though such situation must be the result of recent development. Thus, the cluster *bč'*, met in **bč'ə* 'measles', shows in all dialects both assimilated and non-assimilated forms (cf. SAbx *a-bč'ə*, LyxBz *a-p'č'ə*, Ash *bč'ə//p'č'ə*, Tap (AbR 123) *bč'ə*, GumTap *p'č'ə*). The original form could be **bəč'ʒ́*, with the subsequent elision of the first unstressed vowel and partial, in isolects, assimilation *b* > *p'*. This assertion is corroborated by Ub *bəč'ə* 'scarlet fever, smallpox, measles' (a probable Abkhaz loan, cf. Chirikba 1986a: 115). The cluster **bć'* is met in **bć'a* 'to reap, crop', the original form of which could be **bəć'á*. Similar explanations can be given for some other combinations of voiced and voiceless segments: **bək'ə* > **bk'ə* 'to pinch', cf. Tap *bk'-ra*, SAbx *a-r-pk'-rá* (partial assimilation), **bəq'a* > **p'q'a* 'to beat, strike, thresh', cf. Abzh *á-p'q'a-ra* (complete assimilation), Bz *á-pq'a-ra* (partial assimilation, due probably to influence of *a-p-q'a-ra* 'to cut'), Tap *p'q'a-ra//bq'a-ra*. The most general mechanism for the appearance of such units seems to be, thus, syncope of an unstressed vowel, which can also account for clusters containing the combination "voiceless obstruent plus voiced obstruent", cf. **pɦa* 'to be a priest' < **pVɦa*, **tɦa* 'to visit' < **tVɦa*, **tɦa* 'to reap the harvest (from the trees)' < **tVɦa*, **cɦam-k'ə-ra* 'wooden hook' < **cVɦam-k'ə-ra*, **c'ɣa* 'small strap, lace' < **c'Vɣa*, **č'ɦa* 'shriek' < **č'Vɦa*. The now unanalyzable morphemes often represent old compounds. **č'ɦa* 'shriek', for example, can be analysed as **č'a* 'mouth' and **ɦa*, verbal root extension, cf. **č'ə-ta* 'to produce sound', from **č'a* 'mouth' and **ta* 'to give'.

(1.2.3) Obstruent stop plus resonant (TR)

The models include combinations of bilabial or dental stop with resonant:

voiced T	voiceless T	ejective T
br	*pr*	
bl		
dl	*tl*	
	tr	
	kl	
	qr	
ʒl		*c'l*

ǯ'm

č'n

čr

Comment to TR clusters:
Clusters *tl* and *kl* are attested only in loans from Circassian (**tlap'q'a* 'kin, tribe', **tlašə* 'strong', **klapadə* 'sock') or Kartvelian (**kləbə* 'file (tech.)'). *dl* is found in etymologically unclear SAbx *a-dlapsa* 'without'.

(1.2.4) Spirant plus obstruent
The models are: spirant plus stop (ST), spirant plus spirant (SS):

(a) clusters ST			*(b) clusters SS*	
voiced T	voiceless T	eject. T	voiced	voiceless
		s°t		*ss*
	š°k°		*źź*	
	št		*źħ°*	
	šq°			*s°s°*
	šq		*žž*	*šš*
	šc			*šx*
γb				*šħ*
γd			*žž´*	*šš´*
	x(´)č´			*šx*
				s°s°
			γγ	*xx*
				x(´)š´
			γγ´	
			γ°γ°	*x°x°*
			ħ°ħ°	*ħ°ħ°*

Some of these clusters are the result of now unanalyzable combinations of morphemes, others appeared due to vowel elision. Many SS clusters represent gemination of root consonants.

Besides two exceptions (**źq*, **sħ*), all components in ST and SS clusters possess one and the same laryngeal feature. The exceptions are due to vowel elision.

(1.2.5) Spirant plus resonant (SR)

voiced	voiceless
	św
ž°r	
ž°l	
	x̌m
	x̌l
γr	*x̌r*
	x̌'n

(1.2.6) Resonant as the cluster onset

The models are as follows: resonant plus obstruent stop (RT), resonant plus spirant (RS), resonant plus resonant (RR). Some of these clusters result from now unanalyzable combinations of morphemes, or from vowel elision.

(a) clusters RT *(b) clusters RS*

voiced T	voiceless T	glot. T	voiced S	voiceless S
mb	*mp*	*mp'*	*mz*	*ms*
mg´		*mk''*		*mś*
mg°				*mš*
		mq°	*mž´*	*mš´*
mʒ	*mc*		*mž°*	*mš°*
mʃ	*mć*		*mγ*	*mx̌*
		mć'°		*mh̀*
	mč	*mč'*	*mh̀°*	
mǯ´	*mč´*	*mč''*	*lh̀*	
	nc°		*rγ*	
rg°			*rh̀*	
	rq		*rh̀°*	

(c) The only combination of two resonants occurring in morpheme-initial position is *ww*.

(1.2.7) Three-segment clusters

The Common Abkhaz three-segment initial clusters are as follows: *pśt, pśq'(°), pśś, pśh°, pśl, pšk, pšʒ, pχt, pχχ, pχn, p'q'l, čχ°χ°, ś°t'r, šth, mp'l, mcq, (m)žl/r, mst.* The first component is usually a bilabial, or a dental. The major part of these clusters result from combinations of morphemes or vowel elision.

(1.2.8) Four-segment clusters

The two four-segment initial clusters result from combinations of at least two morphemes: *psth°* in **psth°a* 'cloud', from **psə* 'to water, soak' and **th°a* (?), *mck'l* in **mck'la-śə* 'to peck', from **cə* 'tooth', **k'əla* 'hole', **śə* 'to beat, strike' (*m* being an increment ?).

Medial Clusters

(1) Two-segment clusters

(1.1) Obstruent as cluster onset

(1.1.1) Stop plus obstruent

Just like the initial clusters, the most common types of medial clusters are: (a) bilabial plus stop/affricate (PT), and (b) bilabial plus fricative (PS). The first subtype is only represented by two clusters: *bǯ', pt.* While one of these is found only in a Kartvelian loan (**abǯ'ar* 'weapon'), the other may be a result of the combination of two morphemes (**tap-ta* 'lipoma', with **-ta* loc. suf.?). Thus in fact we have hardly any reliable Common Abkhaz medial cluster of the structure PT. The second subtype, however, has somewhat more examples:

(b) clusters PS

voiced	voiceless
	pś
	pš'
	pš°
bγ	*pχ*
bh	*ph*

It seems that Common Abkhaz, with the exception of **-bh-*, hardly had any medial clusters with a voiced bilabial onset. The cluster **-bγ-* is found in a Circassian loan (**g°əbγan* 'reproach'), and **-pš°-* only in an Ossetian loan (**apš°əma* 'host'). Other clusters representing combinations of two obstruents are as follows:

(c) clusters TT			*(d) clusters TS*		
voiced	voiceless	ejective	voiced	voiceless	ejective
dg´				*tx̌*	
gd					*t°γ°*
		ć'k°		*tḣ*	
		č'k°			
		č'q°		*k°š*	

Comment:
All initial clusters with a voiced onset are found either in loans (e.g. **adg´əl* 'land', from Georgian), or in etymologically unclear words, very likely old compounds. The cluster **-tx̌-* is found in a Circassian loan (**q°atx̌a* 'trophy'), other TS clusters probably result from combinations of morphemes. Combinations of the voiced and voiceless elements do not occur with the sole exception of **-g°q-*, found in etymologically unclear **ag°qá* 'Circassian' and probably resulting from vowel elision (< **ag°əqá*).

(1.1.2) Clusters ending in a resonant (TR):
bl, br, dl, dw, tl, gr, k'w, gm, k°m, ǯm. Clusters *br, dl, tl, gm* are found only in loans: **abrag´ə* 'brigand', **č´ədla* 'January', **psawatla* 'household', **p'atla* 'term' (all from Circassian; cf. also etymologically unclear Abzh *a-pč´atla* 'lash on legs for husking maize'), **agməg* 'ugly' (< Oss). **-bl-*, found in roots which are likely to be old compounds, is identical with the initial cluster **bl-* of the morpheme **b(ə)lə* 'to burn'.

(1.1.3) Spirant as cluster onset
Medial clusters of the structure 'spirant plus obstruent' have two subtypes: (a) spirant plus stop (ST), and (b) spirant plus spirant (SS):

(a) clusters ST		*(b) clusters SS*	
voiced	voiceless	voiced	voiceless
	st	*źź*	
zg			*ś°ś°*
	sk´		*šx°*

śt		*šʰ*	
śqʷ		*x̌s*	
št	*γ́γ́*		
x̌č		*ħʷš́*	
x̌č́	*ħ́ʷħ́ʷ*		

Comment:
Clusters **-šx̌ʷ-*, **-x̌s-* are found only in Circassian loans: **wašx̌ʷa* 'vow, oath', **t'ax̌sa* 'weak'. Combinations with identical consonants are result of gemination.

Combinations with resonant as the second element (SR) are very rare: *zn*, *γr*, *γʷr*.

(1.1.4) Resonant as cluster onset
The models are as follows: resonant plus obstruent stop (RT), resonant plus spirant (RS), resonant plus resonant (RR):

(a) clusters RT

voiced T	voiceless T	eject. T
mb	*mp*	*mp'*
	mt	
	mč́	*mč́'*
nd		*nt'*
ng		
nǵ		
		nkʷ
	nqʷ	
	nc	
nʒ		
		nć'
nʒ́		*nč́'*
	lt	*lt'*
lʒ		
rb	*rp*	*rp'*
rd	*rt*	
rdʷ		
rg		*rk'*

(b) clusters RS

voiced S	voiceless S
	mf
	ms
	mś
mźʷ	
mħ	*mħ*
	mħʷ
	rs
	rš
	rśʷ
rγ	*rx̌*
rγ́	*rx̌́*
rγʷ	*rx̌ʷ*
rħʷ	*rħʷ*
	js
	jš
	jśʷ
	jx̌

rg´		*rk´´*
rg°		*rk°*
	rq°	
		rc'
rʒ	*rć*	
	rć°	
	wk´	
jd		*jt'*
jg°	*jk°*	*jk°*
jʒ	*jć*	

Comments:

(a) The cluster *nd* is attested in an etymologically unclear lexeme (**gəndə* 'an additional dowry if the bride is not beautiful') and in a Turkic loan (**šʷəndəqʷəra* 'trunk, box').

(b) Clusters *mb, nč´, lt, rb, rg* are attested only in loans: **dawmbaj* 'aurochs' (< Circ), **k'ambašə* 'buffalo' (< Geo < Pers), **ħʷənč'a* 'to plunder' (< Circ), **k'alta* 'hem (of a skirt)' (< Geo), **warba* 'kite, eagle' (< Geo), **argama* 'open, public' (< Oss).

(c) *rd* is attested in one, presumably compounded word (**šʼarda* 'much, many'), and in two loans: **wa(r)dəqʷə* 'hoop, rim (of barrel)', **wardən* 'cart', both from Ossetic.

(1.1.5) Clusters RR: *ml, mr, rm, wr, jm.*

(1.1.6) Three-segment clusters

The medial three-segment clusters in Common Abkhaz are as follows: (a) with obstruent as the onset: *bst, stĥ, śtx̌//źdɣ, śk'(l), šx̌x̌*; (b) with resonant as the onset: *msq'(°), mśkʷ, mħ°ħ°, nt'r, rk'l, rcʷm, rśm, jms, jmx̌°, jmĥ, jmħ°*. They are mostly found in old compounds.

Comments:

(a) The unit *-śtx̌-//-źdɣ-* is attested in an etymologically unclear lexeme, which may be a Circassian loan: **kʷaśtya* 'fire-brand', cf. CCirc **wasīəɣa* 'lamp'.

(b) *-śk'l-* is found also without *l*, cf. Bz *a-śəśk'(l)amś*, Abzh *a-šəšk'ams*, Ash *čʼk'lams* 'ant'.

Final Clusters

(1) Two-segment clusters

(1.1) Obstruent as cluster onset

(1.1.1) Obstruent plus obstruent (TS, ST)

The final clusters of this type are: *ps, pś, pš', pǩ, pǩ', tǩ', śk'.*

(1.1.2) Resonant plus obstruent (RT, RS)

Clusters of this type do not form a symmetrical system. The onset resonant can be (a) *m*: *mp, mt', mf, mc', mś*; (b) *n*: *nʒ', nc'*; (c) *r*: *rt, rt', rd°, rtʷ, rg, rg°, rč', rx́'*; (d) *j*: *jt, jʒ'*. Clusters "resonant plus resonant" (RR) in final position do not occur.

(2) Three-segment clusters

Only a few three-segment clusters occur in final position: *mǩǩ, n/rtǩ'*.

Some Results of the Analysis of Common Abkhaz Clusters

(1) The number of segments in a cluster on the level of the morpheme usually does not exceed two; the three- and four-segment clusters (only 2 examples of the latter) result from old combinations of morphemes or from vowel elision.

(2) All segments in a cluster normally possess one and the same laryngeal feature.

(3) Except for the PS initial clusters, other clusters usually contain either two voiceless obstruents, or a resonant plus (voiced/voiceless) obstruent. The most usual resonant in clusters is *m*. *r* as the cluster onset often signals an old compound (*r* being a connective affix), though sometimes it may only be an increment.

(4) The most usual types of initial clusters are PS, TS, SS, RT, RS. Clusters SS (and TT) are mostly the result of vowel elision or expressive gemination of the root consonant.

(5) The most usual medial clusters are PS, RT, RS.

(6) Final consonant groups are not numerous, they are mostly of PS (S being a voiceless spirant), or of RT types.

6. RECONSTRUCTION OF THE COMMON ABKHAZ VOCALIC SYSTEM

Tapanta preserved the original bivocalic system of Common Abkhaz and Common West Caucasian. Underlyingly Ashkharywa and South Abkhaz have the same binary vocalic system, though on the surface level Ashkharywa transformed combinations of pharyngal *ħ* with *a* or *ə* into a long vowel *ā* (which is in fact in

allophonic variation with *ħV/Vħ*), while in Abkhaz the same combination was further modified into a vocalic diphthong *aa* (see Chapter II, 1.5.).

Reconstruction of the root-initial vowel

The root-initial vowel in South Abkhaz is always *a*. Due to its confusion with the homophonic article *a*, attached to the so-called 'dictionary' and some other grammatical forms, the etymological initial *a-* was in some cases lost, while in others it is present underlyingly, reappearing only in certain grammatical forms. Tapanta, on the whole, retains the initial vowel better, though sometimes it also demonstrates the loss of the root-initial **a-*. In such cases certain grammatical forms can be diagnostic in reconstructing this initial vowel. These forms are: indefinite singular, possessive and/or personal forms of the denominal stative verbs, where the etymological *a-* is, as a rule, retained. The initial root vowel of the second part of a compound is usually also retained.

Examples:

(a) indefinite singular forms: SAbx *ábǯ'ar* 'weapon(ry)', indef.sg. *abǯ'ár-k'//bǯ'ar-k'*, *abaá* 'skinny', indef.sg. *baá-k'//abaá-k'*; *áps(ə)-wa* 'Abkhaz', indef.sg. *apsə́-wa-k'*; cf. *á-bga* 'wolf; fox', indef.sg. *bga-k'*, *a-x̌ə́* 'bullet', indef.sg. *x̌ə-k'*;

(b) possessive forms: SAbx *j-ábǯ'ar* 'his (male/hum.) weapon(ry)', *j-aɣá* 'his (male/hum.) enemy', *s-áps-wa čə* 'my Abkhaz horse'; cf. *jə́-bga* 'his (male/hum) wolf, fox', *s-x̌ə́* 'my bullet';

(c) personal forms: SAbx *ábrag´* 'brigand', *j-abrág´-wə-p'* (or *j-abrág'ə-w-p'*) 'they are brigands', Bz *áps-wa* 'Abkhaz', *d-apsə́-wa-wə-p'* '(s)he is Abkhazian'; cf. *a-ɣ'ə́č´* 'burglar', *d-ɣ'əč´-wə-p'* 'he is burglar', *a-waj°ə́* 'man', *d(ə)-waj°ə́-w-p'* 'he is man';

(d) compounds: *a-waj°-ága* 'a fool man' (*a-waj°ə́* 'man', *ága* 'fool'), cf. *a-waj°ə́-naʒa* 'a grown-up man' (*á-na-ʒa-ra* 'to reach, achieve'), *a-ž°-ard°əna* 'starling' (*a-ž°* 'cow', *árd°əna* 'blackbird'), cf. *á-ž°-c'əs* 'swallow' (*á-ž°* 'cow', *a-c'ə́-s* 'bird').

The possessive forms are even more conservative with regard to the retention of the root-initial *a* than the indefinite singular, cf. Ash *áħ°əspa* 'knife', indef.sg. *ħ°ə́spa-k'*, poss. *w-áħ°əspa* 'your (male/hum) knife', Bz *áč'a* 'glass, goblet', indef.sg. *č'a-k'*, poss. *s-áč'a* 'my glass'.

In unstressed syllables the phonological contrast between *a* and *ə* is to a large degree neutralised. This explains why, without any clear-cut regularity, etymological *a* in unstressed syllables can change into *ə*, and vice versa, or both can be neutralized to zero. The syncopated unstressed vowel can be restored when the syllable is stressed.

Reconstruction of the root-medial unstressed vowel:
SAbx *ápsˇma* 'host' ~ indef.sg. *apsˇə́ma-k'* 'one host', *árma* 'left' ~ *arə́ma-ra-x̌'* 'to the left', Bz *arćna* 'hen' ~ indef.sg. *arćə́na-k'* 'one hen'.

Reconstruction of the root-final unstressed vowel:
a-k'-rá 'to catch' ~ *jə-k'ə́* 'catch it! (imper.)', *a-k'ə́-ga* 'the catcher'; *a-pś-rá* 'to die' ~ *a-pśə́* 'the dead man'; *apś'* 'red' ~ indef.sg. *apś'ə́-k'*; *aw* 'long, tall' ~ indef.sg. *awə́-k'*, etc.

Another source for reconstruction of the root medial or final vowel is presented by the data of those dialects which retain these vowels. Examples: SAbx *á-bga* 'wolf' vs. Tsab *á-baga*, Ash, Tap *bagá* 'fox'; SAbx *ájba* vs. Tap *jə́ba* 'orphan'; SAbx *á-bna*, Ash, Tap *bna* vs. Sa *á-bana* 'forest'; SAbx *á-tbaa* vs. Tap *təbĥa* 'wide, broad'; Abzh *á-mra* vs. Bz *á-mra//á-mər//á-mara*, Tap *marə́* 'sun'; Abzh *a-mšə́n* vs. Bz *a-mšə́n//a-mašə́na* 'sea'; Abzh *a-x̌ə́-l-pa* vs. Bz *a-x̌ə́-l-pa//a-x̌ə́-la-pa* 'hat'; SAbx *a-k'k'áj°-ĥ°a* vs. Abzh (DG 224) *a-k'ak'áj°-ĥ°a* 'loudly and clearly (of shriek, song, etc.)'; Abzh *ápś'-ga-ra* vs. Bz *ápś'a-ga-ra* 'to undertake, start doing sth', etc. The full grade forms are preserved more regularly in Ashkharywa and Sadz.

In compounds **a* under the stress sometimes tends to be reduced to *ə*. On the other hand, in the unstressed syllable the etymological **ə*, instead of being (regularly) dropped, sometimes changes into *a* and thus survives elision. These phenomena (the reasons for which see above, in 6.1.), can be observed not only in the individual dialects, but already in Common Abkhaz.

(1) **a* > **ə*

(1.1) In Common Abkhaz: **ab-q°ə́-nda* 'brother-in-law', from **áb-q°a* 'father-in-law' + *-nda* (?); **an-q°ə-pĥa* 'sister-in-law', from **an-q°a* 'mother-in-law' and **pĥa* 'daughter'; **č'ə́-śə* 'new', from **č'a* 'young' and **śə* 'small, little'; SAbx *wə-j*, Tap *awə́-j* 'this', from combinations of deictics **a*, **wa*, and **j*; **a-rə́-j* 'this', from combination of deictics **a*, **ra*, and **j*; **a-ba-nə́-j* 'this, that', from combination of deictics **a*, **ba*, **na*, and **j*; **qə́-šˇə* 'casement-window', from **qa* 'head', **ašˇə* 'door'; **pxə-nə́* 'summer', from **pxa* 'warm', **-nə* 'period'. In the latter case the preservation of the unstressed *ə* in SAbx *á-pxən* is explained by the phonetic modification of the final sequence *-nə*: **pxa-nə* > **px̌-nə* > *pxən*, due to the usual process *CC___C* => *CCVC*; cf. Tap *pxnə* 'summer'.

(1.2) The same process **a* > *ə* took place in individual dialects: **ajg°ášˇə* 'small axe' > SAbx *ajg°əšˇ*, cf. Tap *g°ašˇ*; **baća* 'twig, switch, rod' > Bz *a-bə́ća*, Abzh

a-bə́ca, cf. Ash *báca//bacá*, Tap *bacá*; **basta* 'thick millet porridge' > SAbx *a-bə́sta*, cf. Ash *básta//bastá*, Tap *bastá*, Tap *pšə-x̌´* 'cold wind', cf. *pša* 'wind', *x̌´ə-* 'cold', SAbx *a-ć°ə-mza* 'candle', cf. Ash *ć°á-mza*, Tap *č°á-mza*, from *a-ć°a//č°a* 'wax', *mza* 'torch', etc.

(2) **ə* > *a*: **apśə́-wa* 'Abkhazian', Abzh *apsa-ć°á* 'Abkhazians', Ahch *ápsa-wa* 'Abkhazian'; **bza-n-ć'ə* 'never' > Bz *bzanać'á//bzanć'ə́*, Abzh *bzanc'ə* (**ć'ə* 'to pass (of time)'; **mč'ə-bž'ə* 'week' > SAbx *á-mč'əbž'//á-mč'ə-bž'a*, etc.

7. PROSODIC PROPERTIES OF COMMON ABKHAZ

Tapanta, in general, preserved the original stress better than South Abkhaz, in which the marker of the dictionary form *a-* often retracted the stress onto itself. But even for South Abkhaz it is comparatively easy to restore the original stress on the basis of certain grammatical forms, usually the indefinite singular.

Examples:

SAbx *ábž'ar* 'weapon(ry)', indef.sg. *(a)bž'ár-k'*, cf. Ash, Tap *abž'ár*, hence CAbx **abž'ár*, Bz *ábx̣°ənda* 'brother-in-law', indef.sg. *bx̣°ə́nda-k'*, cf. Tap *abq°ə́nd*, hence CAbx **abq°ə́nda*, SAbx *ápš°ma* 'host', indef.sg. *apš°ə́ma-k'*, cf. Tap *pš°ə́ma*, hence CAbx **apš°ə́ma*, Bz *arćna* 'hen', indef.sg. *arćə́na-k'*, cf. Tap *arcə́na*, hence CAbx **arćə́na*, etc.

Other cases, though not very numerous, show discrepancy between South Abkhaz and Tapanta: SAbx *a-bə́sta*, Tap *bastá* 'maize pap', Ashkharywa showing alternative variants *básta//bastá* (< Greek ?), Abzh *a-bə́ca*, Tap *bacá* 'twig, rod (for wattling)', Ashkharywa again alternatively *báca//bacá*, SAbx *a-g°áj°a*, Tap *g°añ°á* 'deep', SAbx *a-č'ə́rk°a*, Tap *č'ərə́k°a* 'Jerusalem artichoke' (< Circ), etc.

Dybo 1989: 12 and Spruit 1986: 37 argue that any Abkhaz consonant is a bearer of a certain accentual valency. Though there are exceptions to this rule (in case of certain clusters behaving like a single consonant), this could mean that any consonant in Abkhaz is accompanied by an underlying vowel, as it is basically vowels that bear accentual properties. Thus any *C* can be regarded as underlyingly *CV*. The behaviour of Abkhaz clusters gives grounds for further suggestions, as the majority of them in the appropriate accentual conditions can be dissociated by insertion of shwa (see Chapter 2, in 1.5.). From this can follow that any surface sequence *CC* in Abkhaz (except for some close-knit clusters) is underlyingly *CVCV*. The alternative solution could be that any consonant in

Abkhaz is inherently syllabic, and is a bearer of prosodic properties. In the appropriate phonetic conditions the consonant yields its syllabic element as shwa. Whatever the interpretation, such a situation when the consonants, not vowels are bearers of prosodic and timbre properties, makes this language rather unusual from a typological point of view.

Dybo 1989 argues that the paradigmatic accent system possessed by Abkhaz is in all probability a residue of an older tonal system. Some Tapanta isolects still preserve a system of three tones combined with the normal pan-Abkhaz system of dynamic stress. It is difficult to suggest any chronological frames to mark the supposed shift from the system of phonological tones to that of dynamic stress, though the residues of tones in Tapanta can prove that it happened relatively late. Dybo proposes the same situation for Ubykh and Circassian, as these latter (especially Ubykh) show remarkable parallels to the Abkhaz accentual system. Given all this we can propose for Common Abkhaz a combination of dynamic stress, similar to what the modern dialects possess, with a parallel system of three phonologically relevant tones, high, middle, and low (probably independent from the position of the stress). The existence of the tonal systems in some Daghestanian languages allows us to make a suggestion that tonal systems were characteristic of the North Caucasian linguistic area as a whole, though it is not clear whether we are dealing with genetic or only areal affinity.

8. LOANS IN COMMON ABKHAZ

South Abkhaz, in general, preserved the native vocabulary much better than Tapanta, which acquired a lot of Circassian, Turkic, Arabic, and Persian loans, which replaced some of the original items. The borrowed material in Common Abkhaz comprises mainly Circassian, Kartvelian and Old Ossetic loans. As far as the intra-West Caucasian borrowings are concerned, the general direction of borrowing was mostly from Circassian into Abkhaz and Ubykh, and from Abkhaz into Ubykh. I don't speak here of the Turkic loans, as the majority of them seem to be borrowed relatively late, i.e. after the split of Common Abkhaz, and only a few of them could penetrate Common Abkhaz prior to that time.

Common Abkhaz loans from Circassian

Even if we do not take into consideration modern Tapanta and Ashkharywa, which are overflooded by Circassian borrowings, these latter still comprise the largest group of loans in Common Abkhaz. The closeness of the phonetics of the West Caucasian languages does not always allow us to be certain whether we are

dealing with inter-group borrowings or with genetically related items. There are some factors which facilitate this operation: in case of the correspondence of Circassian laterals *L*, *λ* to Abkhaz clusters *dl*, *tl*, *kl*, or of Circassian velar spirants *ĝ*, *x*, *x°* to Abkhaz *g'*, *k'*, *k°*, we are obviously dealing with borrowings in Abkhaz, as the mentioned Circassian sounds have different Abkhaz correspondences in genetically related material (cf. ZL 19-20). But beyond these rules, there still are a number of common items, which some authors tend to treat as borrowings, while others consider them to belong to shared West Caucasian heritage. I shall touch upon such cases below.

The peculiarities of Circassian borrowings in South Abkhaz, Ashkharywa and Tapanta are discussed in Kondzharia 1976, Ionova 1978, Amichba 1984, Djonua 1985, ZL, etc. Here I shall provide the list of loans only with very brief comments when they are needed. When the semantics of South Abkhaz differ from that of Tapanta (and/or Ashkharywa), I divide them by a semicolon, giving the South Abkhaz meaning first. For the Circassian source I give the Common Circassian form, if it suffices, or words from concrete dialects, if they explain the particular Abkhaz form better.

The list of Circassian loans:

**bzaməq°ə* 'silly, ignorant; having bad knowledge of foreign language' < CCirc **bza-mə-q°ə* 'deaf; speaking a foreign language', **pása* < CCirc **pʰa-sa* 'early', **pašaša* 'to caracole, prance (of horse), be nervous; to rummage, potter about (of small insects)' < CCirc **pʰa-šaša* (Kab *păśăśă* 'to mess, potter about'), **pág'a* < CCirc **pʰa-ĝa* 'proud, haughty', **pág°a* < CCirc **pʰa-g°a* 'blunt(-nosed)', **pč'arəħə* 'the leader of the hunters; marksman' < CCirc **pčʰ'a-rə-ħ(a)* 'young man serving elder; cook; hunter's bag', **psápa* < CCirc **psa-pʰa* 'good deed (in a religious sense)', **psawátla* < CCirc **psa-wa-λa* 'living; household', **p'átla* < Bzh, Kab *p'ală* (< CCirc **p'q°aλa*) 'term', **dág°a* < CCirc **da-g°ə* 'deaf', **txaʒ'ə* < CCirc **txa-ʒ'ə* 'to abound in; to revel, enjoy', **tlašə* < CCirc **λa-šə* 'big, strong', **t'ak°ə* < CCirc **t'ak°ə* 'a little, a bit', **t'áxsa* < Bzh (Urusov 134) *t'axsă* (< CCirc **t'asxa*) 'weak', **g°aq'a* 'martyr; to worry, hasten' < Bzh *g°a-ʔă* (< CCirc **g°ə-ʔa*) 'to be in trouble, worry; to hurry', **g°əbzəγa* 'tender, sweet; clever' < CCirc **g°ə-bzə-γa* 'clever', **g°əbγán* < CCirc **g°ə-bγa-n* 'reproach; offence', **g°əγa* < CCirc **g°ə-γa* 'hope', **g°ź°áź°a* < Abdz *g°əź°aź°ă* (< CCirc **g°ə-zaź°a*) 'to worry; hurry', **klapádə* < CCirc **λa-pa-də* 'sock, stocking', **k'ábza* < CCirc **xa-bza* 'custom, tradition', **k'ák°a* < CCirc **xa-k°a* 'stallion', **k'əγarə/ája* 'match-maker; representative of bride's side' < CCirc **xaĝa/əraja* 'the man who takes care of the guest' (Ad), 'man close to somebody's family' (Kab), **k'əja* 'honest, righteous' < CCirc **xəja* 'innocent',

**k°əjtə* < CCirc **x°əjtʰə* 'free', **k'ápa* < CCirc **k'a-pʰa* 'fat tail of sheep', **k'at'á/ǽjə* < CCirc **k'a-t'a/əjə* 'gut, intestine', **k'azəza* < CCirc **k'a-zəza* 'to tremble', **k'ásа* < CCirc **k'a-sa* 'late', **k"arə* < CCirc **k"a-rə* 'pacer, ambler', **q°əpha* 'boy of noble family brought up by peasants; having good inclinations' < CCirc **x̌°ə-pxa* 'talented, having aptitude', **q'áza* 'master' < CCirc **q'a-za* 'specialist, able', **q'ásа* 'experienced, smart; quiet' < CCirc **q'a-sa* 'tame, quiet', **q'áža* < CCirc **q'a-ža* 'to restrain', **q"əp'č'a* 'neat, tidy' < CCirc **q"ə-p'č'a* 'articulate, clear', **q"əšə* < CCirc **q"ə-šə* 'smart, intelligent', **čʰə́dla* 'a winter month' < CCirc **čʰə́La* 'middle (of summer, winter)', **č'ánə* < Ad *č'ánə* (in Kab *ś'ajən*) 'inheritance; escheat', **č'(ʼ)ərək"a* < CCirc **č'ə/a-rə-k"a*, Sh *č'ərək"ă* 'Jerusalem artichoke', **sakʼə* 'wooden lock' < CCirc **sax(ə)* 'pole of gate' (Kab), 'bolt, bar' (Ad), **žák'a* < CCirc **ža-k'a* 'beard', **šáta* 'to try' < CCirc **šʰa-tʰa* 'to try out, check' (Ad), **x̌°əmp'ərc'ak'ə* '(winged) female ant' < Kab *x̌°əmp'ăc'ăgʼ* 'ant', **ĥ°ažə* < CCirc **γ°a-žə* 'yellow', **ĥ°aśa* < CCirc **γ°aśa* 'to be mistaken, lose way', **ħač'aśə* < CCirc **ħač'a-śə* 'separate guest-house', **ħ°ənč'a* < CCirc **x̌°ən-č'a* 'to capture, plunder, rob', **mác'a* < CCirc **mac'a* 'locust', **maša* < CCirc **maša* 'pit, hole', **məγ°a* < CCirc **məγ°a* 'poor, unhappy', **wášx̌°a* 'vow, oath' < CCirc **wa-šx̌°a* 'o, skies!; vow', **wa(n)daň°ə* < Circ, cf. Ad *wăntăγ°*, Sh *wătăγ°*, Kab *wăndăγ°* 'heavy, difficult', **waja* < CCirc **wa-ja* 'storm, bad weather', **jadə́gʼa* 'Adyghe' < CCirc **adəĝa* 'Circassian', **jənə́ź°ə* < CCirc **jənə-źə* 'mythical giant'.

Correspondences in Circassian loans

Correspondences between South Abkhaz, on the one hand, and Ashkharywa with Tapanta, on the other, in the words of Circassian origin containing laterals (Circ *L*, *λ*, *λ'*), velar spirants (Circ *ĝ*, *x*, *x°*), or uvular spirant *γ°*, pose certain problems, as their pronunciation in Common Abkhaz is unclear. There is only consistency between all the dialects in what concerns the Circassian *ĝ* and *γ°*, rendered uniformly by palatalised velar stop *gʼ* and labialised voiced pharyngal *ĥ°*, respectively (the latter was transformed into labiopalatal spirant *j°* in South Abkhaz). Due to the fact that for centuries the speakers of Ashkharywa and Tapanta used Circassian as their second language, they borrowed the Circassian laterals and velar spirants into their own phonemic systems (see Chapter II). South Abkhaz had never experienced such a massive Circassian influence, and the Circassian loans were adapted to its phonetics. Thus, in Tapanta and Ashkharywa the Circassian voiced lateral *L* is pronounced as palatalised resonant (*lʼ*), and in South Abkhaz as cluster *dl*. The Circassian voiceless laterals are pronounced in Tapanta and Ashkharywa as the corresponding sounds or as an ich-Laut spirant (*ç*), while in South Abkhaz as clusters *tl*, *kl*. The Circassian voiceless velar

spirants are pronounced in Ashkharywa and Tapanta in the same way as in Circassian (with somewhat more palatalisation), while in South Abkhaz they are rendered as velar palatalised and labialised stops, respectively (*kˊ, kˊ°*). I am inclined to regard the South Abkhaz forms as reflecting the older pronunciation of Circassian loans, prior to the period when Tapanta and Ashkharywa migrated to the North Caucasus and became bilingual.

Examples:

Circ *ĝ* : CCirc **pʰaĝa* 'haughty' > SAbx *a-pagˊa*, Tap *pagˊa*;

Circ *x* : CCirc **xabza* 'tradition, customary law' > SAbx *a-kˊabza*, Tap *xˊabza*;

Circ *x°* : CCirc **x°əjtʰə* 'to have a right' > SAbx *a-kˊ°əjt-ra* 'id.', Ash, Tap *xˊ°əjt* 'free';

Circ *γ°* : Kab *γˊ°abžă* < **γˊ°abʒˊă* (CCirc **γˊa-pčˊa*) > SAbx *a-jˊ°abʒˊa*, Tap *ĥˊ°abʒˊa* 'brownish';

Circ *L* : CCirc **čʰˊəLa* 'middle (of summer, winter)' > SAbx *čˊədla*, Ash *čˊəlˊa* 'a winter month';

Circ *λ* : CCirc **λapadə* 'sock(s)' > SAbx *a-klapad*, Tap *λapad//çapad*.

While analysing the Circassian loans one is confronted with the seemingly inconsistent rendering of lateral, velar and uvular spirants. Thus, the Circassian voiceless lateral *λ* is rendered in South Abkhaz either as *tl* or *kl*, the plain velar *x* as *kˊ*, but sometimes as *xˊ*, the rounded velar *x°* either as *xˊ°* or *kˊ°*, the uvular *γ°* mostly as *ĥ°*, but sometimes as *γ°*, likewise the voiceless uvular *χ°* is rendered either as *ħ°*, or *xˊ°*. To account for these discrepancies Djonua, in his dissertation devoted to loans in Abkhaz (1985), proposed rules designed to account for different rendering of some of the mentioned Circassian sounds. Djonua argues that the different reflexes of the Circassian voiceless laterals and velars are dependent on the position of the stress: in the stressed syllable in Abkhaz the voiceless lateral *λ* is rendered as *tl*, the voiceless velars *x*, *x°* as *kˊ*, *kˊ°*, whereas in the Abkhaz unstressed syllable *λ* is rendered as *kl*, while *x* and *x°* as *xˊ* and *xˊ°*. The same, as Djonua argues, applies to Circassian *γ°*: in the stressed syllable in Abkhaz the outcome is *ĥ°* (> SAbx *j°*), and in the unstressed syllable it is *γ°*. As Djonua rightly points out, the very change of Circassian *γ°* to Abkhaz *ĥ°* is strange, as the latter does possess *γ°*. The same question arises for the cases when Circassian *χ°* is substituted by Abkhaz *ħ°*. The reverse rule applies, according to Djonua, to the loans with *ĝ*: in the stressed syllable it is rendered as *γ* (only one example available), and in the unstressed syllable as *gˊ*.

Djonua's explanation, attractive as it might seem, fails to account for the

wholesale picture of reflexes of the Circassian sounds. Against the proposed rule, we found *tl*, *k°*, *γ°* in Abkhaz unstressed syllables, which renders the accentual explanation of the phonetic discrepancies in the borrowed Circassian material not sufficiently plausible.

The phonetics of the Circassian borrowings usually reflect, except in rare cases, rather archaic, usually West Circassian forms, though in Tapanta and Ashkharywa later East Circassian influence is obvious. Semantically many Tapanta words, borrowed from Circassian and shared by South Abkhaz, are closer to Kabardian, while South Abkhaz ones are mainly closer to West Circassian.

The following items, however, reflect undoubtedly Kabardian forms in South Abkhaz as well, which may point to their rather late introduction: they could have penetrated individual dialects after the split of Common Abkhaz:

**p'at'áwə* 'to stir, move' < Kab *p'ăt'ăwă-n* (in Ad *p'ăt'ărăwă-n*) 'id.';
**tħamáda* 'old man' < Kab *tħămadă*, cf. Bzh *tħamaĭă* 'id.';
**g'əmədа* 'name of horse/light bay (of horse)' < Kab *g'ămədă* 'light-yellow (of horse)', cf. Ad *č'ămədă* (Balkarov 1970: 39) < CCirc **k̄'əmədа*;
**q°atxa/ə* 'trophy' < Kab *q°ajntx* (in Ad *q°antx*); the glottalised *q°* points to Kabardian as the source, while the absence of *j* makes the Abkhaz form closer to Adyghe; cf. also Abzh *a-ħ°atxa*;
**žərə* 'steel' < Kab *žər* < *žər* (< CCirc **čərə*).

Some of the loans became obsolete in South Abkhaz, occurring mainly in the language of folklore (**tlašə*, **q°atxa*, **ħač'ašə*, **jənəžəə*), or in set-expressions (**məγ°a*, **wášx°a*). In case of **č'(')ərək°a* 'Jerusalem artichoke' the South Abkhaz form *a-č'ərk°a*, with palatalised affricate, points to a Shapsygh or Ubykh (*č'ərk°a*) source, while Ash *č'ərk°a*, Tap *č'ərək°a* were borrowed from a Circassian dialect other than Shapsygh, cf. Bzh, Tem *č'ərək°*. By its first vowel Kuban-Zelenchuk Kab *ś'ərək°ă* (cf. Ocherki 36) is closer to Adyghe (and Abkhaz) forms than to Standard Kabardian *ś'ărək°ă*. Tap *paša* (cf. Abzh *a-páča*) 'leader' can only reflect a very late loan from Kabardian (or just from Tu *paşa*), while Abzhywa is closer to Adyghe or to Common Circassian, cf. Adyghe *pačă* 'id.'; this renders the Common Abkhaz character of **páča* rather dubious, unless the latest loan from Kabardian replaced the older Tapanta form **páča*. Kabardian

influence is also evident in such a Tapanta word as *č'ajn [č'en]* 'inheritance', which is closer to Kab *ś'ăjən*, cf. SAbx *a-č'án*, which approximates Adyghe *č'ăn*. SAbx *a-k'at'aj* 'bowels' reflects the West Circassian form similar to Bzh *č'ăt'ăj* < *k'ăt'ăj* 'id.', while Ash, Tap *k'at'əj* shows dependence on either Tem or Kab *č'ăt'əj*. The source of the anlaut *q°* in **q°əpħa* 'boy of noble family brought up by peasants; having good inclinations', given CCirc **x°əpxă*, is unclear.

The majority of the items given in the list above have obvious Circassian etymologies. But in a number of cases the Circassian etymology of certain lexemes poses problems, as they can be analysed both in Circassian and in Abkhaz. Thus, Shagirov (ZL 32) analyses the first part of CCirc **γ°ašʼa* 'to be mistaken, to lose way', supposedly borrowed into CAbx **ħ°ašʼa* 'id.', as *γ°a* *'road' (cf. *γ°ăg°ə*, the actual Circassian word for road), leaving *šʼa* unexplained. He rejects the Abkhazian etymology proposed by Djonua: *j°a-* 'two' (in fact, *j°-a* 'twice') and *šʼa* 'to consider, regard', which is in any case more plausible than the Circassian etymology. If Djonua is right, the Circassian word itself must be regarded as a loan from Abkhaz.

Similarly, it is not clear whether we should classify as Circassian loans such items as **k'ăg°a* 'short(ish)' (cf. CCirc **k'a-g°a*), **cag°ə/a* 'blunt, not sharp' (cf. CCirc **ca-g°a*), as they can be equally explained from the material of both Abkhaz and Circassian (cf. Djonua 1985: 85-106). Other supposed loans from Circassian lack a comprehensive Circassian etymology, cf. for example CAbx **k°aśtxa//*k°aźdγa* 'fire-brand' vs. CCirc **wasīəγa* 'id.'.

I exclude from the list of Circassian loans such items as **ħ°əza* 'friend', **čq°a* 'to boast', **k'ač'ə* 'short', **q°əšʼə* 'medicine, remedy' (cf. ZL) on the following grounds.

(1) **ħ°əza* 'friend', along with Ub *wəśa* 'comrade, of the same age', is regarded by some authors as originating from Circ *γ°əsă* 'companion; accomplice' (Genko 1955: 44; ZL 21-22). But because the phonetic correspondences do not favour this suggestion (Abx *z* vs. Circ *s* and Ub *ś*,), I prefer to regard all three forms (i.e. the Abkhaz, Circassian and Ubykh) as unrelated to each other. A possible etymology for South Abkhaz *a-j°ǿza*, Tap *ħ°za* < **ħ°əza* can be: **ħ°ə* 'two', **za* 'attached to' (cf. **pə-za* 'leader', with **pə* 'nose', 'front', **za* 'attached to').

(2) Shagirov (ZL 27) regards CAbx **čq°a* 'to commend, praise', along with Ub *ša-tx̌°a* 'id.' to be borrowed from Circassian, cf. Adyghe *šʼə-tx̌°ə*, Kab *śə-tx̌°ə* 'id'. This, however, is difficult to accept, again on phonetic grounds. In Abkhaz the first element (*č-*) is probably the (fossilized) reflexive prefix, which is also true for Ubykh (here it comes from *ša* 'head'), while in Circassian *šʼə-//śə-* is a local prefix. The second part in all three languages is a common root (*q°a* : *tx̌°a* : *tx̌°ə*).

The initial dental element of West Caucasian clusters of the type TX (dental plus velar or uvular) is regularly lost in Common Abkhaz.

(3) **k'ać'ə* 'short; blouse, shirt' is considered to be a loan from CCirc **k'ać'ə* 'short'; kind of clothes' (ZL 29), but in Abkhaz the affricate *č'* is not palatalised, as it is in Circassian. This can testify to a common origin of both the Abkhaz and Circassian lexemes (with the secondary palatalisation in the latter).

(4) **q°əš°ə* 'medicine, remedy; poison' is regarded as a possible loan from CCirc **x°əšx°a* 'medicine' (ZL 30), but the phonetic difficulties (Abx *q°* vs Circ *x°*, Abx *š°* vs. Circ *šx°*) make the comparison impossible at least if we speak of borrowing. The etymology of the Circassian word is also unclear (cf. ZL, ibid.).

Some of the borrowed items are only attested in South Abkhaz and Ashkharywa, which renders their Common Abkhaz origin doubtful (assuming these items were not lost in Tapanta): **páč'a* 'leader (in flock of birds or animals)', cf. CCirc **p^{h}a-č^{h}'a* 'leader', **c'áp'a* 'dirty', cf. CCirc **c'a-p'a* 'id.', **wa(n)daň°ə* 'difficult, heavy' (Adyghe *wăntăγ°*, (Sh) *wătăγ°*, Kab *wăndăγ°* < CCirc **wă(n)ĭtăγ°ə* 'heavy, massive'), **ħaləẑ°ə* 'a sort of curd-dumpling', cf. CCirc **ħalə-ẑ°a* 'kind of curd-pasties', **waja* 'bad weather, storm', cf. CCirc **wa-ja* 'id.', **tlaň°a* 'path', cf. CCirc **λa-γ°a* 'id.', **x̌°əmp'ərc'ak'ə* 'ant', cf. Kab *x̌°əmp'ăc'ăg'* 'id.'.

South Abkhaz possesses other loans from (West) Circassian, not shared by Tapanta, which indicates that they were borrowed comparatively late: *a-pxáħ°* 'rasp (tech.)', cf. CCirc **pxa-x̌°a* 'id.', *a-dáx̌'(a)* 'the best (speaking of the guest)', cf. CCirc **daxa* 'beautiful', *a-tláp'q'a* 'arrogant (of words)', cf. CCirc **λap'q'°a* 'dear, expensive, precious' (borrowed from Kabardian into Tapanta as *λap'a* 'dear, precious'), *a-š°atlaj* (arch.) 'kind of shoes' (Rus 'ноговицы'), cf. Ad *ś°ă* 'leather, skin', *λaj(ă)* 'gaiter' (Djonua 1984: 24), *a-γ°ak'əja (q'ama)* 'a sort of dagger', cf. CCirc **γ°ə-k'a* 'blacksmith', Bz *a-x̌°anč'a* 'rough (for ears); inarticulate', cf. CCirc **q̄°a-(n)č^{h}a* 'crooked' (the Kabardian form *q'°anšă* was borrowed by Tapanta: *q'°anč'a* 'culprit; unjust'), Bz *a-ħat/dg°ən* 'grave monument', Sa *a-ħadwán* 'graveyard', cf. Ad *ħadă-wənă* 'tomb; morgue' (lit. 'dead ones' house'), *máfa* (Bz)//*mák°a* (Abzh) **'good, happy', cf. Ad *mafă*, Kab *max°ă* 'id.'. SAbx *a-x̌č'át* 'cream' is a possible contamination of the original *a-x̌áč'a* 'curds' with CCirc **č'ata* 'cream' (cf. a somewhat less plausible etymology in ZL 26), cf. also Ash *č'áta*. SAbx *a-k'áč'a* 'left-handed', 'crooked', 'underdeveloped/short hand', if it really is borrowed, could come from the late Circassian form *ʔašă* < **ʔa-č^{h}'a* < **q'a-č^{h}'a* 'one-handed, crooked' with interesting rendering of the Circassian glottal stop as palatalised and glottalised velar *k'*, cf. Tap *ʔač'a* 'id.'. The Circassian glottal stop comes from glottalised uvular **q'*, preserved in Hakutsw Shapsygh. In

South Abkhaz borrowings from Circassian in place of the glottal stop we usually have *q'*, which reflects either the Common Circassian, or the Hakutsw Shapsygh form.

Common Abkhaz loans from Kartvelian

Loans from the languages of the Kartvelian family, namely, from Georgian and Megrelian, are not numerous in Common Abkhaz, which indicates that the direct contacts of Mediaeval Abkhazians and Kartvelians were not so extensive as they became later, viz. from the middle of the XIX century. Kartvelian loans were discussed in Schmidt 1950, BD, Lucassen 1980, Djonua 1985, ZL, etc.

The list of Kartvelian loans:

**abǯ́ár* < Geo *abǯar-i* 'weapon', **adg'ə́l* < Geo *adgil-i* 'place', **agə́rə* 'Megrel' < Kartvelian, cf. Geo *m-egr-el-i*, Meg *m-arga-li* 'Megrel' (cf. also the Georgian mediaeval toponym *Egr-is-i*, referred to Megrelia), **am-bəšta* < Geo *bušt-i* 'urinary bladder', **b(ə)q"ə́l* 'wooden tub; nave of the wheel' < Meg *buq'uni* 'wooden tub', **p'at'ə́w* < Geo *p'at'iw-i*, Meg *p'at'u* 'respect', **t'ə́wra* '(thick) forest; weeds' < Geo *t'ewr-i* 'thick forest', **gánə* < Geo *gan-i* 'side, width', **g'áma* < Geo *gemo* 'taste', **kablá* < Meg *kabu/əla* 'one year-old calf', **kláb* < Geo *klib-i* 'file (tech.)', **k'ambáš'* < Meg *k'ambeši* 'buffalo', **k'alát* < Geo *k'alat-i* 'wattled basket', **k'álta* < Geo *k'alta* 'hem (of a skirt)', **k'anǯ́a* < Meg *k'enža* 'doll', **k"ap'áj* < Geo *k'op'e* 'gourd used as a scoop; basin, cup', **q"áǯ́ə* 'penis (pueri); testiculi' < Meg *ʔwaǯ-*, Laz *q"aǯ-* 'testiculi' (in Geo *q'wer-i*), **c'ásə* 'tradition, custom' < Geo *c'es-i* 'rule, order', **c'ála* < Geo *c'ala* 'lymph', **c'ájə* 'child, small boy' < Meg *c'(i)e* 'small boy', **ǯ́(w)ár* < Geo *ǯwar-i* 'cross', **š°anə́* < Geo *swan-i*, Meg *šoni* 'Svan', **wəbála* '(to sit on a) horse without saddle' < Geo *u-bel-o* 'without saddle', **x̌°amár* '(to) play' < Geo *x̌umara* 'joker', *x̌umr-ob-a* 'to tell jokes; joke', **márǯ́a* 'exclamation expressing a strong feeling' < Geo *marǯw-* 'to win', **mc'awár* < Geo *mc'ewar-i* 'hunting dog, borzoi', **lárǯ́ə* 'white, grey (coat of horse)' < Geo *lurǯ-i* 'blue; grey (coat of horse)', **wárba* 'kite, eagle' < Geo *orb-i* 'eagle', **wə́y°ə* < Meg *uyu* 'yoke', **wə́ra* 'unbroken horse' < Geo *ura* 'stallion', Meg *ura* 'unbroken horse'.

Comments:

(a) The initial **am-* in **am-bəšta* is unclear.

(b) The final *-a* in **wárba* is not clear.

The Kartvelian origin of a number of Abkhaz items is uncertain.

(1) **g°ərg°ər/lə* 'little wheel, ring (also of chain)', cf. Geo (Imer) *gogore* 'little

wheel', Meg *gorgoli* 'wheel'. In case of borrowing from Kartvelian one would expect CAbx **g°arg°ar/lə*; cf. the late Abzhywa loan *a-g°ag°araj* 'little wheel', from the Imeretian form.

(2) **kač'ə* 'wood-goblin' (SAbx), 'mischievous, naughty' (Tap), cf. Geo *kaǯ-i* 'devil, goblin' > Meg *kaǯi*, Svan *kaǯ* 'id.'. Except for the (unimportant) discrepancy between Abx *č''* and Geo *ǯ*, the Tapanta form (*kač'-k'ə* 'naughty', *kač'-k'-ra* 'to be mischievous, naughty', with *k'ə* 'to catch') poses some problems. Though deglottalisation in clusters is a usual phenomenon in Tapanta (**č'k'* > *čk'* ?), the Tapanta word may alternatively be regarded as a derivative of **kač'(a)* 'to shake, tremble'. The later Abkhaz (probably literary) borrowing from Georgian is *a-káǯ'-k°a//a-kaǯ'-aa* (*-k°a/-aa* pl.) 'mythological creatures, evil spirits' (AB I: 349). Except for Kartvelian, cf. also Arm *kaǯ* 'devil, goblin'.

(3) Because of the difference in the final resonants, there are doubts as to whether CAbx **k'ak'an(a)* 'walnut' really comes from Geo *k'ak'al-i* 'nut', as is usually asserted. The Common Abkhaz word can be connected with CCirc **k'(ˇ)ak'(ˇ)a* 'egg' and further with Daghestanian forms like Andi *gaga*, Bezh (Khoshar-Khota) *k'äk'ä*, Hun *k'ɵ̈k'i* 'stone (of fruit)' and probably also Tab *k'ek'el-*, Lez *k'ak'al*, Rut *k'ak'al*, Tsax *k'ak'al*, Kryz *k'ɨk'äl* 'small stone' (cf. NS 730-731). The final *-na* can be a diminutive suffix.

Some items borrowed from Kartvelian into Common Abkhaz are themselves loans in Kartvelian: Geo *p'at'iw-i*, Meg *p'at'u* 'respect' is from Arm *patiw* (Deeters 1926: 82), for Geo *gemo* 'taste' cf. probably Gr γεῦμα 'id.', Meg *k'ambeši//k'ambeči* 'buffalo', through Geo *k'ameč-i*, dial. *k'ambeči*, comes from Persian *gōmēš* 'id.' (< OIran **gau-maiša*, cf. Abaev I: 618), Geo *k'alat-i* 'basket' comes from Gr κάλαθος, Modern Gr καλάθι 'id.' (via Arm *k'alat* 'id.', cf. Abaev I: 617), Geo *c'es-i* 'rule, order' may be a borrowing from Arm *cēs* (Deeters 1926: 66), Geo *ǯumara* 'joker', *ǯumr-ob-a* 'to say jokes; joke' comes ultimately from Arab *qmr* 'to play (cards, etc.)', cf. from the same source Kurdish *ǯumar* 'game of hazard'. Meg *k'enǯa* 'doll' is considered to be a loan from Tu *genç* 'young' (cf. Kipshidze 1914: 254; with Megrelian diminutive suffix *-a* ?), and if so, the reconstruction of CAbx **k'anǯ'a* is not possible. CAbx **b(ə)q°ǯ'l* 'wooden tub' can alternatively be regarded as a borrowing (together with Meg *buq'uni*) from Lat *pōculum* 'mug, beaker'.

Common Abkhaz loans from (Old) Ossetic

Intensive Abkhaz-Ossetic contacts took place in the times of the Abkhazian Kingdom (8-10 centuries) and later, until the 13 century, when the Ossetians

were crushed by the Mongols. The Ossetic loans in Abkhaz have been discussed in Abaev 1949, Djonua 1985, ZL, etc. In the Ossetic material given below the Iron and Digor forms are divided by a slash (the first form being Iron).

The list of Ossetic loans:
apš°ǝma < Oss *fəsəm/fusun* 'host, master', **agməg* < Oss *ægoməg/ægomug* 'ugly, silly', **argám(a)* 'openly' < Oss *ærgom/ærgon* 'face, façade, obvious, open', **(j)arnəg* 'silly, mad' < Oss *ærnæg* 'wild', **ǯ'anax* 'sledge' < Oss *ʒonəγ/conæγ* 'sledge; jaw', **ž'aga(-ća)* < Oss *zga/əzga/izgæ* 'rust', **ratən* < Oss *rætæn* 'leather thong used in wooden plough', **waršə* < Dig *wæras* 'bear', **wa(r)dəq°ə* 'hoop, rim (of barrel)' < Oss *wærdæx* 'twisted twig used as cord', **wardán* < Oss *wærdon/wærdun* 'a kind of bullock cart'.

Comments:
(a) The source of the initial and final *a-* in **apš°ǝma* 'host, master' is not clear. In fact the anlaut of the Abkhaz word fluctuates between *#ap-* and *#p-*, cf. the indefinite singular form *apš°ǝma-k'* 'a/one host' vs. *sə-pš°ma* 'my host'. Apart from Abkhaz, cf. also Circ, Ub *bəsəm* 'id.', Ing *fusæm*, Chech *husam* 'shelter', 'master's house'. The cluster **pš°* in Abkhaz developed from **fš°* (< **fVš°*). The Ossetic word, borrowed into neighbouring Caucasian languages, is derived from Iran **pasumant-*, **fšumant-* 'owner of cattle', and is akin to Avesta *fšūmant-* 'owner of cattle', OInd *paśumant-* 'rich in cattle' (Abaev I: 502). Shagirov (ZL 156) argues that the West Caucasian words could be borrowed not from Iranian (i.e. Old Ossetic), but from Old Indian, which is unlikely.
(b) **agməg* 'ugly, silly' is now only attested in South Abkhaz. The Ossetic etymology is *æ-kom-əg* 'without mouth' (Abaev I: 121).
(c) Oss *ærgom/ærgon* 'face, façade, obvious, open', which consists of a prefix *ær-* and *kom* 'mouth' (cf. Abaev I: 175-6), is also found in Megrelian (*argam* 'id.'), which could be borrowed via Abkhaz.
(d) The Ossetic word for 'sledge' has many correspondences in the languages of Eurasia (Turkic, Finnic, Indo-European), cf. Abaev I: 397-8; its origin is unknown.
(e) Ossetic *zgæ* 'rust' seems to be the likely source of CAbx **ž'aga-ća* (absent in Tapanta), if we suppose insertion of *a* in the (initial) Ossetic cluster *zg*. Except for Ossetic and ZorPahlavī (in the latter *zag* 'rust', *zagīk* 'rusty'), the other Iranian forms contain a nasal, cf. Pers *zang/žang* > Arm *žang* 'rust' (Bailey 1956: 67) > Geo *žang-i/ǯang-i* 'oxide', 'rust', and, from the latter, further on into Meg *žangi/ǯangi* (Cagareli 1880: 65), Laz *m-žangi/ǯangi* 'id.' (Marr 1910: 180); cf. also Arameic *ǯäng/ǯänk* 'rust' (SMOMPK, XX, otd. III, 1894, p. 284). As for the final

part of the Abkhaz word, it is either **ća* 'to go', or **ća* 'to be distorted, turned'.
(f) The reconstruction of CAbx **ratənə* 'leather thong used in wooden plough' is based solely on the Abzhywa material. The Ossetic word goes back to **raδana-* < Proto-Iranian **rasana-* (Abaev II: 382).
(g) Beside Abkhaz, Oss *wæras* was borrowed into Svan *waræš/woræš* 'a sort of alcoholic drink'. Abaev IV: 89 suggests that the Ossetic word itself must be a loan from Finnic, cf. Komi *yröš* 'kvass', Khanty *ŏrəs* 'tree/birch sap', Mansi *äreś wüt* 'kvass'.
(h) The reconstruction of CAbx **wa(r)dəq°ə* 'hoop, rim (of barrel)' is based on Abzhywa material only. Abzhywa must have dropped *r* in the medial cluster, which is, however, not common. Though the Ossetic origin of this word is quite plausible, the final consonant poses certain problems: in Abzhywa, Tapanta and Kabardian it is labialised, which is not the case in Ossetic. It is noteworthy that (Turkic) Balkar *bardux, urdux* 'twisted twig', also borrowed from Ossetic (Abaev IV: 91), has *u* in the final syllable which perfectly corresponds to West Caucasian forms with labialisation, though it does not explain why all these forms show discrepancy from the original with regard to the final vowel. Another problem is that in Tapanta we have uvular stop *q°* instead of the expected spirant. Beside West Caucasian and Balkar, this word was also borrowed into Georgian (Mokhev dialect): *valdaǩ-i* 'cord made of twisted grass', this time with preservation of the original vowels (Abaev, ibid.).

Some Ossetic ethnonyms as reflected in Abkhaz
(1) The immediate source of *ázja* 'Karachaj (as people)', an archaism found only in Bzyp folklore, is not clear, but the ultimate source must be Oss *asə* (Ir), *asi, assi* (Dig) which now means 'Balkaria', 'Balkarians', but used to be one of the old self-designations of Ossetes, who preceded Turkic Balkarians and Karachajs in the West Caucasus. Cf. also (Old) Rus *jas*, referred to Old Ossetians. The origin of the term is not clear. According to one of the explanations, it is connected with Avestan *āsu* 'quick, swift' (cf. Abaev I: 79-80).
(2) CAbx **aśʷə́* 'Tapanta', 'North Caucasian plane', which, according to Genko 1955: 9, used to be referred to the old Ossetes (who inhabited the territories later settled by Tapanta), might be of Ossetic origin as well (also connected with Avestan *āsu* 'quick, swift' ?). The same term probably gave rise to OGeo *ovs-i* > MGeo *os-i* 'Ossete', from which Meg *opsi* > AbzhAbx *a-wáps* 'id.'.
(3) The third Old Ossetic ethnonym, *alan*, is preserved in the Abkhaz family name *Alán* (and in Megrelian family name *alan-ia*), cf. Modern Oss *allon*, ethnical term in folklore, < OIran **ăryānām* (gen. pl.) 'Aryan'; the double *ll* in Modern

Ossetic reflects combination **ry* (Abaev, ibid.). Cf. also Gr Ἀλανοὶ, Lat *Alani*, referred to the ancestors of Ossetes, and Meg *alani* 'Karachaj' (as people), 'brave, hero' (Abaev I: 47).

The alleged Ossetic origin of the following words is unlikely.

(1) Schiefner 1863 (cf. also Abaev IV: 220-221) proposed to connect CAbx **q°əš°ə* 'medicine, remedy', 'poison', 'gunpowder' with Oss *xos/xwasæ* 'hey', 'medicine', 'means', cf. also *toppə-xos* 'gunpowder' (lit. 'gun medicine'). The Ossetic word comes from **hu-wāstra*, lit. 'good *(hu-)* grass' (Abaev, ibid.). But if the word was really borrowed from Ossetic we would have expected in Abkhaz **x°aš(a)*, rather than **q°əš°ə*. It is difficult to explain vowel discrepancies, labialisation of *š*, as well as differences in the anlaut consonant. Shagirov (ZL 30) sees in Abkhaz a Circassian loan (CCirc **x°əšx°a*) 'medicine', which is equally unacceptable on phonetic grounds.

(2) CAbx **k°əǯ́ma* 'wolf', which does not show any reliable West Caucasian correspondences, can also be of Ossetic origin, coming, according to Abaev 1949: 312 (and Abaev I: 606), from Oss *k°əʒ/kuj* 'dog', though the final *ma* is not clear. Abaev suggests that it may be the Abkhaz negative suffix *ma*, i.e. 'not dog' (ibid.). Nevertheless, the word may well be native to Abkhaz, as it is reminiscent of East Caucasian forms like PAvar-Andi **g(°)iži* 'bitch', Lak *k̄ači* 'dog', PDarg, PLez **k̄°ača* 'bitch' (cf. NS 445);

(3) SAbx *a-psəng'arəj*, Ash *psərg'ala*, Tap *psərglá* 'anvil' < CAbx **psəng'ará* can either be related to CCirc **səg'ə* 'hump, crest (of bird)', 'anvil', and thus come from CWC **(p)sə(n)g'ə* or, alternatively, be an Iranian loan. In the latter case Abaev 1949: 313 proposes its borrowing from Oss *æfsæn/æfsæn* 'ploughshare' < 'iron'; in this case the second part might have been Abx *-r-gəla* 'to fix, put', i.e. 'fixed iron' (?). But the connection with the Circassian word seems to be more plausible.

(4) Abaev II: 313-314 derives Tap *q°al* 'knucklebone' from Oss *qūl/ɣolæ* 'id'. The Tapanta word can be tentatively connected with SAbx *a-q°ál* 'big lump (of sugar)' and thus be traced back to CAbx **q°alə* (?), though due to the semantic differences there is no complete certainty about such connection.

(5) CAbx **raxəš'na/*raxč'əna* '(the hearth) chain', alongside CCirc **λax(°)ə/ač^{h}ə* 'id.' and some Daghestanian forms (Avar *raxxass*, Darg *raxaž*, Hun *laxas/raxas* 'chain') are considered to be borrowed from Oss *ræxəs/ræxis* '(the hearth) chain' (Abaev 1949: 87, 90, 313; cf. also ES I: 247-8), while the very Ossetic word comes, according to Abaev 1956: 27, from Germanic **rak(k)is* 'chain', cf. OHG *rahhinza*. The Abkhaz form has (the final) segment *-na*, missing in other

languages; it can be presumably the Abkhaz diminutive suffix *-na*. If the Ossetic word is indeed connected with Germanic, it only had to be borrowed from Old High German, because in all other Germanic languages *-k-* was not changed into *hh* (phonetically *x*) in intervocalic position. D. Boutkan informs me that the proto-Germanic form (given Middle Dutch, Old English and Old Low German data) should be reconstructed as **rakes-* (Germanic *s-* stem), which would explain the *s* in the Ossetic word, otherwise it is not probable that the Ossetians would have preserved the nominative suffix *-s* of the Germanic word. Still, it is more probable that the word is native to North Caucasian languages (which does not exclude internal borrowings), and from there has penetrated Ossetic.

(6) CAbx **čəbə́g(a)* 'scythe', together with CCirc **čʰ'amag'ə*, Ub *č'amag'* 'id.', are regarded as borrowings from Oss *cævæg* 'id.' (cf. Abaev I: 305-6, ZL 164-165). Abaev (ibid.) derives Oss *cævæg* 'scythe' from the verb *cævən* 'to beat'. Nikolayev and Starostin (NS 335), however, reject the idea of the borrowed nature of the West Caucasian forms because they have reliable East Caucasian correspondences: Andi, (South) Avar, Hun, Lak *č'inik'*, Bezh *c'inik'*, Archi *č'inikw*, Rut *č'inak'* 'scythe'. They argue that the Ossetic word itself must be a borrowing from a form close to the Abkhaz one.

Other (presumably) Ossetic loans do not cover the whole Abkhaz speaking area:

(a) Tap *x̌(ˀ)šʳəp*, Ash *x̌əšʳə́p*, Sadz *a-šx̌ərp/a-šx̌(ə)rə́p/a-č(ˀ)xrə́p* 'sickle' < Oss *æxsərf/æxsirf* 'id.' (with further Indo-European parallels). The change Oss *-rf* > Abx *-rp* can be explained by the final position of the cluster.

(b) Tap *psənčˀ*, Ash, Ahch, Tsab *a-psə́nčˀ* 'yoke' < Oss *æfsonʒ/æfsoj* 'yoke' < Iran **span-ti* (Abaev I: 484-485). The cluster *ps* in Abkhaz developed from **fs* (cp. **apšˀəma*).

(c) *a-psásk'a* 'midge' < Oss *sask/saskæ*, *sask'æ* 'midge', 'mosquito', 'small insect'. The same word is found in Hung *száska* 'grasshopper', 'locust', Mordva *śäśke/śeśke*, Fin *sääski*, Est *säsk*, Saami *čūšk* 'moskito', Balkar *saskə* 'gadfly', Pers *sūsk* 'cockroach', Gabri *sisk* 'bittle', etc. (Abaev III: 37), though the ultimate source is unknown.

(d) Abx *a-supal* 'fringe of saddle' is supposed to originate from Oss *cupal/copalæ* 'cluster, bunch' (MS 162), though the rendering of the Ossetic *c* (phonetically *[c]*, *[ć]*, or *[č]*) is unusual. In Abkhaz one should have expected either **a-čˀəwpal*, or **a-cəwpal*.

(e) Tap *amlaga* 'skinny' < Oss *mallæg* 'skinny', 'weak'. The initial *a-* in Tapanta is unclear (cf. **apšˀəma*).

In general, Abkhaz loans reflect Old Ossetic phonetics: preservation of the old *a* before nasal resonants *n*, *m*, which in Abkhaz in word-final syllable in some of the cases (under stress ?) was reduced to *ə*, e.g. **wardə́n*, **ratə́n*, from **wardán*, **ratán*. Another general feature is that the majority of (Common) Abkhaz loans reflect the Ossetic variants with back, rather than front, sibilants.

Some other loans

**basta* 'maize or millet pap' (probably from Middle Gr παστά, cf. Jakovlev 1948: 166-168), **kˇašta* 'young sheep', **k'apə-k'apə//*q'aq'abə* 'mountainous partridge' (< ?), **q'ama* 'dagger' (< ?), **ć'əbra* 'savory, *Satureia hortensis*' (< ?), **čˇənərə* 'hired shepherd' (< Iran ?), **sañandaq'* 'bow/arrow' (< Turkic), **šabə-ša* 'Saturday' (eventually from Hebrew), etc.

Comments:

(a) For Abx *kˇašta* 'young sheep' an Ossetic origin has been proposed (cf. Djonua 1985: 124), though the etymology of the latter is unclear (cf. Abaev 1949: 313). Abaev I: 604 considers it to be a loan from the Caucasian languages, from which he refers only to Svan *neɣast* 'goatling half year-old', which, however, does not match either Ossetic or Abkhaz forms. Laz *košat'i* 'one year-old goat' (Marr 1910: 198) is a more welcome companion to the Ossetic and Abkhaz words, apart from which cf. also Tu (dial.) *koşat* 'junger Ziegenbock, der noch nicht zur Deckung verwendet wurde', Arm *k'ōš* 'Ziegenbock' (U. Bläsing, pers.com.). Rayfield 1988: 241 considers the Abkhaz word to be of Nakh origin (cf. Chech *üstaɣ* and Bats *ujstxi*), which is not plausible for phonetic reasons.

(b) **k'apə-k'apə//*q'aq'abə* 'mountainous partridge' (onomatopoeic by origin) can be regarded as a "Wanderwort", cf. Geo *k'ak'ab-i*, Meg *k'ok'obe-* < PK **k'ak'ab-* (EK 105), Andi *ɣabɣo*, Xvar *ɣoɣba*, Axv *ɣaɣba*, Darg *q'aq'aba*, Lak *q̄aq̄aba* 'the cry (of partridge)', Tab *q̄aq̄uba*, Gylian *kəbk*, Arm *kakhav*, Gr κακκάβη, Hitt *kakkapa-*, Lat *caccabō* 'to cry (of partridge)', 'partridge' (cf. XS 16; Nikolayev 1985: 62; Cardona 1983: 65). The absence of the word in the North Abkhaz dialects, however, renders its Common Abkhaz character doubtful.

(c) For **q'ama*, also found in other Caucasian languages, as well as in Turkic, cf. also Iraqi Arabic *qama* 'dagger' (< Tu ?). The discussions of different etymologies of this word see in ES I: 219.

(d) **sañandaq'* 'bow, arrow', coming from Turkic (ZL 118), could penetrate Abkhaz (and certainly Ubykh) via Circassian (especially because of the nasal, not present in the Turkic forms cited by Shagirov). Cf. Ad *sayəndaq*, Kab *sayəndaq'* 'quiver with arrows and bow', Ub *sayəndaq* 'arbalest'. In Turkic: Chagat *sagdak*,

Tat *sadak*, Kum *sadaq* 'quiver', Kirg *saadak* 'quiver, bow with arrows', Kar-Balk *sadaq* 'bow, arrow'. It was also borrowed into Russian: сарайдак, сайдак 'quiver with bow and arrows' (Shagirov, ibid.).

CHAPTER IV

THE RECONSTRUCTION OF THE COMMON CIRCASSIAN PHONEMIC SYSTEM

The first comparative survey of Circassian dialects with the discussion of common lexical material and sound correspondences between all Circassian dialects was undertaken by Jakovlev (1928; German translation 1930), though he, like his colleague Genko, never tried to make a reconstruction of the phonemic system of the languages under investigation. Some intra-Circassian consonantal and vocalic correspondences were discussed in Ashxamaf 1939. The first comprehensive Common Circassian reconstruction was undertaken by the Dutch linguist Kuipers (1963; PC), which was followed by Proto/Common Circassian reconstructions by Balkarov 1970, Starostin 1978 (cf. also NS), and Kumaxov 1981. Of importance are also works by Rogava 1943; 1974, Lomtatidze 1953; 1967, Abdokov (FL; ZS), Shagirov (ES I, II), Urusov, etc.

The phonemic systems of Bzhadygh and Shapsygh (cf. Chapter II, in 3.1.1. and 3.1.2.) prove to be, in general, the most conservative and closest to that of Common Circassian. These dialects retained the old distinction between aspirated and non-aspirated (i.e. lax and tense) obstruents, which is lost by other dialects. The comparison of Shapsygh or Kabardian with the rest of the Circassian dialects allows us to restore the palatalised velar stop series. Kabardian, with small exceptions (retention of *x°*), represents the most simplified system. The Beslenej dialect of Kabardian, however, preserves some of the older oppositions.

The reconstructed system of Common Circassian consonantism is in fact very close to the inventory of Bzhadygh. The reconstruction presented here is similar to that of Kuipers (cf. PC 4). The only differences concern the glide *h* (not to be confused with the pharyngal *ħ*), which I consider automatic (as it occurs only in anlaut before a vowel) and therefore non-phonemic, and the labiodental spirant **f*, tentatively reconstructed by me, and missing in the system proposed by Kuipers.

The reconstruction proposed by Kumaxov 1981: 161 differs from that of Kuipers in that he considers the opposition "lax-tense" to be a local West-Adyghe (Bzhadygh and Shapsygh) innovation and therefore not a property of Common

Circassian. Kumaxov does not reconstruct the glide **h* and the labiodental **f* either.

Nikolayev and Starostin (NS 197) instead of **q'*, **q°* in reconstructions by Kuipers, Balkarov and Kumaxov, restore **ʔ*, **ʔ°*. It is possible, of course, to disregard the Hakutsw Shapsygh data as possibly reflecting Ubykh influence (Ubykh, which neighboured on Hakutsw, did not have glottal stop as a phoneme) and to posit the phonemes proposed by Nikolayev and Starostin (and by Kuipers 1963 !), though I prefer to stick to the traditional view, regarding the Hakutsw material as archaic. In any case, the correspondences in the sister-languages prove that the glottal stop (plain and labialised) is a result of a purely Circassian development.

The systems reconstructed by Kuipers and Kumaxov, like the one given in this study, represent in fact the consonant system of *Common Circassian*, i.e. the latest stage of the proto-language, close to its contemporary offsprings: no phoneme is reconstructed which is not present in at least one of the modern dialects. Other reconstructions (see Balkarov 1970; ZS; NS), which I shall discuss later, go much deeper into the history of these languages and represent the consonant system of *Proto-Circassian*.

1. COMMON CIRCASSIAN PHONEMIC INVENTORY

Consonant System

	Stops				Affricates				Spirants			Resonants		Glides
Labials	*b*	*pʰ*	*p̄*	*p'*					*(f)*			*m*		*w*
Dentals	*d*	*tʰ*	*t̄*	*t'*	*ʒ*	*cʰ*	*c̄*	*c'*	*z*	*s*		*n*	*r*	
Dent.-alveol. labialised					*ʒ°*	*cʰ°*	*c̄°*		*ź°*	*ś°*	*ś'°*			
Alveolars palatalised					*(ǯ)*	*čʰ*	*č̄*	*č'*	*ž*	*šʰ*	*š̄*			
					ǯ'	*čʰ'*	*č̄'*	*č''*	*ž'*	*šʰ'*	*š̄'*			
Laterals									*L*	*λ*	*λ'*			
Palatals														*j*

Velars					$\hat{g}$	x
labialised	g°	$k^{h\circ}$	$\bar{k}^{\circ}$	k°		x°
palatalised	g'	$k^{h\prime}$	$\bar{k}'$	k''		
Uvulars		q^{h}	$\bar{q}$	q'	γ	$\check{x}$
labialised		$q^{h\circ}$	$\bar{q}^{\circ}$	q°	γ°	$\check{x}^{\circ}$
Pharyngals						$\hbar$

Vocalic System

a $\check{a}$ ∂

2. DEVELOPMENTS IN DIALECTS

Developments common to several dialects

I. *West Circassian:*

$*x^{\circ}$ > f (except for clusters with sibilants)

II. Bzhadygh, Temirgoj, Abadzakh:

$*g'$, $*k''$ > $\check{g}'$, $\check{c}''$

III. Temirgoj, Abadzakh:

$*\bar{p}$ > p

$*\bar{t}$ > t

$*k^{h\prime}$, $*\bar{k}'$ > $\check{c}'$

$*\bar{q}$, $*\bar{q}^{\circ}$ > q, q°

$*\bar{c}$ > c

$*\acute{c}^{h\circ}$, $*\acute{c}^{\circ}$ > $\acute{c}^{\circ}$

$*\check{c}^{h}$, $*\check{c}^{h\prime}$ > $\check{s}$, $\check{s}'$

IV. East Circassian:

$*\bar{p}$ > b

$*\bar{t}$ > t

$*g'$, $*\bar{k}'$ > Bes $g'/\check{g}'$, Kab $g'/\check{g}$

$*k^{h\prime}$, $*k''$ > $k'/\check{c}'$, $k''/\check{c}''$

*$\bar{k}^{\circ}$ > g°
*$\bar{q}$, *$\bar{q}^{\circ}$ > q', q°
*$\bar{c}$ > $ʒ$
*$ʒ^{\circ}$, *$\acute{c}^{\circ}$, *$\acute{z}^{\circ}$ > v
*$c^{h\circ}$, *$ś^{\circ}$ > f
*$ś^{\circ}$ > f°

V. Bzhadygh, Temirgoj, Abadzakh, Beslenej, Kabardian:
*q', *q° > $ʔ$, $ʔ^{\circ}$

VI. Temirgoj, Abadzakh, Beslenej, Kabardian:
*p^{h} > p
*t^{h} > t
*$k^{h\circ}$ > k°
*q^{h}, *$q^{h\circ}$ > q, q°
*c^{h} > c

VII. Temirgoj, Abadzakh, Beslenej:
*$š^{h}$, *$\check{š}$ > $š$
*$š^{h\prime}$, *$\check{š}'$ > $š'$

Comments:
(1) The opposition "lax-tense", realised phonetically as the contrast between aspirated and non-aspirated, is well preserved only in Bzhadygh, while in Shapsygh it is dying out. In Temirgoj and Abadzakh these two series merged, while in Kabardian the tense affricates became voiced; except for Besleney, they were further spirantised in the rest of the Kabardian dialects (with some residues in subdialects, especially in Karachaj-Cherkessia); the lax series became plain voiceless.
(2) The velar stops became affricates in all the dialects except Shapsygh and (residually) East Circassian.
(3) In all dialects but Hakutsw Shapsygh, the glottalised uvulars became glottal stops.
(4) The reconstruction of CCirc *f is rather tentative, as it is based on the Adyghe evidence only (cf. below, in Chapter V, under CWC *f (1)).

Developments in individual dialects
I. Bzhadygh:

*k^h', *$\bar{k}$' > $č^h$', $\check{č}$'
*$\check{č}^h$, *$č^h$' > $\check{š}^h$, $š^h$'

II. Shapsygh:
*c' > c'/s'
*($\check{ǯ}$), *$\check{ǯ}$' > $\check{ǯ}$
*$č^h$, *$č^h$' > $č^h$
*$\check{č}$, *$\check{č}$' > $\check{č}$
*$č$', *$č$'' > $č$'
*$\check{z}$, *$\check{z}$' > $\check{z}$
*$š^h$, *$\check{š}^h$' > $š^h$
*$\check{š}$, *$\check{š}$' > $\check{š}$

III. Temirgoj:
*$\check{č}$, *$\check{č}$' > $\check{č}$, $\check{č}$'

IV. Abadzakh:
*$\check{ǯ}$, *$\check{ǯ}$' > $\check{z}$ $\check{z}$'
*$\check{č}$, *$\check{č}$' > $\check{š}$, $\check{š}$'
*$č$' > $\check{š}$'/$\check{ś}$'/ʔ'
*$č$'' > $\check{š}$''/ʔ'

V. Beslenej:
*$č^h$, *$č^h$' > $č$, $č$'
*$\check{č}$, *$\check{č}$' > $\check{ǯ}$, $\check{ǯ}$'
*$ś$' > $ś$

VI. Kabardian:
*$\check{č}^h$, *$č^h$' > $\check{š}$
*($\check{ǯ}$), *$\check{ǯ}$', *$\check{č}$, *$\check{č}$' > $\check{z}$
*$\check{z}$, *$\check{z}$' > $ź$
*$\check{š}^h$, *$š^h$', *$\check{š}$, *$\check{š}$' > $ś$

Comments:

(1) Shapsygh merged plain back sibilants with the palatalised series.

(2) Different developments of glottalised sibilants in (Caucasian) Abadzakh suggests that here at least two subdialects have merged.

(3) Unlike most of the Adyghe dialects and its own Beslenej dialect (and like Shapsygh), Kabardian lost the distinction between plain back sibilants and their

palatalised series. In Beslenej the old distinction was preserved, though in many cases it also tends to be neutralized either in the palatalised or plain series (cf. Taov 1975: 148).

(4) In both Kabardian and Abadzakh the original affricates were spirantised.

3. INTER-CIRCASSIAN CONSONANTAL CORRESPONDENCES

Table of inter-Circassian correspondences

CCirc	CWCirc	Bzh	Sh	Tem	Abdz	CECirc	Bes	Kab
*b	*b	b	b	b	b	*b	b	b
*p^h	*p^h	p^h	p^h	p	p	*p	p	p
*$\bar{p}$	*$\bar{p}$	$\bar{p}$	$\bar{p}$	p	p	*b	b	b
*p'	*p'	p'	p'	p'	p'	*p'	p'	p'
*d	*d	d	d	d	d	*d	d	d
*t^h	*t^h	t^h	t^h	t	t	*t	t	t
*$\bar{t}$	*$\bar{t}$	$\bar{t}$	$\bar{t}$	t	t	*d	d	d
*t'	*t'	t'	t'	t'	t'	*t'	t'	t'
*g´	*g´	ǯ´	g´	ǯ´	ǯ´	*g´	g´/ǯ´	g´/ǯ
*g°	*g°	g°	g°	g°	g°	*g°	g°	g°
*k^h´	*k^h´	$č^h$´	k^h´	č´	č´	*k´	k´/č´	k´/č
*k^h°	*k^h°	k^h°	k^h°	k°	k°	*k°	k°	k°
*$\bar{k}$´	*$\bar{k}$´	$\check{c}$´	$\bar{k}$´	č´	č´	*g´	g´/ǯ´	g´/ǯ
*$\bar{k}$°	*$\bar{k}$°	$\bar{k}$°	$\bar{k}$°	k°	k°	*g°	g°	g°
*k'´	*k'´	č'´	k'´	č'´	č'´	*k'´	k'´/č'´	k'´/č'´
*k»	*k»	k»	k»	k»	k»	*k»	k»	k»
*q^h	*q^h	q^h	q^h	q	q	*q	q	q
*q^h°	*q^h°	q^h°	q^h°	q°	q°	*q°	q°	q°
*$\bar{q}$	*$\bar{q}$	$\bar{q}$	$\bar{q}$	q	q	*q'	q'	q'
*$\bar{q}$°	*$\bar{q}$°	$\bar{q}$°	$\bar{q}$°	q°	q°	*q»	q»	q»
*q'	*q'	ʔ	q'	ʔ	ʔ	*ʔ	ʔ	ʔ
*q»	*q»	ʔ°	q»	ʔ°	ʔ°	*ʔ°	ʔ°	ʔ°
*ʒ	*ʒ	ʒ	ʒ	ʒ	ʒ	*ʒ	ʒ	ʒ
*c^h	*c^h	c^h	c^h	c	c	*c	c	c
*$\bar{c}$	*$\bar{c}$	$\bar{c}$	$\bar{c}$	c	c	*ʒ	ʒ	ʒ
*c'	*c'	c'	c'/s'	c'	c'	*c'	c'	c'
*ʒ°	*ʒ°	ʒ°	ʒ°	ʒ°	ʒ°	*v	v	v
*$ć^h$°	*$ć^h$°	$ć^h$°	$ć^h$°	ć°	ć°	*f	f	f
*$\bar{ć}$°	*$\bar{ć}$°	$\bar{ć}$°	$\bar{ć}$°	ć°	ć°	*v	v	v

*(ʒ)	*(ʒ)	ʒ	ʒ	ʒ	ʒ	*ʒ	ʒ	ž
*ʒ´	*ʒ´	ʒ´	ʒ	ʒ´	ʒ´	*ʒ´	ʒ´	ž
*čʰ	*čʰ	šʰ	čʰ	š	š	*č	č	š
*čʰ´	*čʰ´	šʰ´	čʰ	š´	š´	*č´	č´	š
*č̆	*č̆	č̆	č̆	č	š	*ʒ	ʒ	ž
*č̆´	*č̆´	č̆´	č̆	č´	š´	*ʒ´	ʒ´	ž
*č’	*č’	č’	č’	č’	č’/ʔ	*č’	č’	ś’
*č’´	*č’´	č’´	č’	č’´	č’/ʔ´	*č’´	č’´	ś’
(*f)	*f		f			*ʔ		
*z	*z	z	z	z	z	*z	z	z
*s	*s	s	s	s	s	*s	s	s
*ź	*ź	ź	ź	ź	ź	*ź	ź	ź
*ź°	*ź°	ź°	ź°	ź°	ź°	*v	v	v
*ś	*ś	ś	ś	ś	ś	*ś	ś	ś
*ś°	*ś°	ś°	ś°	ś°	ś°	*f	f	f
*ś’	*ś’	ś’	ś’	ś’	ś’	*ś’	ś	ś’
*ś’°	*ś’°	ś’°	ś’°	ś’°	ś’°	*f’	f’	f’
*ž	*ž	ž	ž	ž	ž	*ž	ž	ź
*ž´	*ž´	ž´	ž	ž´	ž´	*ž´	ž´	ź
*šʰ	*šʰ	šʰ	šʰ	š	š	*š	š	ś
*šʰ´	*šʰ´	šʰ´	šʰ	š´	š´	*š´	š´	ś
*š̆	*š̆	š̆	š̆	š	š	*š	š	ś
*š̆´	*š̆´	š̆´	š̆	š´	š´	*š´	š´	ś
*L	*L	L	L	L	L	*L	L	L
*λ	*λ	λ	λ	λ	λ	*λ	λ	λ
*λ’	*λ’	λ’	λ’	λ’	λ’	*λ’	λ’	λ’
*ĝ	*ĝ	ĝ	ĝ	ĝ	ĝ	*ĝ	ĝ	ĝ
*x	*x	x	x	x	x	*x	x	x
*x°	*f	f	f	f	f	*x°	x°	x°
*γ	*γ	γ	γ	γ	γ	*γ	γ	γ
*γ°	*γ°	γ°	γ°	γ°	γ°	*γ°	γ°	γ°
*x̆	*x̆	x̆	x̆	x̆	x̆	*x̆	x̆	x̆
*x̆°	*x̆°	x̆°	x̆°	x̆°	x̆°	*x̆°	x̆°	x̆°
*ħ	*ħ	ħ	ħ	ħ	ħ	*ħ	ħ	ħ
*m	*m	m	m	m	m	*m	m	m
*n	*n	n	n	n	n	*n	n	n
*r	*r	r	r	r	r	*r	r	r
*w	*w	w	w	w	w	*w	w	w

*j *j j j j j *j j j

Identical correspondencies

A number of consonants in the genetically related material are identical in all the Circassian dialects and therefore need no special comments. They are: *b, p', d, t', ʒ, c', z, s, ź, ś, ś', g°, kʷ, ĝ, x, L, λ, λ', x̌, x̌°, γ, γ°, ħ, m, n, r, w, j*. I will give only one example for each correspondence:

*b : Ad, Kab *baʒă* 'fly'
*p' : Ad, Kab *p'aśă* 'large, big'
*d : Ad, Kab *dă* 'nut'
*t' : Ad, Kab *t'ə* 'ram'
*ʒ : Ad, Kab *ʒă* 'army'
*c' : Ad, Kab *c'ă* 'louse'
?*f : Ad *-făfə* 'to flutter'
*z : Ad, Kab *zə* 'one'
*s : Ad, Kab *să* 'I'
*ź : Ad, Kab *źə* 'old'
*ś : Ad, Kab *śă* 'a hundred'
*ś' : Ad, Kab *ś'ə* 'to make, do'
*g° : Ad, Kab *g°ə* 'heart'
*kʷ : Ad, Kab *kʷă* 'to go'
*ĝ : Ad, Kab *ĝă* 'scrotum, testicle'

*x : Ad, Kab *xə* 'sea'
*L : Ad, Kab *Lə* 'flesh'
*λ : Ad, Kab *λə* 'blood'
*λ' : Ad, Kab *λ'ə* 'man, husband'
*x̌ : Ad, Kab *x̌ə* 'net, web'
*x̌° : Ad, Kab *x̌°ə* 'to graze'
*γ : Ad, Kab *γă* 'year, season'
*γ° : Ad, Kab *γ°ă* 'burrow, hole'
*ħ : Ad, Kab *ħă* 'barley'
*m : Ad, Kab *mə* 'wild apple'
*n : Ad, Kab *nă* 'eye'
*r : Ad *γărə*, Kab *γăr* 'prisoner'
*w : Ad, Kab *wă* 'you' (sg.)
*j : Ad, Kab *jə* 'eight'

Comments:

(a) The Beslenej dialect of Kabardian replaced Common Circassian *ś'* by *ś*.

(b) The reconstruction of CCirc **f* is tentative, as it is based on one Adyghe example only, cf. Tem (AdR 182) *č'ă-făfə-č'ə*, where *č'ă-* is preverb 'under', while the final *-č'ə* is unclear. The Kabardian counterpart is unknown.

Non-identical correspondences

Other consonants represent non-identical correspondences. As Kuipers (PC 3) pointed out, it suffices in general to have Bzhadygh and Kabardian to restore a Common Circassian form. Here I shall rely heavily (though not solely) on Kuipers' dictionary to illustrate the correspondences and the reconstructed proto-forms. The Shapsygh data reflecting old opposition "lax-tense" represented here are taken from the scarce literature on the dialect (ShD; Paris 1972; Smeets 1984; also PC). During my visit to the villages inhabited by speakers of Hakutsw

Shapsygh in the Caucasian Black Sea region close to Sochi, I was unable to find traces of the lax-tense opposition in the speech of the two villages (4 persons) where I managed to work. It is possible that this opposition is better preserved in Kuban Shapsygh and certainly in the speech of the Shapsygh emigrants in Turkey (cf. the system of Genceli Shapsygh described by Smeets 1983).

(1) Stops
(1.1) Bilabial
(1.1.1) Lax -tense: *p^h, *$\bar{p}$
CCirc *p^h > Bzh, Sh p^h : Tem, Abdz p : Kab p
CCirc *$\bar{p}$ > Bzh, Sh $\bar{p}$: Tem, Abdz p : Kab b

Examples:
*p^h : Bzh, Sh p^h*ă*, Tem, Abdz, Kab *pă* 'nose, front'; Bzh, Sh p^h*əźə*, Tem, Abdz *pəźə* 'hedgehog', Kab *pəź* 'blackthorn'; Bzh, Sh *g°ap^{h}ă*, Tem, Abdz, Kab *g°apă* 'pleasure';
*$\bar{p}$: Bzh, Sh *pānă*, Tem, Abdz *pană*, Kab *bană* 'prickle, thorn(bush)'; Bzh, Sh *pətă*, Tem, Abdz *pətă*, Kab *bədă* 'strong, solid'; Bzh, *paxă*, Tem *paxă*, Kab *baxă* 'steam'.

(1.2) Dental
(1.2.1) Lax - tense: *t^h, *$\bar{t}$
CCirc *t^h > Bzh, Sh t^h : Tem, Abdz t : Kab t
CCirc *$\bar{t}$ > Bzh, Sh $\bar{t}$: Tem, Abdz t : Kab d

Examples:
*t^h : Bzh, Sh t^h*ə*, Tem, Abdz *tə*, Kab *tə* 'to give'; Bzh *č^{h}at^{h}ə*, Tem, Kab *č'ătə* 'sheep-shed'; Bzh, Sh *mat^{h}ă*, Tem, Abdz, Kab *mată* 'basket';
*$\bar{t}$: Bzh, Sh *tă*, Tem, Abdz *tă*, Kab *dă* 'we'; Bzh, Sh *təγă*, Tem, Abdz *təγă*, Kab *dəγă* 'sun'; Bzh, Sh *tamă*, Tem, Abdz *tamă*, Kab *damă* 'wing'.

Comment:
Kuipers 1963: 68 explains the irregular character of correspondences in Bzh *t^{h}ăwă*, Kab *dăwă* 'how?', Bzh *t^{h}ănă*, Kab *dănă* 'where?' and Ad *śəd//səd*, Kab *sət* 'what' by the grammatical nature of these items.

(1.3) Velar
(1.3.1) Voiced: *g'

CCirc *g' > Bzh, Tem, Abdz $ǯ'$: Sh g' : Kab $ǯ/g'$

Examples:

*g' : Bzh, Tem, Abdz *ǯ'ană*, Sh *g'ană*, Kab *ǯană/g'ană* 'shirt'; Bzh, Tem, Abdz *bǎǯ'ə*, Sh *bǎg'ə*, Kab *bǎǯə/bǎg'ə* 'spider'; Bzh, Tem, Abdz *bzaǯ'ă*, Sh *bzag'ă*, Kab *bzaǯă//bzag'ă* 'evil, mischievous'.

Comment:

In some Shapsygh subdialects g' is met alongside $ǯ$, cf. in ShD: *čămăǯ* (p. 35)*//šămăg'* (p. 31) 'scythe'. In Kabardian the same situation occurs more regularly, g' and $ǯ$ being in allophonic variation.

(1.3.2) Glottalised: *k''

CCirc *k'' > Bzh, Tem, Abdz $č''$: Sh k'' : Kab $č'/k''$

Examples:

*k'' : Bzh, Tem, Abdz *č'ă*, Sh *k'ă*, Kab *č'ă//k'ă* 'tail, end'; Bzh *č'əš^{h}ə*, Tem, Abdz *č'əšə*, Sh *k'əš^{h}ə*, Kab *č'əś//k'əś* 'smithy'; Bzh *c'ač'ă*, Kab *c'ač'ă// c'ak'ă* 'nit'.

(1.3.3) Lax - tense: *$k^h{}'$; *$k̄'$, *$k^h{}^\circ$, *$k̄^\circ$

CCirc *$k^h{}'$ > Bzh $č^h{}'$: Sh $k^h{}'$: Tem, Abdz $č'$: Kab $k'/č$

CCirc *$k̄'$ > Bzh $c̄'$: Sh $k̄'$: Tem, Abdz $č'$: Kab $g'/ǯ$

CCirc *$k^h{}^\circ$ > Bzh $k^h{}^\circ$: Sh $k^h{}^\circ$: Tem, Abdz k° : Kab k°

CCirc *$k̄^\circ$ > Bzh $k̄^\circ$: Sh $k̄^\circ$: Tem, Abdz k° : Kab g°

Examples:

*$k^h{}'$: Bzh $č^h{}'ə$, Sh $k^h{}'ə$, Tem, Abdz $č'ə$, Kab $čə//k'ə$ 'brushwood, twig'; Bzh $č^h{}'at^hə$, Tem *č'ătə*, Kab *čătə//k'ătə* 'sheep-shed'; Bzh $č^h{}'ăc'ə$, Tem *č'ăc'ə*, Kab *čəc'ə//k'əc'ə* 'kid, young goat';

*$k̄'$: Bzh *č'ātə*, Sh *k̄'ātə*, Tem, Abdz *č'atə*, Kab *ǯăd//g'ăd* 'chicken'; Bzh *č'āpă*, Tem *č'apă*, Kab *ǯabă//g'abă* 'side (of body, hill)'; Bzh *č'əjə*, Tem *č'əj*, Kab (arch.) *ǯəj/g'əj* '(inside of) throat';

*$k^h{}^\circ$: Bzh, Sh $k^h{}^\circ ə$, Tem, Abdz, Kab $k^\circ ə$ 'core, middle'; Bzh $k^h{}^\circ ă$, Tem, Abdz, Kab $k^\circ ă$ 'thigh'; Bzh $k^h{}^\circ ăndə$, Kab $k^\circ ăd$ 'much, many'; Bzh $k^h{}^\circ əc'ə$, Tem $k^\circ əc'ə$, Kab $k^\circ əc'$ 'marrow';

*$k̄^\circ$: Bzh, Sh $k̄^\circ ə$, Tem, Abdz $k^\circ ə$, Kab $g^\circ ə$ '(two-wheeled) cart'; Bzh $k̄^\circ ăcə$, Tem $k^\circ ăcə$, Kab $g^\circ ăǯ$ 'wheat'; Bzh $cak̄^\circ ă$, Tem $cak^\circ ă$, Kab $ǯag^\circ ă$ 'blunt, dull'.

Comment:
The original plain velar stops merged during the Common Circassian period with the palatalised series, and the latter were further affricatised in all dialects except Shapsygh and Kabardian. The Adyghe dialects, however, retain voiceless velars in some clusters, cf. Tem: *psk'ă*, Sh *psk^{h}ă* 'cough' (Bzh *pč^{h}ă*), Tem *bărăsk'ă-źəj* 'wednesday' (Bzh *bărč'ă-źəj*), *bărăsk'ă-šx°* 'Friday' (Bzh *bărč'ă-šk°*), Tem, Sh *zə-γă-psk'ə* 'to bathe oneself' (Bzh *zə-γă-pč'ə*), Tem *wăś°ă-ć°ăpsk'´* 'lightning', Tem, Bzh *šk'ă* 'calf', *šk'ənλ* 'trough, manger', Tem *q°ašk'* Rus свинчатка', *-šk'ă* 'lump, chip, splinter' (cf. Txarkaxo 1963: 96-97).

(1.4) Uvular
(1.4.1) Lax - tense: *q^{h}, *$q̄$, *q^{h}°, *$q̄$°

CCirc *q^{h} > Bzh q^{h} : Sh q^{h} : Tem, Abdz q : Besl, Kab q
CCirc *$q̄$ > Bzh $q̄$: Sh $q̄$: Tem, Abdz q : Besl, Kab q'
CCirc *q^{h}° > Bzh q^{h}° : Sh q^{h}° : Tem, Abdz $q°$: Besl, Kab $q°$
CCirc *$q̄$° > Bzh $q̄$° : Sh $q̄$° : Tem, Abdz $q°$: Besl, Kab q^{w}

Examples:
*q^{h} : Bzh, Sh q^{h}ă, Tem, Abdz, Kab *qă* 'grave; cemetery'; Tem *qamp'ă*, Kab *qap'ă* 'dandruff'; Bzh *băq^{h}ə*, Kab *băq* 'cowshed';
*$q̄$: Bzh, Sh *q̄abză*, Tem, Abdz *qabză*, Kab *q'abză* 'clean'; Bzh *q̄əp'c'ă*, Sh *q̄əś°t'ă*, Tem *qəp'c'ă*, Kab *q'əp'c'ă* 'plum'; Bzh *ć°aq̄ă*, Tem *ć°aqă*, Kab *vaq'ă* 'shoes';
*q^{h}° : Bzh, Sh q^{h}°ă, Tem, Abdz, Kab *q°ă* 'pig'; Bzh, Sh q^{h}°*əźə*, Tem *q°əźə*, Kab *q°əź* 'pear'; Bzh q^{h}°*ajă*, Tem *q°ajă*, Kab *q°ăj* 'cheese';
*$q̄$° : Bzh, Sh $q̄$°ă, Tem, Abdz *q°ă*, Kab *q^{w}ă* 'son'; Bzh *q̄°əśhă*, Tem *q°əśhă*, Kab *q^{w}əśhă* 'mountain'; Bzh *q̄°əjə*, Tem *q°əjə*, Kab *q^{w}əj* 'mangy'.

Comment:
The opposition "lax-tense" in the uvular set in the speech of certain isolects of Turkey Shapsygh, namely, Düzce and Genceli Shapsygh, was transformed in the following way: *q^{h} and *q^{h}° merged, respectively, with spirants *x̌* and *x̌°*, while the tense members *$q̄$, *$q̄$° became plain *q*, *q°*, similar to what happened in Temirgoj and Abadzakh (cf. Smeets 1976: 61; 1984: 456; cf. also ShD 37 about the similar development of lax uvulars in certain isolects of Caucasian Shapsygh). In the Turkey Shapsygh isolect of Cemilbey, described by Paris 1972, the reflexes of Common Circassian uvulars seem to coincide with those of East Circassian: *q^{h} and *q^{h}° became plain *q*, *q°*, while tense *$q̄$, *$q̄$° are pronounced as glottalised *q'*,

q°. The latter were reinterpreted by Paris as phonologically tense, the feature of glottalisation being regarded as concomitant (p. 289). All these discrepancies prove that present-day Shapsygh (as well as Abadzakh) is in fact a merger of different subdialects, which is understandable given that before the Great Exodus in the middle of the last century Shapsygh and Abadzakh used to be the biggest Circassian tribes, undoubtedly with many subdialects, which have all been mixed in the newly acquired Turkish (or Arabian) habitat.

(1.4.2) Glottalised: *q', *q°

CCirc *q' > Bzh, Tem, Abdz, Kab, Sh *ʔ* : HakSh *q'*

CCirc *q° > Bzh, Tem, Abdz, Kab, Sh *ʔ°* : HakSh *q°*

Examples:

*q' : Bzh, Tem, Abdz, Kab *ʔă*, HakSh *q'ă* 'hand, arm'; Bzh *ʔat^{h}ă*, Tem *ʔată*, Kab *ʔătă* 'haystack'; Tem *g°əʔă*, Bzh *g°aʔă* 'to worry; to hurry', Kab *g°əʔă* 'to grieve, sob';

*q° : Bzh *ʔ°əšə*, Tem *ʔ°əš*, HakSh *q°əšə*, Kab *ʔ°əś* 'clever'; Bzh, Tem, Kab *ʔ°ənă*, HakSh *q°ənă* 'nail'; Bzh *ʔ°ant'ă*, Tem *ʔ°ănt'ă*, HakSh *q°ărt'ă*, Kab *ʔ°ănt'ă* 'to turn, wind'.

Comments:

(a) Hakutsw Shapsygh, which is the southernmost (sub)dialect of Adyghe, was bordering on Ubykh and Abkhaz, due to which influence the retention of *q'*, *q°*, which changed into plain and labialised glottal stops in the rest of Circassian dialects, could be explained. It is equally possible to regard Hakutsw data as reflecting some Ubykh substratum or influence, and reconstruct instead *ʔ and *ʔ°, as Kuipers 1963 and Nikolayev and Starostin did. However, I follow Balkarov 1970 (p. 225-228), Kuipers (PC) and Kumaxov 1981 (p. 147-148, 193) in restoring uvular glottalised stops, which is corroborated not only by internal (Hakutsw) evidence, but also by correspondences in Ubykh and Abkhaz. If the appearance of glottalised uvulars in Hakutsw was due to Ubykh substratum or influence, why did Hakutsw preserve the pharyngal spirant *ħ* (e.g. in *ħă* 'dog', *tħă* 'god', etc.), also absent from Ubykh? As is well known, those Ubykh who speak Shapsygh, regularly replace *ħ* by uvular *χ* (e.g. *χă* 'dog', etc.).

(b) PC 59 lacks Kabardian cognate to Bzh *g°aʔă*.

(c) In PC 73 *š*, instead of *ś* in Kab *ʔ°əś* 'clever', is obviously a misprint.

(d) In PC 73 Kabardian (and Bzhadygh) forms meaning 'to turn, wind' are given with *a* (*ʔ°ant'ă*), while due to the dictionaries there should be *ă* at least in

Kabardian, cf. also the Hakutsw form given above (my own recordings).

(2) Affricates
(2.1) Front affricates
(2.1.1) Lax-tense: *c^h, *$\bar{c}$
CCirc *c^h > Bzh c^h : Sh c^h : Tem, Abdz c : Kab c
CCirc *$\bar{c}$ > Bzh $\bar{c}$: Sh $\bar{c}$: Tem, Abdz c : Kab $ʒ$

Examples:
*c^h : Bzh, Sh $c^hə$, Tem, Abdz, Kab *cə* 'hair, wool'; Bzh, Sh *ħanc^{h}ă*, Tem *ħanc*, Kab *ħăncă* '(wooden) spade'; Bzh *q°anc^{h}ă* 'trunk with twigs', Kab *q^{w}acă* 'twiggy';
*$\bar{c}$: Bzh, Sh *că*, Tem, Abdz *că*, Kab *ʒă* 'tooth'; Bzh, Sh *cəγ°ă*, Tem *cəγ°ă*, Kab *ʒəγ°ă* 'mouse'; Bzh, Sh *k°ăcə*, Tem *k°ăcə*, Kab *g°ăʒ* 'wheat'.

(2.2) Middle affricates
(2.2.1) Voiced labialised: *$ʒ^w$
CCirc *$ʒ^w$ > Adyghe $ʒ^w$: Kab *v*

Examples:
*$ʒ^w$: Tem, Abdz *$ʒ^w$ă* 'to dam, fill, block up' (Jakovlev, Ashkhamaf 1941: 439; Bersirov 1981: 118), Bzh, Abdz *ħa-nʒ^{w}ă*, Tem *ħa-nʒ^w*, Kab *ħă-vă* 'haystack'; Tem *ʔ°ə-ʒ^{w}ăʒ^w* 'silly' (Vodozhdokov 1963: 45).

Comments:
(a) The first element in *ħa-nʒ^{w}ă* is *ħă* 'barley', while *-n-* is an increment. Both *$ʒ^w$a* 'to dam, fill' and *-$ʒ^w$a* in *ħa-$ʒ^w$a* 'haystack' represent one and the same morpheme. The Kuban Shapsygh form for 'haystack' is *ħa-nć^w* (ShD 36), i.e. with *ć^w* instead of $ʒ^w$, probably due to local innovation. In the last example *ʔ°ə-* means 'mouth'.
(b) It is possible that the third morpheme with *$ʒ^w$* is preserved in Yugoslav Abadzakh *$ʒ^w$ə*, though with unclear meaning, cf. examples in the comments to the pair *$ć^h$° : *$č$°. Cf. also $ʒ^w$ in Anatolian Shapsygh *qanəʒ^{w}ă* 'wooden hook', used in free variation with *qanəč°ă* (Smeets 1984: 131). Smeets suggests (pers.com.) a loan from Turkish *kanca* 'large hook' (where *c* renders an alveolar affricate), which I don't find very convincing, given the presence of *č°* or $ʒ^w$ in Shapsygh forms. Cf. the other Shapsygh forms in ShD 118, 140: *ʔă-nač°//pxă-ʔă-nač°ă* (*pxă* 'wood(en)', *ʔă* 'hand')//*qa-nəć°* (*qă-* 'hither' ?).

(2.2.2) Lax-tense: *ć$^{h\circ}$, *ć$^{\circ}$

CCirc *ć$^{h\circ}$ > Bzh ć$^{h\circ}$: Sh ć$^{h\circ}$: Tem, Abdz ć$^{\circ}$: Kab *f*

CCirc *ć$^{\circ}$ > Bzh ć$^{\circ}$: Sh ć$^{\circ}$: Tem, Abdz ć$^{\circ}$: Kab *v*

Examples:

*ć$^{h\circ}$: Tem *bză-g$^{\circ}$ə-ra-ć$^{h\circ}$ə*, Kab *bzə-g$^{\circ}$ə-rə-f* 'to articulate badly, to burr' (*bzə-g$^{\circ}$ə* 'tongue', *-ra-* instr.); Bzh *ʔă-bə-ć$^{h\circ}$ă* 'mitten' (*ʔă* 'hand', *bə* 'hollow'); Bzh *ć$^{h\circ}$ax$^{\circ}$ă* 'to creep, slide', BesKab *fax$^{\circ}$ă* 'to crawl; to rub against sth'; Bzh *ć$^{h\circ}$ə-txă*, Sh *ć$^{\circ}$ă-txă*, Tem *ć$^{h\circ}$ə-ntxă*, Kab *zə-xă-fə-txă* 'to tear up, scratch';

*ć$^{\circ}$: Bzh, Sh *ć$^{\circ}$ə*, Tem, Abdz *ć$^{\circ}$ə*, Kab *və* 'bull, ox'; Bzh *ć$^{\circ}$əndə*, Kab *vənd* 'rook'; Bzh, Sh *ć$^{\circ}$aqă*, Tem *ć$^{\circ}$aqă*, Kab *vaq'ă* 'shoes'.

Comments:

(a) *ć$^{h\circ}$ is a rare phoneme in Common Circassian. All three instances given in PC 30, together with Tem *λă-bγ$^{\circ}$ə-ć$^{\circ}$ə* 'walking with slanting feet' (*λă* 'foot', *bγ$^{\circ}$ə* 'side') might well represent one and the same morpheme (notwithstanding the difference in vowels) with the general meaning 'to slide' (cf. PC, ibid). The second morpheme is *ć$^{h\circ}$ə* or *ć$^{h\circ}$a*: cf. Bzh *ć$^{h\circ}$ə-txă*, Sh *ć$^{\circ}$ă-txă*, Kab *fə-txă* 'to tear up, scratch' (cf. Smeets 1984: 228 for the Shapsygh form and Urusov 224 for the Kabardian one); note that the Bzhadygh form is (mistakenly ?) given with ć$^{\circ}$ in Balkarov 1970: 263 and in PC 30. Etymologically *ć$^{h\circ}$ə/a is connected with the Ubykh and Abkhaz verbal/nominal affix of intensity (cf. Chirikba 1986: 100).

(b) Txarkaxo 1963: 97 gives one more Bzhadygh root with ć$^{h\circ}$: ć$^{h\circ}$ənə 'overgrown (of plants)', but it must be either irregular or a mistake, since its Kabardian counterpart *vən-c* 'overgrown (of plants)' (with suff. *-c* 'bushy'; cf. Urusov 130) points to CCirc *ć$^{\circ}$ənə.

(c) It is difficult to determine, without Bzhadygh or Kabardian data, which of the affricates, *ć$^{h\circ}$ or *ć$^{\circ}$ (probably the first one?) is contained in the Yugoslav Abadzakh verbal morpheme *ć$^{\circ}$ă/ə* 'to tear/break off' (a possible cognate to Ub *-ć$^{\circ}$a-* 'to break') in *s-ă-ʒ$^{\circ}$ə-ć$^{\circ}$ă* 'I tear off', *ʔ ă-s-ʒ$^{\circ}$ə-ć$^{\circ}$ə-ʔ ə-št* 'I shall break off (the maize)' (Bersirov 1981: 118).

(2.3) Back affricates

(2.3.1) Lax -tense: *č^{h}, *č, *č^{h}', *č'

CCirc *č^{h} > Bzh š^{h} : Sh č^{h} : Tem š : Abdz š : Bes č : Kab š

CCirc *č > Bzh č : Sh č : Tem č : Abdz š : Bes ǯ : Kab ž

CCirc *č^{h}' > Bzh š^{h}' : Sh č^{h} : Tem š' : Abdz š' : Bes č' : Kab š

CCirc *č' > Bzh č' : Sh č : Tem č' : Abdz š' : Bes ǯ' : Kab ž

Examples:

**čʰ* : Bzh *šʰə*, Sh *čʰə*, Tem, Abdz *šə*, Bes *čə*, Kab *šə* 'horse'; Bzh *šʰə*, Sh *čʰə*, Tem, Abdz *šə*, Kab *qʷă-š* 'brother'; Bzh *pxašʰă*, Sh *pxačʰă*, Tem, Abdz, Kab *pxašă* 'rough, tough';

**č* : Bzh, Sh *čəĝə*, Tem *čəĝə*, Abdz *šəĝə*, Bes *ǯəĝ*, Kab *žəĝ* 'tree'; Bzh, Sh *čă*, Tem *čă*, Abdz *šă*, Bes *ǯă*, Kab *žă* 'to run'; Bzh, Sh *pčă*, Tem *pčă*, Bes *bǯă*, Kab *bžă* 'door';

**čʰ´* : Bzh *šʰă*, Sh *čʰă*, Tem, Abdz *š´ă*, Bes *č´ă*, Kab *šă* 'milk'; Bzh *băšʰə*, Sh *băčʰ*, Tem *băš´*, Bes *bač´*, Kab *baš* 'stick'; Bzh *măšʰə*, Tem *măš´ə*, Bes *măč´*, Kab *măš* 'millet';

**č´* : Bzh *č´əLă*, Sh *čəLă*, Tem *č´əLă*, Abdz *š´əLă*, Bes *ǯ´əLă*, Kab *žəLă* 'village'; Bzh *č´ămə*, Sh *čămə*, Tem *č´ămə*, Bes *ǯ´ăm*, Kab *žăm* 'cow'; Bzh *č´əž´ă*, Sh *čəžă*, Tem *č´əž´ă*, Bes *ǯ´əž´ă*, Kab *žəźă* 'far away'.

Comments:

(a) In Shapsygh the plain back affricates merged with the palatalised series (**čʰ*, **čʰ´* > *[čʰ´]*, **č*, **č´* > *[č´]*). In the variety of Shapsygh presented in Smeets 1984: 131, 461 'horse' and 'brother' are *[šə]* (in free variation with regular (palatalised) *[š´ə]*), which may witness preservation of the old velarised, though spirantised forms.

(b) The irregular preservation of affricates in the Adyghe dialects can be explained by positional factors. Thus, *č* (< **čʰ*) in the morpheme meaning 'without', instead of regular *š*, can be explained by the influence of *n*, cf. Tem *č´ăfə-nčă* 'joyless', *wəzə-nčă* 'healthy', Bzh *śħă-nčʰă* 'headless', etc. In the same morpheme in Abadzax the affricate is preserved only in isolects, cf. Abdz *č´ăfə-nəč*, *wəzə-nəč* (Kumaxova 1972: 25). Cf. the same situation in Bzhadygh with other morphemes: *q̄ʷan-čʰ´ă* 'crooked, unjust' (with epenthetic *n*) vs. regular Tem *qʷa-š´ă* and Kab *qʷan-šă* 'id.'.

The old affricate can also be preserved in clusters, which is characteristic especially for Temirgoj, cf. Tem *č´* instead of *š´* in *pč´əħă* 'evening', *pč´ădəž´* 'morning, tomorrow morning', *nəčħapă* 'this evening', *pč´apă* 'twilight' vs. regular Bzh *pšʰ´apă* (PC 34) and regular *pš´apă* in the Standard Adyghe dictionary (RAd 907). Apart from these cases, however, there are other instances of seemingly unmotivated preservation of affricate, just as in the speech of my Bzhadygh informant, Tagir Tlabzu (Adyghea, aul *Pănăž´əqʷaj*; further TT), where, besides the normal reflexes of the Common Circassian affricate **čʰ´* as **šʰ´*, the affricate is preserved in the verb 'to share', cf. in his speech *gʷăčʰ´ə* vs. Bzh (PC 59) *gʷăšʰ´ə*, Sh *gʷăčʰə*, Tem *gʷăš´ə* 'to share'.

(2.3.2) Plain - palatalised: *ʒ, *ʒ́

CCirc *ʒ > Bzh ʒ : Sh ʒ : Tem ʒ : Abdz ž : Bes ž/ž́ : Kab ž

CCirc *ʒ́ > Bzh ʒ́ : Sh ʒ : Tem ʒ́ : Abdz ž́ : Bes ʒ́ : Kab ž

Examples:

*ʒ : Bzh *λăg°aʒ*, Tem *λăg°anʒă*, Sh *λăg°anʒă/λăg°aʒ*, Abdz *λăg°anž*, Bes *λăg°anž/ž́ă*, Kab *λăg°aźă* 'knee'; Bzh, Tem *jă-băʒə*, Sh *jă-băʒə*, Abdz *jă-bážə* 'to fall'; Bzh, Tem *băʒəʒă* 'staggering, rocking'; Bzh, Tem *ʒəʒəʒ*, 'emotional interjection'; Ad *psə-ʒăn* 'watery';

*ʒ́ : Bzh, Tem *baʒ́ă*, Sh *baʒă*, Abdz *baž́ă*, Bes *baʒ́ă*, Kab *bažă* 'fox'; Bzh, Tem *ħaʒ́əγă*, Sh *ħaʒəγă*, Kab *ħăžəγă* 'flour'; Bzh *q̄°aʒ́*, Sh *q̄°ažă*, Tem *q°aʒ́*, Bes *q"aʒ́ă*, Kab *q"ažă* 'village'.

Comments:

(a) The reconstruction of the plain affricate *ʒ is dubious, as it is based only on few roots, the original forms of which raise some controversy. For instance, Kuipers 1963: 75 explains the presence of ʒ instead of expected ž (with a view to the Kabardian correspondence) in the Adyghe word for 'knee' by influence of *n*. Though such explanation is relevant for a number of other cases, Kumaxov 1981: 174 argues that it cannot be applied to the word for 'knee', citing the Bzhadygh form *λăg°aʒ*, i.e. without *n* (cf. the same form in Autlev 1966: 11); cf. also Sh *λăg°aʒ* in ShD 49, and *λažă* in Baksan isolects of Kabardian (Ocherki 255). Kuipers (ibid.), however, does cite the Bzhadygh form with *n*. Kumaxov 1981: 173-4, for his part, also argues that in some cases the plain ʒ is of secondary origin, cf. the Bzhadygh preverb *ʒă-xă-* 'before, by', where *ʒă* comes from *žă* 'mouth', or Bzh, Tem *na-ʒă-bă-ʒ* 'ugly', where *ʒă* comes from *-ʒ́ă* < *-*ǵa* 'bad' (*nă* 'eye'). But even if Kuipers is right in assuming that in the word for 'knee' ʒ can originate from ž, the variants or forms with ʒ (cf. examples above and below, in (b)) can in principle be traced back to the Common Circassian period. Shagirov (ES I: 249-250) in cases where Adyghe ʒ or ʒ́ corresponds to Kabardian ź, suggests for Proto-Circassian a middle affricate ʒ.

(b) For Abadzakh Kumaxova 1972: 21, besides the form cited above, gives also *λăg°anź*, found in some isolects. Ad *psə-ʒăn* 'watery' is cited in Autlev 1966: 11.

(2.3.3) Glottalised: *č', *č́'

CCirc *č' > Bzh č' : Sh č' : Tem č' : Abdz š'/ś'/ʔ́ : Bes č' : Kab ś'

CCirc *č́' > Bzh č́' : Sh č' : Tem č́' : Abdz š'/ʔ́ : Bes č́' : Kab ś'

Examples:

**č'* : Bzh, Tem *č'ă-sə*, Abdz *ʔă-sə*, Kab *ś'ă-sə* 'to sit inside of sth'; Bzh, Tem, Sh *č'əg°ə*, Abdz *š'əg°//ś'əg°*, Bes *č'əg°*, Kab *ś'əg°* 'earth, land'; Bzh, Tem *γ°əč'ə*, Abdz *γ°əš'ə*, Kab *γ°əś'ə* 'iron';

**č''* : Bzh, Tem *mač''ă*, Sh *mač''ă*, Abdz *maš''ă/maʔă*, Bes *mač''ă*, Kab *maś'ă* 'little'; Bzh, Tem *ħač''ă*, Sh *ħač''ă*, Abdz *ħaš''ă/ħaʔă*, Bes *ħač''ă*, Kab *ħaś'ă* 'guest'; Bzh, Tem *č''aLă*, Abdz *š''/ʔaLă*, Kab *ś'aLă* 'youth, boy'.

(3) Spirants

(3.1) Middle spirants

(3.1.1) Labialised: **ẑ°*, **ś°*, **ś"*

CCirc **ẑ°* > Adyghe *ẑ°* : Kab *v*

CCirc **ś°* > Adyghe *ś°* : Kab *f*

CCirc **ś"* > Adyghe *ś"* : Kab *f'*

Examples:

**ẑ°* : Bzh, Tem, Sh, Abdz *ẑ°ă*, Kab *vă* 'to be boiled (of food)'; Bzh, Tem, Sh, Abdz *ẑ°ă*, Kab *vă* 'to plough'; Bzh, Tem, Sh, Abdz *ẑ°aγ°ă*, Kab *vaγ°ă* 'star';

**ś°* : Bzh, Tem, Sh, Abdz *ś°ă*, Kab *fă* 'you' (pl.); Bzh, Tem, Sh, Abdz *ś°ă*, Kab *fă* 'skin, leather, fur'; Bzh, Tem, Sh, Abdz *ś°ă*, Kab *fă* 'to drink';

**ś"* : Bzh, Tem, Sh, Abdz *ś"ə*, Kab *f'ə* 'good'; Bzh, Tem, Sh, Abdz *ś"əc'ă*, Kab *f'əc'ă* 'black'; Bzh, Tem, Sh, Abdz *ś"ăjə*, Kab *f'ăj* 'dirt'.

Comment:

Concerning **ś"*, Paris 1978: 338 proposes that we reconstruct here the affricate **ć"*, rather than a spirant. The spirant certainly goes back to the affricate, but for the late Proto-Circassian, i.e. for Common Circassian, I follow PC, Kuipers 1987: 88 and Kumaxov 1981: 201-203 in reconstructing the spirant.

(3.2) Back spirants

(3.2.1) Voiced: **ž*, **ž'*

CCirc **ž* > Bzh, Tem, Abdz, Bes *ž* : Sh *ž* : Kab *ź*

CCirc **ž'* > Bzh, Tem, Abdz, Bes *ž'* : Sh *ž* : Kab *ź*

Examples:

**ž* : Bzh, Tem, Sh, Abdz, Bes *žă*, Kab *źă* 'mouth'; Bzh, Tem *žă*, Bes *ʔăžă*, Kab *ʔăźă* 'sledge'; Bzh, Sh, Tem *bžəʒă*, Kab *bźəʒă* 'flea';

**ž'* : Bzh, Tem, Abdz *ž'ə*, Sh *žə*, Kab *źə* 'wind'; Bzh, Tem, Abdz *bžă*, Sh *bžă*, Kab

bźă 'bee'; Bzh, Tem *wəžə*, Bes *wəžă*, Kab *wəźă* 'weasel'.

(3.2.2) Lax-tense: *$š^h$, *$š^h{}'$; *š, *š'

CCirc *$š^h$ > Bzh $š^h$: Sh $š^h$: Tem, Abdz š : Bes š : Kab ś
CCirc *š > Bzh š : Sh š : Tem, Abdz š : Bes š : Kab ś
CCirc *$š^h{}'$ > Bzh $š^h{}'$: Sh $š^h$: Tem, Abdz š' : Bes š' : Kab ś
CCirc *š' > Bzh š' : Sh š : Tem, Abdz š' : Bes š' : Kab ś

Examples:

*$š^h$: Bzh, Sh $š^h$əg°ə, Tem, Abdz, Bes šəg°, Kab śəg° 'mountain top, top part; surface'; Bzh $š^h$apxă, Tem $š^h$apx, Bes šapxă, Kab śapxă 'measure, size'; Bzh $š^h$əp^{h}ă, Kab śəpă 'to collect';

*š : Bzh, Sh šă, Tem, Abdz, Bes šă, Kab śă 'internal fat'; Bzh, Sh šə, Tem, Abdz šə, Kab śə 'to measure (space)'; Bzh, Sh šak^{w}ă, Tem, Abdz šak^{w}ă, Kab śak^{w}ă 'hunter; to hunt';

*$š^h{}'$: Bzh wăš^{h}ə, Sh wăš^{h}ə, Tem, Abdz waš'ə, Kab wăś 'axe'; Bzh $š^h$'ə, Kab śə 'to shear (sheep)'; Bzh č'əš^h'ə, Kab č'əś 'smithy';

*š' : Bzh š'ə, Sh šə, Tem, Abdz, Bes š'ə, Kab śə 'three'; Bzh g°ašă, Sh g°ašă, Tem, Abdz g°ašă, Kab g°aśă 'princess'; Bzh pš'ə, Sh pšə, Tem, Abdz, Bes pš'ə, Kab pśə 'prince'.

Comments:

(a) Following Kuipers 1963 and PC, I reconstruct the opposition "lax-tense" for Common Circassian back sibilant fricatives, though the Kabardian correspondences render such a reconstruction rather tentative. Here a late Adyghe development is possible.

(b) In Shapsygh the plain back spirants merged with the palatalised series (*$š^h$, *$š^h{}'$ > [$š^h$ʲ], *š, *š' > [šʲ]). Such system is preserved in (Anatolian) Genceli Shapsygh (GnSh), described in Smeets 1983. A peculiar system of another Anatolian Shapsygh subdialect (encoded here as HtSh, after informant's name) is presented in DA I: 91, 92 and DA III: 177-182 (and analysed by Smeets, ibid.), in which lax *$š^h$ and *$š^h{}'$ were reinterpreted as plain spirants, as opposed to originally tense *š, *š', phonemicised as palatalised series. Thus in HtSh there emerged a new opposition plain-palatalised, not connected with the analogous opposition of Common Circassian. The correspondences are as follows (cf. Smeets 1984: 460):

CCirc *$š^h$ > Bzh $š^h$: GnSh $š^h$: HtSh š

CCirc *$\check{s}$ > Bzh $\check{s}$: GnSh $\check{s}$: HtSh $\check{s}'$
CCirc *$\check{s}^h{}'$ > Bzh $\check{s}^h{}'$: GnSh $\check{s}^h$: HtSh $\check{s}$
CCirc *$\check{s}'$ > Bzh $\check{s}'$: GnSh $\check{s}$: HtSh $\check{s}'$

(3.3) Velar spirants
(3.3.1) Labialised: *x°
CCirc *x° > Adyghe f : Kab x°.

Examples:
*x° : Bzh, Tem, Sh, Abdz *$f\check{a}$*, Kab *$x^\circ\check{a}$* 'sinew'; Bzh, Tem, Sh, Abdz *$fab\check{a}$*, Kab *$x^\circ ab\check{a}$* 'warm'; Bzh, Tem, Sh, Abdz *$maf\check{a}$*, Kab *$max^\circ\check{a}$* 'day'.

Comments:
(a) In Adyghe dialects (except Bzhadygh) x° is preserved in clusters after sibilants, cf. Sh *$ś^\circ x^\circ$* (beside *f°*), Tem *$šx^\circ$* vs. Bzh *$šk^\circ$*, cf. Sh *$ś^\circ x^\circ\check{a}Lə$*, Tem *$šx^\circ\check{a}L$*, Bzh *$šk^\circ\check{a}Lə$* 'udder', Sh *$ś^\circ x^\circ əźə/f^\circ əźə$*, Tem *$šx^\circ əźə$* vs. Bzh *$šk^\circ əźə$* 'pelvis, hip', Sh *$ś^\circ x^\circ\check{a}/f^\circ\check{a}$*, Tem *$šx^\circ\check{a}$* vs. Bzh *$šk^\circ\check{a}$* 'big, great'. The preservation of x° with such a limited distribution conditioned its instability, which is especially characteristic for Shapsygh isolects, where we find such reflexes of the Common Circassian clusters *$šx^\circ$* and *$čx^\circ$* as *$ś^\circ x^\circ$*, *$f\check{a}w$*, *$šx^\circ$*, *x°*, *$šk^\circ$*, *$šf^\circ$*, *f°*, cf. *$ś^\circ x^\circ\check{a}k'ə//f\check{a}wč//šx^\circ\check{a}č//x^\circ ač//šk^\circ\check{a}čə//šk^\circ\check{a}k'ə$* 'gun' (ShD 39, 123; Smeets 1984: 168; Chirikba 1986: 23), *$f^\circ\check{a}//f\check{a}w//šf^\circ\check{a}$* (ShD 39, 63), *$x^\circ\check{a}$* 'big, great', *$ś^\circ x^\circ\check{a}//šf^\circ\check{a}//f^\circ\check{a}$* 'bridle' (Smeets 1984: 168; Chirikba, ibid.), *$məś^\circ x^\circ ə//məfə$* 'acorn' (PC 88), etc.
(b) Paris 1978: 336 proposes that we not reconstruct here *x°*, but rather *f*. Cf. Kuipers 1987: 87-88, where he explains why the reconstruction of *x°* is preferable.

Irregular correspondences
(1) In some cases Shapsygh has the glottalised spirant *s'* in place of *c'* in other dialects, e.g. Sh *$s'\check{a}$* vs. Adyghe, Kab *$c'\check{a}$* 'name', Sh *$s'\check{a}$* vs. Adyghe, Kab *$c'\check{a}$* 'louse', Sh *$s'ənă$* vs. Adyghe, Kab *$c'ənă$* 'wet', Sh *$ps'ə$* vs. Adyghe, Kab *$pc'ə$* 'lie', Sh *$ś^ʷəs'\check{a}$* vs. Adyghe *$ś^ʷəc'\check{a}$*, Kab *$f'əc'\check{a}$* 'black', etc. In other cases *c'* is preserved unchanged, cf. Sh *$c'ək^ʷ$* 'small, little', *$c'əfə$* 'man', etc. The distinction is considered to be a local Shapsygh innovation (PC 7). Though such a conclusion seems rather plausible, alternative options cannot be ruled out. In principle, the Shapsygh pair *$c' \sim s'$* can reflect the older opposition *$c' \sim \bar{c}'$*, the tense(/strong) member of which was modified into *s'*, just as in (East Caucasian) Chamala the old strong affricate *$\bar{c}'$* was transformed into the strong spirant *$\bar{s}'$*.

(2) In the word meaning 'what' an irregular correspondence Sh, Bzh *ś* : Tem, Abdz *s* is observed, cf. Sh *śə(d)*, Bzh *śəd*, Tem, Abdz *səd*, Bes *səj*, Kab *sət*. Kumaxov 1981: 194 thinks that in this case *s* is original. Later I will argue that the discrepancy might be due to the merger of two different Common Circassian interrogative pronouns. Cf. also the irregular correspondence Ad *d* : Kab *t* in the same pronoun.

(3) In certain cases Abadzakh back spirants correspond to middle spirants in other Adyghe dialects, cf. Abdz *k°əšă* vs. Tem *k°əśă*, Bzh *k̄°əśă*, Abdz *šəγ°ă* vs. Tem, Bzh *śəγ°ă* 'to be in mourning', Abdz *šăfə* vs. Tem, Bzh *śăfə* 'secret', Abdz *šaγă* vs. Tem, Bzh *šaγă* 'braid', Abdz *žaγă* vs. Tem *źaγă* 'lungs'. Kumaxova 1972: 55 thinks that Abadzakh preserved the original situation. In other cases, on the contrary, Abadzakh has the middle spirants in place of back spirant in other Adyghe dialects, cf. Abdz *ʔăbźəb* vs. Tem *ʔăbžəb* 'handful', Abdz *bźəhas* vs. Tem *bžəhas* 'winter crop', Abdz *əwəź* vs. Tem *əwəž* 'after, following'. This time Kumaxova 1972: 57 considers innovation to take place in Abadzakh.

(4) In a small group of words analysed in Kuipers 1963: 70, there is an irregular correspondence of Bzhadygh unaspirated consonants and Kabardian voiceless counterparts: Bzh *t̄ăp̄* : Kab *dăp* 'glowing coals', Bzh *k̄°əp̄* : Kab *g°əp* crowd, party', Bzh *čăp̄* : Kab *žăp* 'hoarfrost', Bzh *săk̄°* : Kab *săk°* 'mane' (other cases include borrowings). The phonemic composition of the other two cases (Kab *ʔăt* 'lifting up', *ʔătă* 'stack, rick' with their Bzhadygh cognates) was later (in PC) redefined. It is noteworthy that in all the mentioned cases the irregular correspondence is limited to the final position; cf. also Kuipers (ibid.).

(5) Sometimes *w* irregularly corresponds to *g°*, cf. Kab *awă//ag°ă* 'but', *k‴ă-wă// k‴ă-g°ă* 'going', *warcă//g°arcă* 'manure' (FL 34; ES I: 217).

(6) In a number of cases an irregular correspondence between voiced middle/back spirants and voiced velar spirant is observed, i.e. *ĝ* : *ž/ź*, cf. Ad *bĝəq°* : Kab *bžəq‴* (FL 41, while PC 57 gives Kab *bĝəq‴*) 'beam', Ad *x̌°əbĝ* 'cattle or house birds left for breeding': Kab *x̌°əbžă* 'sheep and goats belonging to one man or one collective-farm', Ad *čaĝă* : Kab *zažă* 'ribs', Ad *ĝə-č'ă* : Kab *źə-ś'ă* (in PC 56 Kab dial. *ĝə-ś'*) 'to wash'. In all these cases Shagirov (ES I: 136, 202) considers *ĝ* to be original.

Phonetic processes

(1) Spirantisation

(a) *ʒ* > *z* : Abdz *zəwă*, Tem *ʒəwă* 'sack'; Abdz *wətxənzaf*, Tem *wətxənʒaf* 'bran'; Abdz *băzăway°*, Tem *băʒăway°* 'midsummer' (Kumaxova 1972: 58); Ad *abaʒă*, Kab *abază* 'Abaza(, Abkhaz)'; Ad *abʒax*, Kab *abăzăxă* 'Abadzakh'. Cf. also in

modern Ad *băʒăr* < *băzăr* (< Rus) 'market'. In the case of Ad *zăfə* : Kab *ʒăxˀ* 'couch-grass' it is unclear, whether fricative or affricate was original (PC 26 gives only Adyghe form);
(b) *cʼ* > *sʼ* : cf. comment (1) to 3. above;
(c) *ǯʼ* > *žʼ* : Ad *šəbžʼəj*, Kab *šəbžəj* 'pepper', Ad *txă-žʼə*, Kab *txă-žə* 'to revel' (the second element is the suffix meaning 'again'). The affricate must be original here, which is proved by the same words borrowed from Circassian into the sister languages, cf. Tap *čʼəbǯʼəj* 'pepper', SAbx *a-txaǯʼ-ra*, Tap *txaǯʼ-ra* 'prosperity, revelling'. For the suffix *-žʼ-//-ž-* 'again' cf. Kuipers 1963: 76, 79.

(2) Affricatisation
(a) *s* > *c* : Sh *x-jə-că*, Tem *x-jə-să* 'to thrust', Sh *fă-caq*, Tem *fă-saq* 'cautiously', Sh *năpcə*, Tem *năpsə* 'tear', Sh *pcəɣˀă*, Tem *psəɣˀă* 'thin', Sh *ħarcă*, Tem *ħas* 'bed (in garden)' (ShD 52), Bzh *txʷəcă*, Tem *txʷəc*, Kab *txʷəsă* 'curved knife for making wooden spoons', analysed as **txʷə* 'to scrap' and **sa* 'knife' by Kuipers 1963: 69;
(b) *ź* > *ʒ* : Tem *psənʒ* (Kerasheva 1960: 1066), YugAbdz *psənʒə* (Bersirov 1981: 119) 'dirt'; the original form is found in Bzh *psə-ź*, lit. 'water-old'; the affricatisation is due to the influence of *n* (Kuipers 1963: 66). Compare the case with the word for 'knee' mentioned above;
(c) In place of the expected back spirant Shapsygh often has the corresponding affricate: Sh *čəgˀə* vs. Bzh *šʰəgˀə*, Tem *šəgˀə*, Kab *śəgˀ* 'top', Sh *q-jă-čəpə* vs. Bzh *q-jă-šʰəpə*, Tem *q-jă-šəpə*, Kab *qʼ-jă-śəp* 'he collects', Sh *čəbl* vs. Bzh *šʰəblă*, Tem *šəblă*, Kab *śəblă* 'lightning, thunder god', Sh *čakʷă* vs. Bzh *šakʷă*, Tem *šakʷă*, Kab *śakʷă* 'hunter', Sh *čăfə-n* vs. Bzh *šʼafă-n*, Tem *šʼăfə-n*, Kab *śăxˀə-n* 'to buy' (cf. ShD 35, 134). Though Shapsygh preserved old affricates rather well (besides merging the plain series with the palatalised ones), in this particular case the Kabardian data point to the spirants being original. The external correspondences also support this assertion, cf. CCirc **ša-kʷa* 'hunter' with CAbx **šˀa-ra-ća*, Ub *šˀa-kʼa* 'to go hunting'. Kumaxov 1981: 198 rightly assumes affricatisation in Shapsygh. Change of spirant into affricate can be considered positional: in all the cited examples the sibilant is in anlaut position. The process did not involve, however, all the spirants in the same position, cf. Sh *šə* vs. Bzh *šʼə* 'three', *šʰapsəɣ* vs. Bzh *šʰapsəɣˀ* 'Shapsygh', *šʰăqʷə* vs. Bzh *šʰ ăʔˀə* 'to moan', etc;
(d) Beside *n*, the influence of the bilabial *b* can also cause affricatisation (Kumaxov 1981: 179-180), cf. Bzh, Tem *nəbǯăɣˀ* 'friend', derived from **nəbžʼə* 'age'. Only Abadzakh seems to preserve the original form: *nəbžʼăɣˀ* (cf. regular Kabardian *nəbźăɣˀ*), while in Shapsygh we find *nəbžăɣˀ*, *nəbźăɣˀ* (ShD 29, 34),

nəbǯăγ°ə (Smeets 1984: 120); cf. also Sh *nəbǯ* 'age' (ShD 114). In the same way, the secondary affricate in Sh *bǯəħă* (beside Hakutsw *bžəħă*) 'winter' vs. Bzh, Tem *bžəħă* 'autumn', Sh *bǯəħapă* 'autumn' vs. Tem *bžəħapă* 'early autumn' (ShD 92-93) can be explained by influence of *b*. In Tem *ǯ́abγ°ă* 'right side' the irregular *ǯ́* instead of *ž́* (cf. Bzh *ž́abγ°ă*, Abdz *ž́abγ°*, Kab *jə-ź*) can also be explained by the presence of *b*. Shapsygh, again, shows deviation: *ź̧abγ°* (ShD 45). Another case of discrepancy, however, is difficult to explain by positional reasons: Ad *ǯ́ăg°ə*, ZenBes *ǯ́ăg°* (Paris 1974: 143), Kab *źăg°* 'hearth', cf. also Ad (Tem) *ǯ́ă-nəq°* 'hearth, place before hearth'. Some authors (ES I: 199; Kumaxov 1981: 180) consider the affricate here to be original.

(3) Assimilation or dissimilation

(a) Ad *măLač'ă* : Kab *măžaλ'ă* 'hunger', with Beslenej preserving the original form *măLa-λ'ă*, cf. the corresponding CAbx **mala-šʼə* 'hunger' (CCirc **λ'a* = CAbx **šʼə* 'to kill/die);

(b) Ad *šă-źəj* 'knife', in Bzhadygh also *šʰă-źəj* (if it is not a misprint in Autlev 1966: 12) or *šʰă-źəj* (my informant TT), cf. also Bes *šă-ž̌ăj* 'knife', from **sa-źə+ja*, lit. "knife-little" (Kab *să* 'knife');

(c) An irregular correspondence Ad *c* : Kab *ʒ*, and Ad *c* : Kab *s*, found in the following words: Bzh *cʰăcʰă* : Kab *ʒăsă* 'spit for roasting' and Bzh *cʰəzə̆* : Kab *ʒəʒă* 'marten' is due, obviously, to assimilation and dissimilation. In both words Kuipers 1963: 69 suggests the presence of **că* 'tooth'.

4. THE STRUCTURE OF THE ROOT MORPHEME

Structurally the Common Circassian root morphemes are similar to those of the contemporary Circassian dialects. The most usual structures are *(C)CV, CVCV*. Examples:

(C)Ca : **čʼa* 'bottom', **tħa* 'god', **da* 'nut', **ma* 'smell', **ħa* 'dog', **psa* 'soul';
(C)Cə : **tʼə* 'ram', **tʰə* 'to give', **γə* 'to weep', **pλə* 'red', **bLə* 'seven';
CaCa : **īama* 'wing', **čʼăLa* 'boy', **daxa* 'beautiful', **max°a* 'name', **jatʼa* 'clay';
CaCə : **mazə* 'wood', **k̄°acə* 'wheat', **čaīə* 'hen', **gʼag°ə* 'to play', **maq̄°ə* 'hey';
CəCa : **wəna* 'house', **məź°a* 'stone', **śʷəcʼa* 'black', **pəīa* 'strong', **čʼəLa* 'village';
CəCə : **məLə* 'ice', **cʼəx°ə* 'man', **dədə* 'awl', **wəzə* 'sickness', **śʼ°əzə* 'woman'.

*Roots with initial *a-*

The West Caucasian languages generally avoid vocalic anlaut, though Abkhaz shows deviations due to its individual development. In Circassian the morphemes with an initial vowel are found mostly in etymologically obscure material. Here I present a somewhat more expanded list of such Common Circassian roots than that presented in PC 83. The Adyghe examples are separated from the Kabardian ones by the slash. Words given without the indication of the particular language are found in both Adyghe and Kabardian.

*List of Common Circassian roots with initial *a- :*

**a* — *a* 'that', contained also in such derivates as **a-da* 'there' (deictic **a*, locative **da*), etc.;

**abaza* — *abazə̆/abazə̆* 'Abaza, Abkhaz';

**abaza-xa* — *abʒax/abə̆zə̆xə̆* 'Abadzakh'; ~ the appropriate etymology is **abaza* 'Abkhaz/Abaza' and **xa* 'below', i.e. 'those (living) below the Abkhazians/Abazas' (Kokov 1983: 40, 270);

ab(a)ra* — *abra-γ°/abra-γ°ă, abă̆ra-γ°ă* 'great, gigantic', *ambər-məẑ°ă/abră-məvă* 'gigantic stone' (*məẑ°ă/məvă* 'stone'); ~ **γ°a* means 'yellow', cf. also CCirc **bLa-γ°a* 'dragon' (bLa* 'snake'). In Adyghe *m* (in *ambər-*) must be epenthetic;

**abγa* — Sh *abγă* 'sofa';

**abγ°a* — Kab *abγ°ă* 'nest'; cf. Ad *nabγ°ă* 'id.';

**abLa* — Sh *abLă* 'kind of wheat';

**abrag'ə* — *abrăž'* family name/*abrăž* 'brigand'; ~ a possible Middle Persian loan, present also in other Caucasian languages (Abaev I: 25-26);

**apk̄'ə* — Bzh *apč'ə/abž'* 'glass'; ~ < Oss *avg(æ)* < Iran **āpaka* (Abaev I: 84-85);

**apš'ə(jə)* — *apš'(əj)/apśəj* emphatic particle used together with words of greeting;

**ada* — Tem *adă* 'tumor, swelling';

**adəĝa* — *adəĝa* 'Circassian';

**aīaqa* — Bzh *aīaqă/adaq'ă* 'rooster';

ač^{h}a* — *ašă-fə/ašă-x°* 'foxtail millet, Setaria italica' (x°ə* 'white'), Kab *ašă-pλ* 'sort of millet' (*pλə* 'red'); cf. also Kab *ašă-məxă* 'shepherd's purse' (bot.), which is analysed by Urusov 108 as *ăšă* 'millet (in field)', with an unclear second element;

**ač't^{h}əmə* — *aš'təm/ăštəm* 'white stonecrop' (bot.);

**ačа* — Bzh *ačă/ažă* 'billy-goat';

**azγa* — Sh *azγă/...* 'Abkhaz'; ~ Cf. Ub *azγa* 'id.';

aś°a* — *aś°ă/ăfă* 'chain mail'; cf. also Tem *aś°ă-č'ad* 'raw leather sole' (*č'ă* 'underneath', *dă* 'sewn up'), *aś°ă-ć°aq*, BesKab *afăvaq'(ă)* 'sandals (strapped to the feet)' (*ć°aqă* 'shoe'); ~ cf. **ś°a* 'skin, leather, fur'; Urusov 90 suggests that the initial *a* comes from *ʔă* 'cattle', which could lead to CCirc **q'a-ś°a* with literal meaning 'animal's leather (used as protection)'. Another possibility is to consider the supposedly original **q'a-ś°a* as a compound 'hand-leather/skin' (CCirc **q'a* 'hand'), cf. CAbx **ma-nə+za* 'shield, cuirass', lit. 'attached to hand' (ma* 'hand', **nə+za* 'attached to'). See below other cases of *ʔă-* changing into *a*;

**axəna* — *axənă/axən* 'goddess of sea' (AdR 24), but according to Kokov 1983: 255 and Mizhaev 1973: 82 'god of cattle'; ~ prob. **xə* 'sea', **ana* 'mother', though the initial *a-* is unclear. Mizhaev (ibid: 86-87) rejects the connection of this word with *xə* 'sea', though he himself cites a folklore text in which *axən* does act as the god of the sea or as sea itself. Another possible etymological solution for **axəna* is to compare it as a whole with CAbx **mašəna* 'sea' (a cognate to Ub *š°a* 'sea'), but the absence of the initial *m-* is still to be explained;

**aγ°a* — Tem *aγ°ă* (AdR 20), Bzh *məja-γ°ă* (Abregov 1969: 57), Sh *γ°ă* (PC 77) 'mistletoe'; ~ PC 77, 83 gives Tem as *jaγ°ă*, and Abregov 1969: 57 as *k°ə-r-γ°ă* (*k°ə* 'centre', *-r-* connective); in Bzhadygh *mə-jă* is 'apple'. Abregov (ibid.) considers *γ°ă* in all these forms as the adjective 'yellow' (CCirc **γ°a*). If this is right, then the original form **ja-γ°a* 'mistletoe' (cf. PC, ibid.) might mean 'their (*j-a-*) yellow';

**aγ°ə* — Sh *aγ°ə/...* 'basket made of the bark of the tree';

**ax°ə* — Sh *ax°ə/...* 'fig';

**ana* — Bzh *j-ană/ană* 'mother'; ~ **ja-* can be the plural possessive prefix ('theirs');

**anawə* — Tem *anăw/...* 'partridge'; ~ a derivative from **ana* 'mother' ?;

**andag°ərа* — *andăg°ər/andăg°əră* 'bugloss, Anchusa' (bot.);

**a(n)g'ərа-x°ə* — Sh *ang'ərăf* (ShD 91)//*ʔăg'ărăf* (ShD 140), Tem *anǯ'ərăf* 'foxtail millet'; ~ the last segment is, according to Urusov 90, 'millet'

**arγə/ana* — Tem *arγăn* Rus 'sheaf of hey'/*arγənă* 'the cut grass put in bunches for drying up'; Shagirov (ES I: 63) tentatively suggests here a

Turkic borrowing;

**arγ°ajə* — *arγ°ăj/arγ°ăj* 'mosquito'; Shagirov (ES I: 63) tentatively suggests a Turkic borrowing;

**arx̌°ana* — *arx̌°ăn/arx̌°ană* 'whirlpool, gulf, rapids'; cf. also such parallel forms as *ħărγ°ăn, qărγ°an/ħărγ°ană* (ES I: 64); ~ according to ES I: 64, from Turc *arəq* + Circ *γ°ană* 'hollow', but cf. Tem *arx̌°ă-ź* 'boa (snake)' (*-ź* pejorative suffix) and maybe also the verb *k'ă-rax̌°ă-n* 'to turn (around)'; **na* 'eye' > 'hollow', cf. Circ *psə-nă* 'well' (water-eye);

**arma-wə* — Tem *armăw/armăw* 'awkward', 'lazy person'; ~ < Abx *arma* 'left', probably through Ubykh intermediary. The final *-w* (< *-ăwə*) can be a fossilised participial suffix. The semantic development in Circassian can be supported by the French parallel *gauche* 'left' > 'awkward' (ES I: 64). Kar-Balk *armau-lu* 'awkward' is certainly from Circassian, not the other way round (cf. ES I: 64).

Comments:

(a) I prefer not to include in this list such items as Circ *abă* 'chasuble-type garment', a late Turkish loan, and Tem *apsə* 'wooden bowl', a borrowing from Armenian (ES I: 62), not shared by Kabardian (cf. PC 83).

(b) Some of these roots are obviously loans (**abrag'ə, *apk̄(ʾ)ə, *arma-wə*). The word **arx̌°ana* is a compound, the etymology of the others is not certain. In any case, such structures as VCV (9 roots) and VCCV (5 roots) must be listed among the models of Common Circassian roots. Type VCVCV (3 roots) contains two ethnonyms, **adəǧa* 'Circassian' and **abaza* '(Abkhaz/)Abaza' with uncertain etymologies. The third item, **aīaqa* 'rooster', is considered in ES I: 56 as a compound, with **aīa* 'father' in the first part, though cf. Ub *taqa* (without *a-*; according to Shagirov, from Adyghe) and Dargwa *daγa* 'rooster' (ES I: 56).

(c) The Kabardian form *abăra-γ°ă* is given in KR 13 alongside *abra-γ°ă*; acc. to Balkarov 1959: 107, it is found in Beslenej. If the full grade form is original, this will increase the number of morphemes of the structure VCVCV.

The Circassian dialects have a number of words with initial *a-* the Common Circassian nature of which is uncertain:

(a) Kab *aʔă* 'no' (interj.);

(b) Kab *aqʷə-ź* 'southern wind' contains *źə* 'wind'; the part *qʷə* is regarded by Abaev I: 55 as *qʷă* 'gorge, ravine', which does not explain the initial *a-* (cf. also ES I: 59). The Tapanta loan *q°əž'* 'wind from the mountains', besides the fact that

it lacks the initial vowel, actually reflects a very early, pre-Proto-Kabardian, or even Common Circassian form, **q°əžʲə*.

(c) Kab *aź-mə-ź//as-mə-ž//ăž-mə-ž* 'awkward, retarded, lilliputian, dwarf', prob. an alliteration of *źə* 'old' with the usual rhyming *m* and the plural form of the possessive prefix (*j-a-* 'theirs), cf. parallel Circ *jə-ź* 'old' with the same prefix in the singular (*jə-* 'its'). The original form could be **j+a-źə-mə-źə*. Ub *azməćʼa* 'fantastic creature, a kind of demon or evil ghost' (HV 44) must be somehow related to the Kabardian word (genetically or by borrowing ?).

(d) Ad *abană* 'hole; thicket' may be an original word containing *nă* 'eye' > 'hollow', though Shagirov (ES I: 55) prefers to look for Turkic source; cf. also Ub *bənə* 'ditch, hollow' (HV 95).

(e) Kab *ăhăj* 'certainly, yes' (Urusov 187), a possible cognate to CAbx **aj(-aj)* 'id.'.

(f) Ad *afə* 'god of lightning and atmospheric phenomena' (Nogma 74; AdR 24) is apparently borrowed from Abx *a-fə* 'id.'. The same etymology have the river *Afə-ps* (*psə* 'water, river') and *Afə*, mountain at the upper *Afə-ps* in Adyghea (Kokov 1983: 44).

Some of the following items can be added to the list of Common Circassian roots with initial vowel, while the others must be put aside as later Turkic, Persian, or Ossetian loans: Ad *abəq°* 'sort of Adyghe horse' (prob. connected with the Kabardian family name *abəqʷă*, thus implying CCirc **abəq̄°a*), Sh *abəʒ* 'glass', Kab *adažənă* (< **adaǯʲəna*) 'little bustard' (zool.), *adaməg°* 'awkward, ignorant', Sh *atʼăkʷəm* 'kind of grass', Kab *aqʷədaj* 'at all', *məśă aqʷəš* 'young bear' (*məśă* 'bear'; the second part implies CCirc **aq̄°əčʰ(ʲ)ə*), Sh *aʔažə* 'kind of grass', *azγăn-twəzγăn* 'feeble, frozen', Kab *asəw* 'nutritiousness, rich in calories', Tem *aśʼăγ°əǯʲ*, Sh *aśʼăγ°əgʲ* 'foxtail millet', Ad *aštram* 'water nut' (Urusov 90: 'pea shrub, Caragana'), *ašraj* 'soup made of corn, dried up meat, beans, etc.', Sh *ak°əj* 'storehouse for harvest', *aLagʲa* 'sort of cotton fabric to cover mattress', Ad *aLam-astăm* 'hospitable', Kab *aLăm-astăm* 'without reservations', *aLawšən* 'poor, ragamuffin', Ad *aLəsən* 'after-grass', Ad *qaməw*, Kab *aməw*, *maməw* 'beaked chervil, Anthriscus' (bot.; cf. Abx *a-məj* 'wild oat, Avena fatua'), Ad *amčʼəśʲ* 'nightingale', Kab *arană* 'peak, top', *arəw* 'sort of grass' (Rus 'раковая трава'), *arqʼəw* 'worthlessness, decrepitude', *aryăj* 'salmon' (according to Abaev I: 176 < Turkic; ES I: 63 gives only Kabardian, though AdR 23 has the same word in Adyghe), Tem *aršaw*, Kab *aršav* 'cupronickel', Kab *arwant* 'metal plank fixing the tyre on the wheel, clamp'.

For some of these items one can tentatively suggest old borrowings from

Abkhaz; thus, for **abəq̄ʷa* cf. the Abkhaz family name (Bz) *a-bəx̌ʷ-ba* < **bəqʷə* 'rock', for **aq̄ʷəčʰ(ʼ)ə* cf. SAbx *a-x̌ʷəčʼə* 'little, small' (< CAbx **x̌ʷəčʼə*), for *amčʼəś* cf. Bz *a-qʼarma-ćʼəś* 'nightingale' (< CAbx **qʼarma* 'hop' and **ćʼə-śə* 'bird').

The vocalic anlaut of a number of items in Adyghe is explained by loss of initial *j-* in the possessive prefixes **j+a-* 'their' (pl.), **jə-* 'its' (sg.), and in deictic **jə* 'this, that':

**j+a-pʰa* — Tem *a-pă/ja-pă* 'the first', lit. 'their-front'; cf. Kab *jə-pă* 'the first', lit. 'its first';
j+a-wəžə* — *a-wəžə/ja-wəź* 'the last (one)', lit. 'their tracks' (wəžə* 'tracks');
**jə-śha* — *ə-śhă/jə-śhă* 'top/the above', lit. 'its head';
**jə-kʼə* — *ə-čʼə/jə-čʼə* 'the end/final', lit. 'its end';
**jə-gʼə-j* — Tem *ə-čʼə-j*, Sh *ə-gʼə-j/jə-kʼə-j* 'and'; ~ poss. **jə-* 'its' plus clitic **gʼə* 'and';
**jə-pśa* — *ə-pśă/jə-pśă* 'top, the upper', Kab also 'south, southern', cf. also Tem *a-pśă-ră* 'the supreme';
**jə-gʼə* — Tem *ǯʼə*, Bzh *əǯʼ/jəgʼə* 'now'; ~ deictic **jə* plus clitic **gʼə* 'and' (etymology of R.Smeets, pers.com.);
**jə-žʼə/a-bγʷə* — Tem *ǯʼabγʷ*, Bzh *žʼabγʷ/jəźərabγʷ* 'the right side'; ~ poss. **jə* 'its', **žʼə/a* ?, **bγʷə* 'side'.

Some Kabardian isolects regularly drop *j-* in the possessive prefix *jə-* 'its, his, her', cf. in BesKab *ə-nă* 'his eye', *ə-γʷă* 'term, time', *ə-žă* 'his mouth'; the same occurs with the the agentive (subject and object) marker *jə-*, cf. Bes *ə-r-jă-t* 'gives to him something', *ə-txă* 'he wrote sth', vs. LKab *jə-nă, ə-γʷă, ə-źă, ə-r-jă-t, ə-txă* (cf. Ocherki 83).

The formation of adjectives and adverbs with the help of 3d p. possessive prefix finds its parallel in Abkhaz and can account for part of the Common Abkhaz roots (mostly adjectives) with initial *a-* as well (see further).

The loss of the initial *j-* in Adyghe, which cannot be identified either with possessive prefix, or with a deixis, is envisaged in the Common Circassian name of the god of sheep-breeding, tentatively reconstructed as **jaməčʰə* (Ad *amәš́*, *jămәš́* (Sh), *jaməš́*, Kab *jaməš*, *ajməš*, cf. also Kar-Balk *ajmuš* (cf. Mizhaev 1973: 74). The name can eventually originate from Greek, with the first element being Gr 'αγιος 'holy', and the rest rendering the name of the prophet Moses (following the conjecture made in the last century by Nogma 1947: 40). In this case the initial syllable in Circassian underwent metathesis (**aj* > **ja*), with the subsequent loss of the initial *j-* by part of Adyghe dialects.

Another source of the anlaut vowel is due to the loss of initial glottal stop, cf. CCirc **q'a-mba-t^{h}a* (Tem *ambat* 'haycock', Kab *ʔămbată*) 'the amount of hay taken on the pitchfork' (cf. **q'at^{h}a* 'to lift'). The same development took place in some Kabardian family names: *abədă* < *ʔă-bədă* 'hand-strong', *aśx^{w}ăt* < *ʔă-ś-γ^{w}ăt* 'hand-?ś-find' (Urusov 90), and in the supposed change **ʔă-* (< **q'a-*) > *a-* in CCirc **aś^{w}a* 'chain mail' < **q'a-ś^{w}a* (see above). Cf. also Sh *amar* 'six wisps of millet', beside *ʔamar*, Tem *ʔăram* 'id.', Sh *arək'ˊ*, beside *ʔarək'ˊ* 'deep wooden vessel with two handles' (ShD 91), Sh *ax^{w}əč'ăn* 'clew', cf. Tem *ʔax^{w}əč'an*, Bzh *x^{w}əcə č'ăn* 'id.' (ShD 92), Sh *ang'ərăf//ʔăg'ărăf* 'foxtail millet' (discussed above).

As in Abkhaz, the initial vowel in Common Circassian can be only **a*, the vowel *ə* being found in medial and final positions.

5. COMMON CIRCASSIAN CONSONANT CLUSTERS

On the level of the morpheme the Common Circassian consonant clusters are characterized by the same features as those maintained in the modern dialects. The most important of them are: (a) all obstruents in the cluster share one and the same laryngeal feature: voiced, aspirated, or non-aspirated, glottalised or non-glottalised (in the latter cases depending on whether the consonant can bear glottalisation); (b) the number of elements in the cluster does not exceed three; (c) non-final obstruents assimilate to the laryngeal feature of the cluster-final obstruent.

Correspondences between the consonants in clusters normally match those between the individual consonants, cf. Bzh *p̄č* : Kab *bž* < **bǯ* (*p̄čănə* : *bžăn* 'she-goat'), Tem *rq* : Kab *rq'* (*warqə* : *wărq'* 'nobleman'), Bzh *nčˊ* : Kab *nś'* (*q^{w}ančˊă* : *q^{w}anś'ă* 'jackdaw/rook'), etc.

Apart from one-to-one correspondences, there are a number of clusters the reconstruction of which needs special comment.

*Clusters *p'q', *p'q^{w}, *t'q^{w}, *ś'q'*

These clusters are restored on the basis of the following correspondences:

**p'q'* > Bzh, Tem *p'*	: Sh *p'ʔ*	: HakSh *p'q'*	: Kab *p'*
**p'q^{w}* > Bzh, Tem *p^{w}*	: Sh *p'ʔ^{w}/p^{w}*	: HakSh *p'q'(^{w})*	: Kab *p'*
**t'q^{w}* > Bzh, Tem *t^{w}*	: Sh *t'ʔ^{w}*	: HakSh *t'q^{w}*	: Kab *t'*
**ś'q'* > Bzh, Tem *ś'*	: Sh *ś'ʔ*	: HakSh *ś'q'*	: Kab *ś'*

Examples:

**p'q'* : Bzh, Tem *p'ă*, Sh *p'ʔă*, HakSh *p'q'ă*, Kab *p'ă* 'bed';

**p'q^{w}* : Bzh, Tem *p^{w}a*, HakSh *p'q^{w}ă*, Kab *p'ă* 'place'; Bzh, Tem *p^{w}ač'ă*, HakSh *p'q'(°)ač'ă*, Kab *p'aś'ă* 'flattened, thin'; Bzh, Tem *p^{w}ală*, Sh *p^{w}ălă*, Kab *p'ală* 'time, term'; Bzh, Tem *λap'ă*, HakSh *λap'q'(°)ă*, Kab *λap'ă* 'dear, expensive';

**t'q^{w}* : Bzh, Tem *t^{w}ə*, Sh *t'ʔ°ə*, HakSh *t'q^{w}ə*, Kab *t'əw* 'two'; Bzh *t^{w}əpšə*, HakSh *t'q^{w}əpšə*, Kab *wə-t'əpś* 'to be released/to release, set free';

**ś'q'* : Bzh, Tem *ś'ă*, Sh *ś'ʔă*, HakSh *ś'q'ă*, Kab *ś'ă* 'to know'.

Comments:

Only Hakutsw Shapsygh preserved the clusters **t'q^{w}*, **ś'q'* in their original form, though sometimes it also has irregular loss of labialisation in one or another isolect. The reconstruction of **p'q'* and **ś'q'* are based solely on the cited example, and that of **t'q^{w}* on two examples (cf. PC 13, 19, 29). There is no evidence for reconstructing CCirc **t'q'* or **ś'q^{w}*.

Clusters of the type "sibilant plus tense stop"

The opposition "lax-tense" in the clusters of the type "sibilant plus tense stop" was neutralised in early Kabardian to the effect that the corresponding modern Kabardian clusters have voiceless, instead of the expected voiced stop:

(a) irregular correspondence	*(b) regular correspondence*
CCirc **sī* > Bzh *sī* : Kab *s(t)*	CCirc **st^{h}* > Bzh *st^{h}* : Kab *st*
CCirc **šʲī* > Bzh *šʲī* : Kab *śt*	CCirc **šʲt^{h}* > Bzh *šʲt^{h}* : Kab *śt*
CCirc **ś°ī* > Bzh *ś°ī* : Kab *ft*	CCirc **št^{h}* > Bzh *št^{h}* : Kab *śt*

Examples:

(a)

**sī* : Bzh *sīə* 'to burn', Kab *ś'ă-γă-st* 'to fan or add fuel to fire' (*ś'ă-* 'under', *γă-* caus.) (PC 16); Bzh *məsīə*, Kab *məstə* 'thing' (Smeets 1990-1991);

**šʲī* : Bzh *šʲīə*, Kab *śtə* 'to freeze (of liquids)';

**ś°ī* : Bzh *ś°īə*, Kab *ftə* 'genitals'; Sh *-ś°tə*, BesKab *-ftə* 'to hurl' (used with preverbs) (PC 16).

(b)

**st^{h}* : Bzh *p'ast^{h}ă*, Kab *p'astă* 'porridge'; Bzh *mast^{h}ă*, Kab *mastă* 'needle'; Bzh *Lănəst^{h}ă*, Kab *Lănəstă* 'scissors';

**šʲt^{h}* : Bzh *šʲt^{h}ă*, Kab *śtă* 'to be frightened';

**št^{h}* : Bzh *št^{h}ă*, Kab *śtă* 'flint'.

As far as the clusters *sl̄* and *st^h* are concerned, the former is found mainly morpheme-initially, while the latter only morpheme-finally, i.e. they are in fact often in complementary distribution, which could facilitate their supposed neutralization in early Kabardian. The neutralization of the rest of the clusters "sibilant fricative plus dental" (all morpheme-final) could in principle be analogical, following the *sl̄* : *st^h* pattern.

*Clusters *pš̌, *pš̌′*

Clusters **pš̌*, **pš̌′* show deficiency in that they lack the lax counterparts: there is no evidence for reconstructing **pš^h* or **pš^h′* (cf. PC 42 and Smeets 1991-1992: 51-53). Another peculiarity concerning these clusters is that the cluster-final tense spirant fails to assimilate the preceding consonant:

CCirc **pš̌* > Bzh *pš̌* : Kab *pś*
CCirc **pš̌′* > Bzh *pš̌′* : Kab *pś*

Examples:

**pš̌* : Bzh *pšă*, Kab *pśə* 'to creep'; Bzh *pšă*, Kab *pśə* 'to knead'; Bzh *š^{h}ə-γ°əpšă*, Kab *śə-γ°əpśă* 'to be forgotten';

**pš̌′* : Bzh *pš̌′ə*, Kab *pśə* 'prince'; Bzh *jă-pš̌′ă*, Kab *jă-pśă* 'to blow at sth'; Bzh *pš̌′ə*, Kab *pśə* 'to swell up'.

Cf. the regular development in the clusters the second element of which is the tense affricate:

CCirc **pč̌* > Bzh *pč̌* : Kab **bǯ* > *bž*
CCirc **pč̌′* > Bzh *pč̌′* : Kab **bǯ′* > *bž*

The Bzhadygh clusters "stop plus tense fricative" have the same correspondences in Kabardian as would the clusters "stop plus lax fricative". Here too, as in the preceding paragraph, a neutralization of the "lax-tense" opposition in early Kabardian can be suggested; neutralization could be strengthened by the fact that this series lacked lax counterparts. It is not by chance that such "regular discrepancy" matches the fate of the single tense spirants, which, apart from all other Common Circassian tense consonants, remain voiceless in Kabardian. Both CCirc **š̌* and **š̌′*, just in the same way as their lax counterparts, changed into *ś* in Kabardian.

One of the solutions which could account for both cases of discrepancies

presented above, as I have already said, is that early Kabardian neutralized the opposition "lax-tense" both in the clusters "fricative sibilant plus stop" (ST) and "stop plus fricative sibilant" (TS) and, at the same time, in the single back spirants, which would account for the deviations from the otherwise regular Adyghe-Kabardian correspondences. This could take place during the process of simplification of the early Kabardian phonemic system by means of reinterpretation of some of the Common Circassian oppositions.

Another solution, which argues that it was early Adyghe, not Kabardian, that deviated, is proposed in Smeets 1990-1991, in which the author is revisiting some of the Common Circassian clusters as presented in Kuipers 1963 and in PC. The author justly dismisses the Common Circassian cluster **pšʰ'* as nonexistent (cf. PC 37). He then argues that Common Circassian in fact did not have the opposition "aspirated-nonaspirated" (resp. "lax-tense") in clusters such as ST and TS, i.e. those described above. According to him, early Adyghe clusters S$\bar{\text{T}}$ and T$\bar{\text{S}}$ come from CCirc ST and TS, respectively, while CAd ST$^{\text{h}}$ originates from CCirc STħ, i.e. with the spirant *ħ* in the cluster-final position. In the same way the three-element cluster **pskʰ* is considered to have risen from a unique four-element cluster **pskħ*.

The reason for such a reconsideration of the ST$^{\text{h}}$ and TST$^{\text{h}}$ clusters "is the defective vowel distribution in the position after the cluster: there is a huge predominance of *e/a* after **stħ*, which may be explained by the lowering effect of the pharyngeal" (Smeets, ibid.: 57).

The proposed solutions effectively eliminate the discrepancies in Adyghe-Kabardian correspondences, substantially reducing the number of the Common Circassian clusters involved in the opposition "lax-tense". While considering this option, the following considerations should be taken into account.
(a) The development of *ħ* into aspiration (i.e. *STħ > ST$^{\text{h}}$), quite possible as it is, needs support from similar examples in Circassian dialects, or from a residual preservation of the old clusters in at least some of the isolects. The etymologies of the roots containing the cluster ST$^{\text{h}}$, unfortunately, mostly fail to counter any such allegations, as their origin is obscure. The more or less reliable etymology for the word **p'astʰa* 'porridge', suggesting a lone from Greek παστά (Jakovlev 1948: 137), and taking into account also the related CAbx **basta* 'id.', does not allow us, however, to reconstruct anything like **pastħa*.
(b) The phonotactical behaviour of lax and tense consonants as to their combinability with adjoining vowels also needs some comment. There is obvious predominance of the syllables **pʰa* over **pʰə* (in PC: 46 morphemes against 12) and **tʰa* over **tʰə* (in PC: 41 morphemes against 10), which supports the

above-mentioned assertion about huge predominance of *a* after clusters with lax (aspirated) consonants (Smeets 1990-1991: 57). This, in effect, corresponds at the same time to the extreme rarity of *ə* after pharyngal *ħ* both in Common and in modern Circassian (in PC: only two or three examples of the morphemes with the syllable **ħə* as against more than 40 morphemes with the syllable **ħa*); the same situation is observed in Abkhaz. The statistics concerning other lax consonants show, however, a more balanced picture, probably due to the small number of morphemes containing these consonants (the examples are again drawn from PC): **cʰa — cʰə* : 1 against 2 morphemes, **čʰa — *čʰə* : 5 against 4, **šʰa — *šʰə* : 4 against 3, **kʰa — *kʰə* : 13 against 10, **qʰa — *qʰə* : 4 against 2, **qʰ°a — *qʰ°ə* : 10 against 7. But sometimes cases with *ə* after lax consonants even outnumber those with *a*: **šʰ́a — *šʰ́ə* : 3 against 6, **kʰ°a — *kʰ°ə* : 13 against 17, **čʰ́a — *čʰ́ə* : 17 against 25.

It is noteworthy that the strength of aspiration of the Bzhadygh lax consonants is such that phonetically it can in principle produce nearly the same effect on the adjoining vowel as would pharyngal *ħ* itself, which could also account for defective distribution of *ə* in the position after the cluster-final lax (aspirated) consonants. Cf. the examples provided by Txarkaxo 1963: 105:

Tem	Bzh	
gˀəšˀəʔ	*gˀəšʰaʔ*	'word'
šˀəʔaɣ	*šʰăʔaɣ*	'patience'
šˀăwšˀəɣˀ	*šˀăwšʰăɣˀ*	'sugar'
šˀənawət	*šʰănawət*	'poison'
šˀəħăn	*šʰăħən*	'to wrap'
tədă	*tʰădă*	'where (to)?'

(c) There is yet a third solution, which could compromise the two previously mentioned. Firstly, as there is no evidence that Common Circassian lacked the tense dental stops, we could assume that in clusters "sibilant spirant plus dental stop" the opposition "lax-tense" in early Kabardian was neutralized in the aspirated series. Secondly, following the suggestion of Rogava 1974: 72 to exclude fricatives from the Common Circassian "lax-tense" opposition and of Smeets 1990-1991 to eliminate the opposition "lax-tense" from the clusters with the final back sibilant fricatives, we can assume that the Common Circassian "lax-tense" opposition involved only stops and affricates, and not fricatives. It is quite possible that the latter became involved in this opposition only in early Adyghe. Note, however, that the Abkhaz and Ubykh data do not support

Rogava's assertion that all Bzhadygh *šʰ* and *šʰʼ* developed from the Common Circassian affricates.

The pair Bzh *wăsīəγă* : Kab *wăzdəγă* 'lamp, torch' is in fact the only regular correspondence involving ST clusters, though, on the other hand, it is the only exception from the "regular discrepancy" referred to above. The unclear etymology of the word, however, does not allow us to draw any conclusions as to its composition. It may either contain CCirc root **sīə* 'to burn' with the prefix *wă-* and suffix *-γă*, or the unclear element *wăs-* plus CCirc **īəγa* > Bzh *īəγă*, Kab *dəγă* 'sun' (cf. ES II: 91). The Abkhaz correlate to this word does not make the situation any clearer: firstly, the Bzyp forms *a-kʷaśdya//a-kʷaźdya* contain *ś/ź* and not the front spirants as in Circassian; secondly, all Abkhaz dialects have the initial *kʷ* instead of *w-* in Circassian. It is probable that Abkhaz borrowed the word from Circassian, and Shagirov suggests that the Abkhaz form might be preserving the original Circassian form with *kʷ-* (ES, ibid.). For the development of velars before *w* in loans cf. also Bz *a-ħad/tgʲən* 'monument over grave' vs. Sa *a-ħadwan* 'cemetery' < Ad *ħadă-wənă* 'sepulchre, morgue' (lit. 'corpse house').

Clusters "sibilant plus velar stop" and "sibilant plus velar/uvular fricative"

Kuipers 1963 and PC reduced the number of the Common Circassian clusters of the type "sibilant plus velar stop" (SK) and "sibilant plus velar/uvular fricative" (SX), partially on the basis of the alleged complementary distribution of their reflexes. It is not possible to explain, however, all the discrepancies in the correspondences following the suggestion proposed by Kuipers. That is why I shall revisit some of these clusters, giving my own interpretation, and then comment on the options proposed by Kuipers.

(1) CCirc **skʼʼ* > Ad *skʼʼ* : Kab *skʼʼ*
CCirc **skʷ* > Bzh *skʷ* : Kab *skʷ*

Examples:

**skʼʼ* : Ad *qă-skʼă*, Kab *qʼă-skʼă* 'to startle, flinch, wince, quiver' (Urusov 163, 177); Kab *Laskʼă* 'sliver, splinter'; *xʷaskʼă/qʲaskʼă* 'spark' (Urusov 112); *maskʼă* 'spark' (PC 88), 'embers' (Urusov 112), *qʷaskʼă* 'chips, kindlings';

**skʷ* : Bzh, Kab *pʼă-skʷă* 'to pinch' (Urusov 177).

Comments:

(a) Kuipers 1963: 86 (and PC 53, 61) unites the data under **skʼʼ* and **skʷ* with

the other material to reconstruct CCirc **šk'ʼ* and **škʷ*. He proposes the rule according to which these clusters are reflected in Kabardian as *skʼʼ* and *skʷ* after long *a*, and as *škʼʼ*, *škʷ* elsewhere. The following examples, however, fail to support the proposed distributional rule, cf. Bzh *jă-pʼăskʷə*, Kab *jă-pʼăskʷə* 'to pinch' (PC 13) and Ad (Tem) *qă-skʼă*, Kab *qʼă-skʼă* 'to startle, flinch, wince' (Urusov 177). It seems that there is enough evidence to reconstruct clusters **skʼʼ* and **skʷ*, distinct from **škʼʼ* and **škʷ*.

(b) Etymologically the examples under **skʼʼ* probably represent one and the same morpheme, **skʼa*, with the general meaning '(swift) jump' and with the semantic development 'small particle splitting off sth'. The first part of Kab *La-skʼă* is probably **Lə* 'meat, flesh' (hence **Lə-a-skʼă*), while *qʼa-skʼă* contains the directional preverb *qʼă* < **q̄a* 'hither'. It is unclear, whether the root **pskʼə/a* also belongs here, cf. Tem *qă-xʷăp(s)čʼə*, Kab *xʷăp(s)kʼʼ* 'to flash (of lightning)', Kab also 'lightning' (PC 75), cf. also Sh *pskʼă*, Tem *pčʼă*, Kab *pkʼă* 'to jump', Kab *śʼă-wə-pskʼă* 'to rock, swing' (*śʼă-* 'under') (PC 87), which Urusov 163 compares with Ad *qă-skʼă*, Kab *qʼă-skʼă* 'to startle, quiver'.

(c) I separate Tem *-škʼă* (< CCirc **škʼa*) from Kab *-skʼă* 'lump, chip, splinter' (< **skʼa*), united in PC 54 under **škʼʼ*. I do the same with Tem *pxă-ʔʼəškʼă-n* and Kab *qʷask'ă* 'chips, kindlings'. The first elements of these latter, by the way, do not match each other either (cf. PC 54).

(2) CCirc **śx* > Ad *śx* : Kab *śx*
CCirc **śxʷ* > Bzh *śxʷ* : Kab *śxʷ*
CCirc **źγ* > Ad *źγ* : Kab *źγ*

Examples:

**śx* : Kab *kʼa-śxă* 'poor, meagre, scanty', *məvă-kʼa-śxă* 'grave' (*məvă* 'stone'); Sh *γă-śxə*, Kab *γă-śx* 'to move down, bend down, decline'; Sh *śxă*, Tem *śxă-jə*, Kab *čʼă-śx* 'small, tiny' (*čʼă* < *kʼă* 'tip'; cf. Urusov 131); Tem, Kab *śxə-śx* 'to rustle, crackle' (for Kabardian cf. Urusov 183); *śxa-śxă* 'to be smashed to smithereens'; Ad *śxə-rəb* 'wild grape' (Urusov 131);

**źγ* : Ad, Kab *źγə-źγ* 'to ring', Ad, Kab *źγərəw* '(hand)bell' (Urusov 170); Ad, Kab *wə-źγ* 'to husk (millet)', Kab *pʼə-źγ*, *źγə-ʒ* 'smithereens', Tem *źγă-jə*, Kab *źγă-j* 'small things', Ad, Kab *dă-źγă-rə-wă* 'to appear as a crowd, to pour out into the street' (*dă-* 'together') (Urusov 131), Kab *źγə-rb* 'gooseberry' (Urusov 131).

Comment:

There is no evidence for the cluster *śx̌ʷ. Though Kuipers provides two examples: *p'c'aśx̌ʷa 'swallow' (PC 22) and *qʷəśx̌ʷa 'shrew, termagant' (PC 73), they must be corrected into *p'c'ašx̌ʷa and *qʷəšx̌ʷa.

(3) CCirc *šk'' > Ad šk'' : Kab śk''/šk''
CCirc *škʷ > Ad škʷ : Kab śkʷ/škʷ

Examples:

*šk'' : Bzh šk'ă, Kab šk'ă//śk'ă (Urusov 120) 'calf'; Tem ʔa-šk''(ă), Kab ʔa-šk''(ă)//ʔa-śk'ă 'lump' (Urusov 120); Sh *tħaməšk'ă*, Tem, Bzh *tħaməč'ă*, Kab *tħaməśk'ă* 'poor' (Kuipers 1963: 85); Sh *năwəš-məšk'ă*, Tem *njăwəš'-məč'ă*, Kab *pśădăj-məśk'ă* 'day after tomorrow' (Kuipers 1963: 85), Tem *pxă-wšk'a-f* 'chip, sliver' (RAd 1035; *pxă* 'wood', *-fă* 'remnant of'); *pxă-ʔ°əšk'a-n* 'chips, kindlings' (PC 54), Kab *šk'amp'əL* 'cork' (Urusov 120);Kab *šk'ă-pλ* 'viper's bugloss, Echium' (bot.; *pλə* 'red') (Urusov 120);

*škʷ : Bzh *wə-p'əškʷə*, Kab *wə-p'əškʷ* 'to crush, crumble, rumple', Bzh, Kab *škʷə* 'to squeeze, crush', Bzh *γă-wə-năškʷə*, Kab *γă-nəškʷə* 'to chew'; Bzh *škʷəmp'ə*, Kab *škʷəmp'* 'addle, rotten (egg)'; Bzh *məškʷə*, Kab *məškʷ* 'acorn'; Tem *škʷə-nă*, Kab *pxă-škʷ//pxă-šk°//pxă-śk°* 'wooden ring at the end of the rope for tying up fast' (*pxă* 'wood'); Ad *pă-škʷə-L* 'intranasal partition' (*pă* 'nose', *Lə* 'meat, flesh'), Kab *nă-škʷə-L* 'flesh under the eye' (*nă* 'eye') (Urusov 120); Kab *škʷă-škʷă* 'to get more appetite' (Urusov 182).

Comments:

(a) In principle, these correspondences can suggest the reconstruction of clusters with an initial affricate, i.e. *čk'' and *čkʷ; cf. for the first example under *šk'' BesKab *čk'a* 'calf' (Balkarov 1959: 108). The fluctuation in Kabardian (*śk'' ~ śk''*, *škʷ ~ śkʷ* or only *śk''*, *śkʷ*) proves, however, that we should follow Kuipers and reconstruct the initial fricative, given its (albeit irregular) preservation in Kabardian within clusters. I do not place here, however, morphemes containing *sk'* and *skʷ* (pace PC 53, 61).

(b) In words 'poor' and 'day after tomorrow' (under *šk'') Temirgoj and Bzhadygh simplified the complex *šk'' by dropping *š*. In Kuipers 1963: 85 Tem *njăwəš'-məč'ă* is given with *š*, probably due to a misprint.

(4) CCirc *čx > Bzh *šx̌* : Sh, Tem, Kab, Bes *šx*

CCirc *čx° > Bzh šk̄° : Sh ś°x°/šf°/x°/f°/f : Tem šx° : Kab šx° : Bes čx°
CCirc *čx > Bzh šx : Sh šx : Tem šx : Kab šx : Bes šx/čx

Examples:

*čx : Bzh *šk̄ə*, Sh, Tem, Kab, Bes *šxə* 'to eat'; Bzh, Sh, Tem, Kab *šxədă* 'to chide'; Bzh *šk̄a-λă*, Kab *šxa-λă* 'manger'; Bzh *γ°a-šk̄a*, Kab *γ°a-šxă* 'to chew'; Kab *šxəbźă* 'seagull' (Urusov 120);

*čx° : Bzh *šk̄°ă*, Sh *x°ă//ś°x°ă//šx°ă//f°ă*, Tem *-šx°ă*, Kab *šx°ă*, Bes *čx°ă* (Ocherki 101) 'large, great'; Bzh *šk̄°ə-źə*, Sh *ś°x°ə-źə//f°ə-źə*, Tem *šx°ə-źə*, Kab *šx°ə-ź* 'pelvis', *šx°ə-λă* 'collar-bone'; Bzh *šk̄°ăLə*, Sh *ś°x°ăLə//f°ăLə*, Tem *šx°ăLə*, Kab *šx°ăL* 'udder'; Sh (NM) *wəfə*, Tem *wəšx°ə* 'to stretch, spread out'; Sh *məfə//məś°x°ə*, Kab *məšx°ə-(m)p'ă* 'acorn'; Bzh *šk̄°ă*, Sh *čx°ă//ś°x°ă//šf°ă//šx°ă//f°ă*, Tem *šx°ă*, Kab *šx°ă*, Bes *čx°ă* 'bridle'; Bzh *šk̄°ă?°ə*, Kab *šx°ă?°* 'bit';

*čx : Bzh, Tem *šxə*, Sh (NM) *dăhă-šxə*, Kab *dəhă-šx* 'to laugh'; Bzh, Tem *wă-šxə*, Kab *wă-šx* 'rain' (*wă* 'sky'); Bzh, Tem *šxă*, Sh *šxă*, Kab *šxă*, Bes *šxă* 'to glue'; Sh (NM) *šxă/əwə*, Tem *šxəwə*, Kab *šxəw*, Bes *čxəw* 'sour milk'.

Comments:

(a) *x* instead of *k̄* in Bzh *šxədă* 'to chide' is irregular.

(b) Shapsygh isolects show different reflexes of *čx° (> *čx°*, *x°*, *ś°x°*, *šx°*, *šf°*, *f°*, *făw*), cf. comment to (3.3.1) in *Non-identical correspondences* above. The Shapsygh examples of the reflexes of CCirc *čx° are taken from my own fieldwork notes and from such sources as ShD 39, Kuipers 1963: 85, Smeets 1976: 58.

(c) The indirect evidence of the old affricate in the word for 'rain' is Svan *učxa//wučxa* 'rain', borrowed from Circassian (cf. ES II: 93).

(d) Though in PC 56 in the word for 'sour milk' (see under *čx) the cluster *šx is restored, in Kuipers 1987: 87 the cluster is reinterpreted as *čx, due to the fact that Beslenej Kabardian has in this item čx (cf. Paris 1978: 334).

(e) Words for 'bridle' and 'bit' contain one and the same morpheme (*čx°a). Kuipers analyses *čx°ă as a combination of *čʰə 'horse' and *x°a 'sinew, tendon' (PC 7).

(5) CCirc *šx > Ad šx : Kab śx
CCirc *šx° > Bzh šx° : Kab śx°
CCirc *žγ > Ad žγ : Kab źγ

Examples:

šx̌ : Tem *c'əšx̌ă* 'to glitter, sparkle'; Bzh *nă-šx̌ə-jă*, Kab *nă-śx̌-ăj* 'sad glance' (*nă* 'eye', *-jă/-ăj* 'bad'), *nă-śx̌ə-f'ă* 'gay' (*f'ă* 'good'), *nă-śx̌* '(stern, angry) glance'; Ad *pă-šx̌ən*, Kab *pă-śx̌ən* 'the thick lower part of the nose' (*pă* 'nose') (Urusov 122);

šx̌° : Bzh *šx̌°ă*, Kab *śx̌°ă* 'sorcery, poison', Tem *fə-šx̌°ă*, Kab *x°ə-śx̌°ă* 'medicine, curative', Tem *g°ə-rə-šx̌°ă*, Kab *g°ə-rə-śx̌°ă* 'suspicion' (Urusov 128); Bzh *šx̌°ă*, Kab *śx̌°ă* 'grey, grey-blue'; Bzh, Tem *γa-šx̌°ă*, Kab *ś'ă-γa-šx̌°ă* 'to temper, harden' (*ś'ă-* 'under, *γă-* instr.) (Kab in Urusov 183); Bzh *šx̌°ə* 'burdock'; Tem *z°ă-x̌°ə-γă* 'oversight, omission', Kab *vă-śx̌°ə* 'to miss', Ad *wă-x̌°ə*, Kab *wă-śx̌°ə* 'to misfire' (Urusov 257; *wă* 'to strike'), Ad *ʔ°ə-šx̌°ə*, Kab *ʔ°ă-śx̌°ə* 'to be delirious' (Urusov 128); Ad *wa-šx̌°ă*, Kab *wa-śx̌°ă* 'o, skies !' (used in archaic formulas); Tem *šx̌°ărə* 'alarm, pursuit, chase'; Tem *p'c'a-šx̌°ə*, Kab *p'c'a-śx̌°ă* 'swallow';

žγ : Tem *nă-žγə* 'eye-socket', 'glance', Kab *nă-źγ* 'eye-socket', 'temple' (*nă* 'eye').

Comments:

(a) PC 59 gives Kab *g°ə-rə-šx̌°ă* 'suspicion', i.e. with *š*, while all other sources give Kab *g°ə-rə-śx̌°ă*, with regular *ś* (cf. KR 40; RK 559; Urusov 128).

(b) For Kab *nă-źγə-c* 'hair on the temple' Urusov 102 cites a parallel form with *γ°* instead of *γ*, considering *γ°* to be secondary.

(c) *ś* in Bzh *ʔ°əśx̌°ă* in PC 73 and in Bzh *p'c'aśx̌°ă* 'swallow' in PC 22 are probably a misprint for *š*, cf. Ad (Tem ?) *ʔ°ə-šx̌°ə* 'to be delirious' in Urusov 128 and Tem *p'c'a-šx̌°ə* 'swallow' in AdR 259, RAd 345 and ES II: 50.

Irregular correspondences in clusters

(1) Affricatisation

bz > *bʒ* : Bzh *č°a-bză*, Kab *va-bʒă* 'ploughshare' (**č°a* ?, **bza/ə* 'to cut'). Change *z* > *ʒ* in Kabardian can be explained probably by influence of Kab *bʒə* 'chisel';

mz > *nʒ* : Ad *qamzăg°* 'ant', Kab *q'anʒăg°* 'ant-hill'.

(2) Metathesis

x°λ > *λx̌* : Ad *max°λă*, Kab *maλx̌ă* 'son-in-law' < CCirc **max°-λă*; cf. CAbx **maħ°ə*, Ub *məxə* 'id.'.

(3) Bilabial obstruents in clusters with the following fricative often tend to change into the corresponding resonant.

(3.1) *PS > mS*

(3.1.1) *bz > mz :*

(a) Ad *qa-mzə-j*, Kab *q'a-bzə-j* 'bird's feather'. *bzə* in CCirc **qa-bzə-jə* 'feather' is connected either with the corresponding element in **bzə-jə* '(sun) beam'; the maize stem (with leaves)', **maśʷa-bzə-jə* 'flame' (lit. 'fiery tongue'), all derived from **bza* 'tongue', or with **bzəwə* 'little bird', 'sparrow' (cf. ES I: 94-95);

(b) Ad *txʷă-mza-šxʷă*, Kab *txʷă-bza-śxʷă* 'sulphur'; ~ *-bza-* is 'tongue', *šxʷă/śxʷă* 'sorcery, poison'. Urusov 113 tentatively connects the first part, *txʷă*, also with CCirc **šxʷa* 'poison', which does not seem plausible not only from the point of view of the phonetics, cf. Ad *măśʷă-txʷa-bz* 'flame' (*măśʷă* 'fire', *bzə* 'tongue'), where any correlation with the idea of 'poison' is absent; *txʷă* can be interpreted instead as 'ashes', the same root as CCirc **txʷa* 'grey'; Abkhaz and Ubykh preserve both meanings of this root: 'ashes', 'grey, the colour of ashes' (< CWC **tqʷa*; cf. Chapter V, 1.4.7.1., under CWC **qʷ*).

(3.1.2) *-p'c' > -mc'* : Kab *bʒa-mc'ă/bʒa-p'c'ă* 'lead' (*-mc'ă/-p'c'ă* is from *-f'c'ă < f'əc'ă < *śʷəc'a* 'black'); Bzh *λa-p'c'ă*, Kab *λa-p'c'ă//λa-mc'ă* 'barefoot' (**λa* 'foot', **p'c'a* 'bare, naked'), Ad *pa-p'c'ă*, Urupsk Ad *pa-mc'ă*, Kab *pa-p'c'ă// pa-mc'ă* 'sharp-pointed' (ES II: 8; **pʰa* 'nose', 'tip', **p'c'a* 'sharp').

(3.2) *PST > mT*

psk'' > mk''* : Sh *ħapsk'ă*, Tem *ħap'č'ă*, Kab *ħamk'ă* 'gallop' (PC 80); the original form is preserved in Shapsygh and can be analysed as 'dog's jumping' (ħa* 'dog', **psk'a* 'to jump').

(4) Alternation of segments in clusters

(a) *txʷ ~ pxʷ* : Ad *dă-txʷă*, Kab *dă-pxʷă* 'to put a hand quickly somewhere (e.g. in the bag)'; cf. **pxʷa* 'to grasp, snatch' (cf. PC 76); Ad *ħă-śăfə-rə-txʷă*, Kab *ħă-śăxʷə-rə-pxʷă* 'dog which does not bark';

(b) *p'c' ~ p'ś'* : Ad *p'c'ăwə*, Kab *p'ś'ăwə* 'to screech, squeal', Ad *γʷă-gʷ-na-p'c'(ă)*, Kab *γʷă-gʷ-na-p'ś'ă* 'side of the road' (*γʷă-gʷ* 'road');

(c) *p'c' ~ śʷt'* : Bzh *qə-p'c'ă*, Sh *qə-śʷt'ă*, Kab *q'ə-p'c'ă* 'plum'; ~ **qə* 'plum', **śʷəc'a* 'black';

(d) *p'č'' ~ t'č''* : Ad *wə-p'č'ă-p'č'ə*, Kab *wə-t'č'ă-p'ś'ə* 'to crack (seeds, nuts)';

(e) *źγ ~ śx* : Ad *źγə-r-b* 'wild grapes', Kab *źγə-rəb ~ śxə-rəb* 'gooseberries'; Kab *źγă-j*, Ad *źγă-jə ~ śxă-jə* 'small'; Ad, Kab *nă-źγ* 'look' (Ad), 'eye-socket; temple' (Kab) ~ Ad, Kab *nă-śxă-j* 'sad' (*nă* 'eye', *ja*

'bad');

(f) *(n)tx̌ ~ (n)tḣ* : Ad *bLa-(n)tx̌ă*, Kab *bLa-(n)tḣă* 'forearm (of animals)';

(g) *ntf ~ ntx* : Ad *qănt f*, Kab *q°ənt x* 'fishing-rod';

(h) *mz ~ nʒ* : Ad *qamzăg°* 'ant', Kab *q'anʒăg°* 'ant-hill'.

Comments:

(a) In (d) the form with both *p'č'* is original, as the root is obviously reduplicated.

(b) The supposed Common Circassian form in (g) is **q̄(°)ənt x°ə*, with delabialisation of *x°* in Kabardian. According to ES I: 82, the Adyghe form might be originally **q°ənt xə*, with subsequent metathesis of labialisation to the final fricative, which in Adyghe gave *f*. But the unclear etymology of the word does not allow us to draw a definite conclusion as to its analysis (I do not agree with Shagirov (ibid.) who suggests its onomatopoeic origin).

(5) Simplification of clusters

(5.1) **CC > C*

(a) **pc̄ > pc̄/(b)ʒ* : Bzh *pc̄jăLə*, Tem *pcjăL*, Kab *ʒăL* '(pussy) willow', in dialects also *bʒăL*. ES I: 166 suggests the foreign origin of this word, pointing to the strange *e* (= *jă*) in Bzhadygh and Temirgoj. But we are dealing here simply with metathesis, cf. the regular Shapsygh form *pc̄ăLə-j* (PC 20), with the final attributive suffix *-j*, usual in the names of plants;

(aa) Bzh *pc̄a-ś°ă*, Kab *bʒa-p'c'ă/bʒa-mc'ă ~ ʒa-mc'ă*, Bes (PC 20) *ʒa-f'c'ă* < CCirc **pc̄a-ś°əc'a* 'lead', with *ś°əc'a* 'black'). I retract Kab *ʒa-mc'ă* from Urusov 69 where it is given as *ʒa-mp'ă*, but I suspect here a misprint (*p'* instead of *c'* ?);

(ab) Bzh *c̄ă-fə*, Kab *ʒă-x°* 'tin' < CCirc **pc̄a-x°ə*, the second element meaning 'white'; cf. **pc̄a-ś°əc'a* 'lead';

(b) *bĝ > ĝ* : Ad *bĝə-bză*, Kab *ĝə-bză* 'curse, damnation'; ~ **bĝă* 'to damn', **bză* 'tongue, language' (ES I: 108);

(c) *bγ° > γ°* : Ad *bLă-bγ°*, Kab *bLă-γ°* 'shoulder blade'; ~ the second element, according to ES I: 99, is *bγ°ə* 'side'; Ad *bγ°ə-šə*, Kab *(b)γ°ə-pś* 'straw of the thrashed millet';

(d) *bL > L* : Ad *bLă-rə-ps*, Kab *Lă-rə-ps* 'chain'; ~ consists of *bLă-rə* 'bunch, sheaf', and *ps* 'strap'; Kab *bLă ~ Lə* 'to burn (as lamp)'; Tem *Lančă*, Kab *bLašă* 'maple' < CCirc **bLač^{h}ă*;

(e) *p'k'' > k''* : Ad *p'č'ə-pxă*, Kab *č'ə-pxă* 'small toothed wheel for cutting dough' (< **p'k'ə-pxa* (**pxa* 'material' < 'wood'); CCirc **p'k'ə* is connected with CAbx **bək'ə* 'to pinch; to cut the edges of the cake' and Ub *bak'ə* 'to press, squeeze, pinch';

(f) *p'λ' > λ'* : Ad *γă-p'λ'ă*, Kab *γă-x°ə-λ'ă* 'to press, iron' (*γă-* caus.);
(g) *st > s* : Ad *γă-stə*, Kab *γă-sə* 'to burn', cf. Kab *ś'ă-γă-stə* 'to add fuel to fire, to fan', Bzh *stă* 'to burn (e.g. lamp)' (PC 16); ~ *ś'ă-* 'under', *γă-* causative;
(h) *ś"c' > ś"* : See under (aa).

(5.2) **CCC > CC*
(a) **psk'' > p'k''/mk''/sk''* : Sh *ħapsk'ă*, Tem *ħapč'ă*, Kab *ħamk'ă* 'gallop' (PC 80); Kab *ś'ă-wə-psk'ă ~ ś'ă-wə-sk'ă* 'to rock, swing' (Urusov 69); Bzh *zə-γă-p'č'ə*, Tem, Sh *zə-γă-psk'ə*, Kab *zə-γă-psk''* 'to wash, bathe oneself' (*zə-* reflexive, *γă-* causative; according to PC 92, probably a contraction of **psə-k'ə*, cf. **psə* 'water', **k'a* 'to pour in');
(b) **psk^h' > pč^h'* : Bzh *pč^{h}ă*, Tem *pskă*, Sh *psk^{h}ă*, Kab *pskă* 'to cough' (PC 92);
(c) *r(ă)sk' : rč^h'* : Tem *bărăskă-źəj*, Bzh *bărč^{h}ă-źəj* 'Wednesday' (*-źəj* little'), Tem *bărăskă-šx°*, Bzh *bărč^{h}ă-šk̄°* 'Friday' (*-šx°ă/-šk̄°ă* 'big').

(6) Secondary clusters due to epenthetic sounds or connectives
(6.1) Obstruent increments (**T > TT*)
The most usual obstruent increments are bilabials:
(a) *c' : p'c'* : Ad *p'c'ap'(ă)*, Sh (NM) *c'ap"ă*, Kab *c'ap'ă* 'disgusting, dirty, low' (*c'ă* 'louse', *p'ă//p"ă* 'place');
(b) **γ° > bγ°* : Ad *bγ°ă-tă*, Kab *γ°ă-tă* 'to grow mouldy' (cf. **γ°a* 'yellow'); Bzh *pxă-mbγ°ə*, Sh *pxă-γ°*, Kab *pxă-(m)bγ°* 'board, plank' (**pxă* 'wood(en), **γ°ə* *'board, plank', cf. CAbx **γ°ə* 'id.'); Ad *γ°ă-č'ă-γ*, Kab *bγ°ă-ś'ă-γ* 'cave' (**γ°a* 'burrow, den, hole', **č'a* 'under, beneath', *-γ* suffix);
(c) **śh > pśh* : Kab *śhăL~ pśhăL* 'mill'; Kab *śhăpă ~ pśhăpă* 'use(ful), profit(able) (< **śha* 'head' < 'self', **p^{h}a* 'nose' > 'front');
(d) *č' > p'ś'* Ad *γă-wə-čə-ʔə*, Kab *γă-wə-p'ś'ə-ʔ°ə* 'to cool' (Ad *č'* lost glottalisation).

(6.2) Resonant increments (**C > RC*)
The most usual resonant increments, especially on the morpheme boundary, are nasals. *m* occurs mostly before labials, and *n* elsewhere. *r* as increment is not often found and can occupy the place of both *m* and *n*.
(6.2.1) **C > mC*
(a) Ad *txəλə-p'*, Kab *txəλə-mp'ă* 'paper' (**txə-λə* 'book', *p'ă < *p'q"a* 'cover, lid, shell, sheath');
(b) Tem *sa-p'ă*, Kab *sa-mp'ă* 'sheath (for knife or dagger)' (**sa* 'knife', *p'ă < *p'q"a* 'cover, lid, shell, sheath');

(c) Kab *λă-mb* 'footprint' (*λă* 'foot'), Tem *kʷə-mbə*, Kab *kʷə-mb* 'hole, hollow' (*kʷə* 'centre'), cf. Ad *bə* 'den (of animal)';
(d) Bzh *k̄ʷə-č'ă*, Kab *gʷə-mk'ă* 'back part of cart' (**k̄ʷə* 'cart', **k'(ʼ)a* 'tail, back part');
(e) Tem *pxa-(m)bLă*, Kab *pxa-bLă* 'stretcher for carrying the dead to the grave' (*pxă* 'wood');
(f) Bzh *tħabə-Lə*, Sh *tħəbə/tħabə*, Kab *tħambə-L* 'lungs' (*Lə* 'flesh') (PC 81).

(6.2.2) **C > nC(C)*
(a) Bzh *c'a-λă*, Kab *c'a-nλă* 'to slip, slide';
(b) Bzh *psə-źə*, Tem *psə-nźə*, Kab *psə-ź* 'mud, mire' (**psə* 'water', **źə* 'old');
(c) Bzh *wəzădə*, Tem *wəzăndə*, Kab *wəzăd* 'to load (a gun)';
(d) Bzh *ś*ʷənč'ə*, Kab *k'əf'* 'dark' (< **ś*ʷək'ə*, with metathesis in Kabardian, cf. PC 33);
(e) Tem *č'ə-ndă*, Kab *ś'ə-dă* 'peanut' (**č'ə* 'earth', **da* 'nut');
(f) Tem *Lančă*, Kab *bLašă* 'maple' (< CCirc **bLačʰa*);
(g) Bzh *kʰ°ăndə*, Kab *kʷăd* 'much, many';
(h) Bzh *q̄ʷa-ncʰă* 'branch with twigs', Kab *qʷa-că* 'branchy';
(i) Bzh *q̄ʷa-šʰă*, Kab *qʷa-nšă* 'crooked';
(j) Bzh *jă-ʔ°əč'ă*, Kab *ʔ°ənś'ă* 'to push, shove';
(k) Bzh *x̌ʷə-č'ă*, Kab *x̌ʷə-nś'ă* 'to rob', Tem *x̌ʷənč'ă* 'raid';
(l) Bzh *tx̌ʷə-č'ă*, Kab *tx̌ʷə-nś'* 'to scrape, plane';
(m) Bzh *č'ăč'ă*, Tem *č'ănč'ă*, Sh *k'ăk'ă*, Kab *-k'ă* 'egg'.

(6.2.3) **C > rC*
(a) Bzh *ĝərzə*, Kab *ĝəz* 'to moan, groan';
(b) Tem *kʷə(r)să*, Kab *kʷəsă* 'stripe';
(c) Bzh *č'ərγə*, Kab *k'əγ* 'to squeak, creak';
(d) Bzh *γʷə-nʒ'ă*, Sh *γʷə-rgʲă*, Kab *γʷə-gʲă* 'mirror';
(e) Tem *γʷərč'ə*, Sh *γʷək'ə* 'severe frost' (PC 77);
(f) Tem *γʷă(r)ĝə*, Kab *γʷăĝ* 'to roar, howl, weep loudly';
(g) Bzh *maīă*, Kab *mardă* 'quantity, measure'.

(7) Sometimes the lack of a reliable etymology makes it unclear, whether we have to do with the simplification of a cluster, or with an increment.

(7.1) Adyghe *CC* : Kabardian *C*:
(a) *p'k''*: *k''* : Ad *p'č'ăγʷa-s(ă)*, Kab *č'ăγʷa-să* 'soot' (< **(p')k'aγʷa-să*), Ad

p'č'ə-ǯ'ə, Kab *t-jă-k'ə-ǯ'ə* 'to fade, lose colour'; Ad *p'č'awă*, Kab *(p')k'awă* 'grasshopper';

(b) *pǩ* : *ǩ* : Ad *pǩată*, Kab *ǩată* 'meaning'.

(7.2) Adyghe *C* : Kabardian *(C)CC*:

(a) *ǯ'* : *bž* : Tem *ǯăməšxə*, Kab *bžăməšx* 'spoon'. It is tempting to see in the last element **šxə* 'to eat' (cf. PC 35), to which Shagirov, however, objects (ES I: 85). He suggests in Circassian a loan from Turkic or Persian, but if the word is a loan, Pers *ǯam* 'bowl, cup' (present also in Georgian and Abkhaz) seems a more likely source than Tat *čümeč*, Pers *čomče* 'scoop, ladle', proposed by Shagirov (ibid.);

(b) *s* : *ps* : Ad *jă-wə-săjə*, Kab *jă-wə-psăjə* 'to put, lean (against sth)'; Ad *wəpsăpsă*, Kab *wə-psapsă/wə-sapsă* 'to become damp';

(c) *st* : *pśt* : Ad *stə-rə*, Kab *pśtə-rə* 'hot'; cf. CCirc **stə* 'to burn';

(d) *š* : *pś* : Ad *bγ°ə-šə*, Kab *(b)γ°ə-pś* 'millet-straw';

(e) *x* : *px* : Bzh *xa-ś°ă*, Kab *pxa-fă* 'stubble-field';

(f) *x°* : *px°* : Ad *t-jă-x°ă*, Kab *t-jă-px°ă* 'to cover' (*t-jă-* prev. 'on top'), Bzh *ʔ°ə-x°ă*, Tem *ʔ°ə-(p)x°ă*, Kab *ʔ°ə-x°ă* 'curtain', Ad *-x°ambă*, Kab *-(p)x°ambă* 'finger' (with *ʔă* 'hand', or *λă* 'foot' in preposition).

(7.3) The same phenomena occur even within Kabardian isolects:

(a) *bγ°* ~ *γ°* : *bγ°ə-pś* ~ *γ°ə-pś* 'millet-straw';

(b) *ps* ~ *s* : *p'c'ə-wə-ps* 'liar' ('lies-teller') ~ *wărăd-wə-s* 'writer of songs', *wə-s-a-k°ă* 'poet';

(c) *pst* ~ *st* : *jə-ǯə-pstəw* ~ *jə-ǯə-stəw* 'right now';

(d) *px* ~ *x* : *pxafă* ~ *xafă* 'stubble';

(e) *p'k'´* ~ *k'´* : *p'k'ă-λăj* ~ *k'ă-λăj* 'ladder', *p'k'awă* ~ *k'awă* 'grass-hopper'

(f) *t'k'´* ~ *k'´* : *t'k'əf'* ~ *k'əf'* 'dark';

(g) *tħ* ~ *ħ* : *tħămbəLəw* ~ *ħămbəLəw* 'earthworm';

(h) *śħ* ~ *ħ* : *śħă* ~ *ħă* 'why?'.

(8) Clusters which appear due to the connective morpheme

Contrary to PC 7, I shall call *connective*, i.e the affix which connects two root morphemes, only *-r-*, which has its cognate *(-r-)* in Abkhaz. All other instances of resonants appearing between two root morphems (i.e. *m/n* and *r*) are treated as *(nonorganic*, or *non-etymological) increments*. Note that it is not always possible to distinguish between *r* as a connective, and as a purely epenthetic element.

(a) Tem *t'a-r-q°ă* 'fork, bifurcation', Kab *t'a-q^{w}ă* 'dual, in two' (**t'q^{w}-a-(r-)q̄°a*, with **t'q^{w}-a* 'twice');
(b) Bzh *k^{h}°ə-r-bə* 'hole, hollow', Tem *pśă-k°ə-r-bə* 'hollow in neck' (*pśă* 'neck'); cf. above, under **C* > *mC* , (c); cf. also Tem *γ°ə-r-bə* 'burrow, hole' (*γ°ă* 'id.');
(c) Bzh *k^{h}°ə-γ°ə*, Tem *k°ə-r-γ°ă*, Kab *k°ə-γ°ă* 'yolk' (*k^{h}°ə* 'centre', *-r-* connective, **γ°a* 'yellow');
(d) Bzh *g°ə-r-x̌°ə(-)*, Kab *g°ə-x̌°* 'to crush millet; mortar for crushing millet' (**g°ə* 'to pound, husk', for **x̌°ə* cf. CAbx **ħ°a-* in **la-ħ°a-* 'to crush millet', **aħ°a* 'sward';
(e) Bzh *fə-r-q^{h}°ă*, Kab *x°ə-q°ă* 'chaff' (**x°ə* 'millet').

Structure of Consonant Clusters in Common Circassian

Initial clusters

(1) Two-segment clusters

(1.1) Obstruent as the cluster onset

(1.1.1) Obstruent stop plus obstruent

The most common clusters of this type have a bilabial stop as the cluster onset in the following combinations: (a) bilabial stop plus stop/affricate (PT), and (b) bilabial stop plus fricative (PS). As the first element always assimilates to the final one, the designation of these features in the tables will be given in respect to the final segment of the cluster.

(a) clusters PT

voiced	lax	tense	ejective
			p'k'(')
		pq̄	*p'q'*
			p'q^{w}
		pc̄	*p'c'*
	pč^{h}	*pč̄*	*p'č'*
bǯ́	*pč^{h}́*	*pč̄́*	*p'č'́*

(b) clusters PS

voiced	voiceless	ejective
bz	*ps*	
bź	*pś*	*p'ś'*
bž	*pš*	
bž́	*pš́*	
bL	*pλ*	*p'λ'*
bĝ	*px*	
bγ	*pχ̌*	
bγ°	*pχ̌°*	

Comments to PT clusters:

(a) Shapsygh is the only Circassian dialect to have *p's'-* and *p'c'-* in place of the alleged CCirc **p'c'-*; no distributional rules can be proposed to account for such discrepancy.

(b) **bǯ́-* is found only in the etymologically unclear but most likely compounded

*(b)ʒ́amәšxә 'spoon'.
(c) *pčʰ- is found only in *pčʰaǎ°a 'sand'.
(d) *p'č' counts two examples: *p'č'ә 'to swarm (of bees)' and *wә-p'č'a 'to ask'.
(e) Following Smeets 1990-1991: 53, the opposition lax-tense in clusters pš, pš´ is eliminated.

Other structural models include: dental stop or back affricate plus stop or fricative (TT, TS):
(a) clusters TT: t'kʷ, t'qʷ;
(b) clusters TS: tx, tx°, tǎ, tǎ°, tħ, čx, č́x, čx°.

Comments to TT and TS clusters:
(a) *t'kʷ- is found in one morpheme: *t'kʷa/ә 'to drip', 'drop'.
(b) *t'qʷ- is found only in *t'qʷa 'two' and its derivatives.
(c) *č́x- is found in one morpheme: *č́xәwә 'sour milk'.
(d) *čx°- is found in one morpheme: *čx°a 'rein' (with its derivatives), which is, according to PC 7, a contraction of *čʰә 'horse' and *x°a 'sinew, tendon'.

(1.1.2) Fricative plus stop or fricative
The models are: fricative plus stop (ST) and fricative plus fricative (SS):

(a) clusters ST				*(b) clusters SS*		
voiced	lax	tense	ejective	voiced	voiceless	ejective
		sť			sǎ	
			sk'´	źγ	śǎ	
			skʷ		śǎ°	
			ś'q'		śħ	
		s°ť		žγ	šǎ	
	šťʰ				šǎ°	
			šk'´		λx°	
			škʷ		λħ	
		šťʰ	šť			

Comments to ST and SS clusters:
(a) *sǎ- is found in one morpheme: *wә-sǎәnda 'to let oneself go, become shabby'.
(b) *λħ- is found in one morpheme: *λ-ħa 'to lay, put', a compound containing *λә 'to lie, put, hang'.

(c) **λxʷ-* is found in **λxʷa* 'to give birth', prob. a compound.
(d) The initial clusters of the structures ST and SS contain only voiceless segments. The only exceptions are clusters **źγ-* and **žγ-*, which are in fact voiced variants of **śx̌-* and **šx̌-*.
(e) Though the lax-tense opposition, given the Bzhadygh data, can be reconstructed for Common Circassian clusters ST, they did not yield the expected reflexes in Kabardian, which can witness that the opposition was neutralized either in early Kabardian, or already in Common Circassian.

(2) Three-segment clusters
There are not many such clusters in Common Circassian: *pstʰ*, *psī*, *pskʰ*, *psk'*, *pśkʷ*, *pšt̂ʰ*, *stx̌*, *stx̌ʷ*.

Comments:
(a) Nearly all three-segment clusters are represented by unique examples. Historically they are probably the results of the contraction of two independent morphemes.
(b) Bzh *pstʰă* 'to swell', given in Vodozhdokov 1963: 57, may contain **psə* 'water' and **tʰa* 'to give'.
(c) The counterpart of Bzh *psīăwə* 'whole, all' in Kabardian is *pstəw* in *jəžə-pstəw* 'immediately; just now' (Smeets 1990-1991), with the same irregular reflex of the tense dental as in the cases discussed previously. Contrary to Rogava and Kerasheva 1966: 90, who regard *ī* in the Adyghe forms as increment, Smeets 1990-1991: 59 believes the dental is original. The probable analysis of the word is *ps-īă-wə*, where one can distinguish **psa* 'soul' and **-wə* adverbial suffix.
(d) **pskʰ-* is found in **pskʰa* 'to cough', which probably contains **psa* 'soul'.
(e) **psk'-*, found in **psk'ə* 'to wash, bathe', can be a result of contraction, cf. **psə* 'water', **k'a* 'to pour in' (PC 92).
(f) **pšt̂ʰ-*, found in **pšt̂ʰə/a* 'to boil (of milk), ferment; be puffed up', according to PC 92, may well be a result of contraction, cf. **pš̌ə* 'to swell up'. As for the final dental, see the explanation in (b) above.
(g) **stx̌-*, found in **stx̌a* 'to coarsen, chap, become rough' and **p'a-stx̌a* 'to scratch', can contain **tx̌a* 'to scratch, tear'. It is not clear whether **məstx̌a* 'ash-tree/elm' also belongs here.

Medial clusters
(1) Two-segment clusters
(1.1) Obstruent as the cluster onset

(1.1.1) Obstruent stop plus obstruent

(a) clusters PT			*(b) clusters PS*	
voiced lax	tense	ejective	voiced	voiceless ejective
	pq̄		*bz*	*ps*
	pc̄	*p'c'*	*bź*	*pś*
	pč̄	*p'č'*	*bž*	*pš̄*
bž́		*p'č''*	*bž́*	*pš̄́*
			bL	
			bĝ	*px*
				pχ̌
			bγ°	*pχ̌°*

Comments:

(a) The number of medial clusters in unanalyzable morphemes is extremely low, especially as compared to the initial clusters. The majority of them, as presented in PC, result from combination of morphemes (though the etymology of compounds or derivates is not always transparent).

(b) Nearly all the roots present in PC 65 with medial **-pq̄ə-* are obvious compounds. Two roots which are less transparent for analysis also may well represent compounds or derivatives. For **śəpq̄a* 'real, genuine; truth' cf. **śə* 'to become visible, apparent' and for **zapq̄a* '(to) straight(en)' cf. **za-* reciprocal prefix; the second elements of the both can be **pq̄ə* 'framework, (part of) body, pivot'.

(c) All three examples for medial **-pc̄-* in PC 20 are undoubtedly compounds: **na-pc̄a* 'eyebrow' (**na* 'eye'), **k'(')a-pc̄a* 'thigh of animal, leg of bird' (**k'(')a* 'tail, end, back'), **γ°a-pc̄a* 'to harden, form a crust' (**γ°ə* 'to dry out').

(d) The examples for **-p'c'-* most likely result from combination of two morphemes: **x̌əp'c'ə* 'cartilage', **x̌°əp'c'ə* 'to itch', **wə-p'c'ə* 'to splash, splatter' (*wə-* verbal prefix), **q̄°a-p'c'a* 'swarthy; lean' (PC 22). In the last word *-p'c'a* is from **ś"əc'a* 'black'.

(e) There are only two examples in PC 40 for **-pč̄-*, which are etymologically not clear, cf. **q'apč̄a* 'trail in forest; far, separated' and **γ°əpč̄a* 'sickle'. The last word possibly contains **γ°ə* 'iron' (ES I: 136), while the second parts of both words (*-pč̄a*) might represent one and the same verbal morpheme.

(f) The only example for **-pč'-* is **wəp'č'a* 'to ask', where *wə-* is probably a verbal

prefix.

(g) The only example for **-bǰ'-* is the etymologically unclear, but most likely compounded **γ°əbǰ'ə* 'Tuesday'.

(h) The only unanalyzable example for medial **-pś-* is **λapśə* 'god of the smiths'. It is being compared with CAbx **šʼaś°ə* 'id.'. *pś* in this Circassian word may in principle go back to **ś°* through metathesis of labialisation.

(i) Reconstruction of medial **-pš̌-* is based on two examples, both of which are likely to be compounds: **(b)γ°ə(p)šə* 'millet-straw' (cf. **γ°ə* 'to dry out', while *p* in *pš̌* may be epenthetic) and **γ°əpšə* 'to forget' (PC 42);

(j) The only example for **-bž'-* is **nəbž'ə* 'age' (PC 39; an old compound?);

(k) All examples for medial **-bL-* seem to be compounds, though not always easily analysable, e.g. **šəbLa* 'thunder/lightning' (**bLa* 'to burn'), **k'(ʼ)abLa* 'sap of the nut tree', **abLa* 'a sort of wheat' (PC 48).

(l) There is not enough evidence for medial **-pǩ-*, as all the examples in PC 68 represent compounds. Cf. **k'(ʼ)apǩə* 'squirrel', where one can see **k'(ʼ)a* 'tail, end', and **x̌°əpǩa* 'talented, having aptitude', cf. **x̌°ə* 'to become' and **pǩa* 'material, means, instrument'.

(m) All examples for medial **-pč'-*, **-bz-*, **-ps-*, **-bź-*, **-bž-*, **-px-*, **-px̌°-* are (most probaby) compounds.

Though such medial clusters as **-bǰ'-*, **-bž'-*, **-bL-*, **-bĝ-*, **-bγ-*, **-pś-*, **-pš̌'-* (of which only **-bĝ-* and **-bL-* count more than one example) can be reconstructed for Common Circassian, each of them is likely to represent the initial cluster of the second component of the compounded root.

There seem to be only two examples of the cluster TS, which are **-tħ-* in **γ°ətħa* 'to urinate' and **-čʼtʰ-* in **ačʼtʰəmə* 'stonecrop' (bot.; Rus 'очиток белый'), possibly a loan.

(1.1.2) Obstruent spirant as the cluster onset

The medial clusters of the type ST and SS are in fact mainly results of combination of morphemes, though not always easily analysable. Note a complete absence of clusters made up of voiced segments.

(a) clusters ST				*(b) clusters SS*	
voiced	lax	tense	glottalised	voiceless	
		stʰ	*sʼ*	*sx̌*	

sk'ˊ	*śx̌*
skʷ	*śh*
škʷ	*šx̌ˤ*
	λh

Comments to ST and SS clusters:

(a) Cluster **-stʰ-* is found in four roots, which lack good etymologies. One of them must be loan: **p'astʰa* 'porridge', cf. Gr παστά (Jakovlev 1948: 137). The rest seem to be old compounds: **mastʰa* 'needle', **Lanəstʰa* 'scissors', Ad *hakʷəstăL* 'thimble', though their analysis poses difficulties (cf. also Smeets 1990-1991).

(b) The only proof for **-sī-* is **wasīəγa* 'torch, candle', with uncertain etymology (cf. ES II: 91).

(c) It is possible that roots containing clusters **-sk'ˊ-*, **-skʷ-* are compounds.

(d) The word for 'acorn' is found in two forms: **məškʷə* and **məšxˤə* (PC 88). Kuipers 1963: 85, fn.49 tentatively analyses the first form as *mə* 'apple' and **škʷa* 'squeezing', cf. Bzh *wə-p'ə-škʷə* 'to crush, crumple', **nə-škʷə* 'to be chewed', Tem *škʷăjăw-* 'smithereens', etc. But this does not explain the parallel form **məšxˤə*. Both forms can well be reflexes of the Common North Caucasian designation of acorn(/oak), with such Daghestanian cognates as Avar *mik* 'acorn', Cham *nikˤ* 'id.', Tin *nixi/mixi c'ulaλ'* 'id.' (the second word means 'nut'), Inx *muqurk'a* 'id.', Tsez *naħuk'la* 'acorn', *naħu* 'oak', Ginukh *nihi* 'acorn', Hun *mōh* 'id.', Tab (Diubek) *maq* (Kondik) *maqˤ* 'id.', Agul (Burshag) *maqan k'ur* 'oak' (*k'ur* 'tree'), (Fite) *meqˤ* 'oak', Lez *mäγˤ* 'acorn', Rut *maχˤ* 'id.', Tsax *moq* 'id.', (Gelmets) *maqˤa* 'id.', Kryz *meγ* 'id.', Udi *maχ* 'id.' (KK II: 99); the Daghestanian word was borrowed into Georgian (*muxa* 'oak').

(e) The only example for **-sx̌-* is **t'asx̌a* 'weak/unstable'.

(f) All examples of morphemes with **-źγ-* and **-šxˤ-* represent compounds.

(g) The only example for **-śx̌-* seems to be **c'əśx̌a* 'to glitter, sparkle', which can be a compound;

(h) Examples for **-śh-* and **-šx̌ˤ-* can be compounds;

(i) It seems that the only example for **-λh-* is **pʰə-γˤa-λha* 'to sit on eggs', a compound, cf. **λ-ha* 'to lay, put' (**pʰə* prev. 'nose', 'front', **γˤa* 'hollow').

(1.1.3) Resonant as the cluster onset

On the level of the morpheme the number of roots with medial consonant groups with the resonant onset is very low. They are mostly found in roots of onomatopoeic origin or in borrowings (some of them are just epenthetic). As to

their comparative distribution, *m* occurs mainly before labials, while *n* elsewhere. In the cluster the resonant always occupies the initial position.

The models are as follows: resonant plus obstruent stop (RT), and resonant plus fricative (RS):

(a) clusters RT				*(b) clusters RS*		
voiced	lax	tense	ejective	voiced	voiceless	ejective
mb			*mp'*	*rz*		
nd	*nt^h*		*nt'*	*rγ*	*rx̌*	
	nk^h				*rx̌$^\circ$*	
	nc^h		*nc'*			
			nč'			
nǯ'			*nč''*			
	rt^h		*rt'*			
rg$^\circ$	*rk^h$^\circ$*		*rk$^\circ$*			
		rq̄				
		rq̄$^\circ$				
rǯ'						

Comments to RT and RS sequences:

(a) *-nd-* in **k^h$^\circ$anda* 'bush, shrub' is likely to be a result of composition (cf. for the second element *śha-nda* 'id.', with **śha* 'head' > 'top').

(b) *-nc^h-* is met in **ħanc^{h}a* 'wooden spade', probably a compound.

(c) *-rǯ'-* in the interjection **marǯ'a* 'let's go!/call (to a group)' is, together with CAbx **marǯ'a* 'id.', are probably loans from Geo *marǯw* 'to win'.

(d) *-rx̌$^\circ$-* is met in **p^{h}ərx̌$^\circ$a* 'passageway, porch' can be analysed as **p^{h}ə-rx̌$^\circ$a*, with **p^{h}a* 'nose', 'front' (?).

(2) Three-segment clusters

The medium three-segments clusters in Common Circassian are as follows: (a) with obstruent onset: *psk'*, *psħ*, *stx̌*, *stx̌$^\circ$*, (b) with resonant onset: *ntx*, *ntx̌*, *ntx̌$^\circ$*. Only few of these clusters are found in unanalysable material.

Comments:

(a) *-psk'-* is met in **x̌$^\circ$apsk'ə* 'to flash (of lightning)', a probable compound.

(b) *-pśħ-* is met in **q̄$^\circ$əpśħa* 'bone', a likely compound analysed **q̄$^\circ$ə-pśħa*, with *śha*

'head, top' and epenthetic *-p-* or, alternatively, **q°ə-pʰ-śħa*, with **pʰa* 'nose, front'.
(c) *-stx̌-* is met in **p'astx̌a* 'to scratch', which Kuipers (PC 14) compares with **tx̌a* 'to tear'; another example, **məstx̌a* 'ash-tree', is etymologically unclear.
(d) *-stx̌°-* is met in unanalyzable **məstx̌°ə* 'pitch, refined wax'.
(e) *-ntx-* is met in **ẑ°əntxa* 'to spit', a probable compound.
(f) most examples for *-ntx̌-* seem to be compounds: **Lantx̌ə* 'to tear off', cf. **tx̌a* 'to tear'; **bLa-ntx̌a* 'shoulder with leg' (of animal), cf. *bLa* 'upper arm and shoulder'; **k'(ʲ)antx̌ə* 'remains, sediment on bottom', cf. **k'(ʲ)a* 'tail, back, end'. The fourth example, **zantx̌ə* 'oats' is not clear.
(g) *-ntx̌°-* is met in **c'antx̌°a* 'to scrape/slide', a likely compound, cf. for the first part *(c'a-)* such items as **c'a-ś°ɬa* 'slippery', **c'a-λa* 'to slip, slide', **c'a-La* 'to smear' (**La* 'to dye, paint'), etc (a cognate to CAbx **c'a* 'bottom, beneath', used also as a preverb ?). The second example is also a probable compound: **λantx̌°a* 'loose filaments/pole with branches for hanging up utensils' (with the initial **λa* 'foot', 'beneath').

Final clusters
The final clusters are absent in the available Common Circassian material.

Some Results of the Analysis of Common Circassian Clusters
(1) The number of segments in a cluster usually does not exceed two; the three-segment clusters are rare and historically mostly result either from combination of morphemes or from vowel elision.
(2) Only the final consonant possesses individual laryngeal features, all the preceding segments assimilating to it.
(3) Except for the clusters PS, other clusters consist predominantly of voiceless segments.
(4) The usual initial clusters are PT, PS, ST, SS.
(5) The usual medial clusters are PT, PS, SS, RT.
(6) Common Circassian did not have final clusters.

6. RECONSTRUCTION OF THE COMMON CIRCASSIAN VOCALIC SYSTEM

Apart from Jakovlev 1923: 108-109 and Kuipers 1960: 40-49, other authors do not doubt the presence of at least two phonemic vowels in Common (/Proto-) Circassian (cf. Balkarov 1970: 260; Kumaxov 1973; Smeets 1990-1991: 49, fn.). Likewise, there is no doubt that the contemporary three-fold vocalic system is the result of phonologisation of the positional allophonic contrast *a* ~ *ă* (cf. Kumaxov

1981: 45, 47, 50, 52).

The rule, accounting for the appearance of *ă*, styled by Kuipers 1960: 78 (fn. 4) as the "two open segments"-rule, in its most general form reads as follows: "the Common Circassian sequence *CaCa* was pronounced *CaCă*, if the final syllable was open", i.e. *(-)CaCa#* ___ *CaCă*. Examples are abundant: Ad *pxa-śˀă*, Kab *pxa-fă* 'bark (of tree)' (*pxă* 'wood', *śˀă/fă* 'skin'), Ad, Kab *cʼa-čʼă* 'nit' (*cʼă* 'louse', *čʼă* 'egg'), Ad *wəna-śh(ă)*, Kab *wəna-śhă* 'roof' (*wənă* 'house', *śhă* 'head, top'), Ad *ca-pă*, Kab *ʒa-pă* 'tip of the tooth' (*că/ʒă* 'tooth', *pă* 'nose, end'), etc. The same applies to uncompounded (or at least synchronically unanalyzable) items: Ad (Tem) *tamă*, Kab *damă* 'wing', Ad, Kab *mază* 'moon', Ad *čʼaLă*, Kab *śʼaLă* 'boy', Ad *baǯă*, Kab *bažă* 'fox', Ad, Kab *baʒă* 'fly', Ad (Tem) *pană*, Kab *bană* 'bush', Ad (Tem), Kab *pʼastă*, 'porridge', Ad *maśʷă*, Kab *mafʼă* 'fire', Ad (Tem), Kab *mată* 'basket', *wasă* 'price', etc. In Kabardian the limitations to the rule are conditioned by the presence of one of the neighbouring *ħ*, *ʔ*, *ʔˀ* (Kuipers 1960: 76; Urusov 352).

Smeets 1984: 206 formulates the law in a somewhat different way: "an underlying stem-final sequence *..ă(R)Că* is changed to *..a(R)Că*". The stem is the whole of the word (including any stem-suffixes) without endings; endings are *-xă* plural suffix and all suffixes that can follow it.

There are, however, some exceptions to this rule (whatever the formulation):
(1) *CăCă*: Kab *bźă-pă* (beside *bźa-pă*) 'the top of the protuberance, hill', Ad (Tem), Kab *să-šxˀă* 'sword', Kab *kˀăsă* 'beardless' (< Tu), Kab *dă-nă* 'where?', Ad *ză-čʼă* 'all', *gˀără* 'anybody/anything', Bzh *wă-dă* 'thither', *tʰă-dă* 'where (to)?', Kab *kʷă-čʼă* 'the manner of walking', *bză-čʼă* 'the manner of cutting', etc. Cf. also the verbal forms: Ad (Tem) *jă-ǯă* 'read it!', *s-ă-kʷă* 'I go', *qă-kʷă* 'he is coming here'.
(2) Another exception is due to the presence of the final interrogative suffix *-a*:
(a) in verbal forms: Ad *ma-kʷ-a* 'is he going?', *ma-ǯ-a* 'is he reading?', *jă-ħ-a* 'is he carrying?', *jă-tx-a* 'is he writing?', *kʷa-γ-a* 'did he go?', Kab *Lăź-a* 'did he work?', *śə-s-a* 'did he sit?';
(b) in pronouns: Ad *tar-a*, Kab *dar-a* 'which?', Ad *xăt-a* 'who?';
(3) The final *-a* in Kabardian in the Past Participle is historically due to the loss of the perfective suffix **-γă*: *Lăź-a* 'the one who was working', *băn-a* 'the one who was fighting', *psăλ-a* 'the one who was speaking'.
(4) In the forms with the emphatic particle *-ba*: Ad *kʷă-ba* 'do go!'.

Many authors, beginning with Jakovlev (cf. Jakovlev, Ashxamaf 1930: 104-105; Jakovlev 1948: 342; Balkarov 1970: 212; Paris 1989: 160-161, 165; cf. also

Urusov 50), condition the action of the above-mentioned rule by the presence of stress falling on the penultimate *ă*. Other authors reject such dependency, claiming that Adyghe shows a different accentual picture from Kabardian, as the *CaCa* sequences here usually have the final, not penultimate, syllable stressed. According to Rogava 1963: 29, Adyghe preserves the original accentual situation, while in Kabardian stress shifted from the older final position to the preceding syllable (cf. also Kumaxov 1981: 54-55; Urusov 48-49). Cf. the discussion of Common Circassian stress patterns below, in 7.

Kuipers (ibid.: 76) does not accept the "two open segments"-rule, explaining the appearance of *a* in such position by "a stressless fused segment *-ăh-* inserted between two open segments the first one of which is stressed". In part of the cases he certainly might be right considering such pairs as Kab *wănă-ś'ă* saddler' (*wană* 'saddle', *ś'ă* 'making') vs. *wănắ-ś'ă* 'new saddle' (*ś'ă* 'new'), *ná-śx̌°ă* 'grey-eyed' vs. *nắ-śx̌°ă* 'a grey eye' (*nă* 'eye', *śx̌°ă* 'grey'), cf. also examples of the interfixal *-a-* cited by Urusov (ibid.: 300): Kab *măz-a-k'ă* 'the one who brings firewood' (*măz* 'forest', *-k'ă* agentive suffix), *g°-a-k'ă* 'pleasant (*g°ə* 'heart', *k'ă* 'to go'), *fəz-a-plă* 'bride-show' (*fəz* 'wife', *plă* 'look'), Ad *măq°-a-wă*, Kab *măq'-a-wă* 'mower' (*măq°/măq'* 'hay', *wă* 'to beat, strike'); cf. also Ad *măL-a-x̌°ă* 'shepherd' (*măLə* 'sheep', suf. *-x̌°ă* < *x̌°ə* 'to pasture'), etc. My interpretation of the situation is, however, different from that of Kuipers: maybe one should restore in such cases not the element **-ăh-* with uncertain semantics, but the possesive prefixes: singular **-jə-* (in cases like *ná-śx̌°ă* 'grey-eyed' < **nă-jə-śx̌°ă*, lit. 'eye-its-grey') and plural **-j-a-* (?).

Nevertheless, the automatic character of the appearance of the open *a* in *CăCă* sequences is beyond doubt, which can be easily demonstrated by the behaviour of vowels in the so-called labile verbs, cf. Bzh *jă-pʰămə*, Kab *jă-păm* (tr.) vs. *pʰamă/pamă* (itr.) 'to smell', Bzh *jă-băn*, Kab *jă-băn* (tr.) vs. Kab *bană* (itr.) 'to fight', Tem *jă-wə-p'ăp'ə* (tr.) vs. *fă-wə-p'ap'ă* (itr.) 'to mould, flatten', Bzh *jă-p'ăsk'ə*, Kab *jă-p'ăsk'* (tr.) vs. *p'ask'ă/p'ask'ă* (itr.) 'to pinch', etc. In these examples the underlying *ă* becomes automatically open with the appearance of another *ă* in the following open syllable. Note that it is not possible to discover any "fused segment" or "interfix" in the unanalysable sequences *CaCă* just cited.

Common Circassian could already have possessed a three-fold vocalic system (**a ~ *ă ~ *ə*), as was suggested by Kumaxov 1973 (and 1981: 43-44) and Smeets 1990-1991: 49 (fn. 2), though the contrast *a ~ ă* might not go as far as late Proto-Circassian, and is due, as was said before, to the phonologisation of the allophones of **a*.

(1) *Reconstruction of CCirc *ă.*
In both Adyghe and Kabardian *ă* occurs in the following positions:
(a) in monosyllabic words: Ad, Kab *să* 'I', Ad, Kab *dă* 'nut', Bzh *pʰă*, Kab *pă* 'nose', Ad, Kab *śă* 'hundred', etc.;
(b) in the final open syllable of disyllabic words: Ad, Kab *mazǎ* 'moon', Ad, Kab *mac'ă* 'locust', Tem *qa-mp'ă*, Kab *q'a-p'ă* 'dandruff', Bzh *na-pʰă*, Kab *na-pă* 'face', Ad, Kab *nəbă* 'belly', Ad (Bzh) *ĭəγă*, Kab *dəγă* 'sun', Ad, Kab *g°əγă* 'hope', etc. Sometimes Adyghe drops the final **-ă*, while Kabardian tends to preserve it: Tem *paλ*, Kab *paλă* 'as if', Ad *λap*, Kab *λapă* 'sock', Ad *śħa-p* 'top of the tree' (< *-pă*), *psaγ* 'aim, target (in shooting)' (< *-γă*), etc.;
(c) rarely in the penultimate syllable with the final sequence **-Că*: Ad, Kab *să-šx°ă* 'sword', Ad *g°ără* (Kab *g°ăr*) 'anybody, anything, a certain, some', Ad, Kab *bă-ră* 'often, many times', Ad, Kab *daxă-č'ă* 'in a beautiful way', Ad *fădă*, Kab *x°ădă* 'like'; it is somewhat more common in the verbal forms: Ad *jă-žă*, Kab *jă-wă-žă* '(s)he is waiting for him/her', Ad, Kab *jă-ʒ'ă* 'read!', Ad, Kab *k°ă-mă* 'if he goes', Ad *Lăžă*, Kab *Lăźă* 'to work', etc.;
(d) in the penultimate syllable with the final sequence **-Cə*, in which case the final **-ə* is regularly dropped in Kabardian: Ad *mă-pšə*, Kab *mă-pś* 'he is crawling', Ad *t'ăkʷə*, Kab *t'ăkʷ* 'a little, few', Bzh *că-fə*, Kab *ʒăx°* 'tin', Bzh *săxə*, Kab *săx* 'bar, gate', Ad *nă-psə*, Kab *nă-ps* 'tear', Ad *măšə*, Kab *măś'* 'millet', etc.

The presence vs. absence of the final (stressed) *-ă* in (Standard) Adyghe can bear grammatical significance, serving as a morphophonemic device distinguishing between the predicative and non-predicative forms of the words. According to Rogava 1963: 28-29, the nouns used as predicates with the stress on the penultimate syllable (*wánă* 'saddle', *mác'ă* 'locust', *psə́-x°ă* 'river', etc.) regularly lose the final (unstressed) *-ă*, while the final stressed *-ắ* in the nouns used as predicates is not dropped.

(2) *Reconstruction of CCirc *a :*
The distribution of **a* was limited to the initial and medial position. In part of the cases the initial **a-* can be explained by the loss of the preceding **q'* (> *ʔ*) or **j-*, or by the borrowed nature of the word. As to the medial **-a-*, it is difficult to distinguish between the cases where it arises automatically from **ă* due to the "two-segment"-rule, and when it is conditioned by the insertion of a vocalic interfix.

(a) the anlaut **a-*: Ad *abaʒă* '(Abkhaz-)Abaza', Kab *abazǎ* 'Abaza', Bzh *aś°ă*, Kab

afă 'coat of mail', Bzh *ačă*, Kab *ažă* 'billy-goat', Bzh *apčʼə*, Kab *abgʼ* 'glass' (< Oss), Ad, Kab *awa* 'but', etc. Kuipers (PC 83) treats the Kabardian anlaut vowel as *hă-*;
(b) the medial **-a-* appears due to the "two open segments"-rule: Ad, Kab *mază* 'moon', Ad, Kab *macʼă* 'locust', Tem *qa-mpʼă*, Kab *qʼa-pʼă* 'dandruff', Bzh *na-pʰă*, Kab *na-pă* 'face', etc. The Common Circassian sequences **qʼa-*, **ħa-* are regularly reflected in Adyghe as *ʔa-* (in HakSh *qʼa-*), *ħa-*, and in Kabardian as *ʔă-*, *ħă-* (cf. PC 65-66 and 80-82). In Kabardian *Cə-* and *Că-* are not distinguished before *ħ*, being neutralised in *Cə* (see below);
(c) the medial **a* appears due to insertion of a vocalic interfix: **jən-a-γă* 'size', from **jənə* 'big, great', and abstract suf. **-γa*, **śʷəz-a-bă* 'widow', from **śʷəzə* 'woman', **jəbă* 'orphan', **tʼqʷ-a-Lă* 'measure equal to the breadth of two fingers', from **tʼqʷə* 'two', **-Lă* 'finger's width', **măqʷ-a-wă* 'mower', from **măqʷə* 'hay', **wă* 'to beat', etc.

It has been suggested that the Common Circassian sequences **#VC-* were always preceded by a prothetic laryngal, thus avoiding the vocalic anlaut (Kumaxov 1981: 44; cf. also PC 83), though this opinion is not accepted by Urusov 337. He also argues that only *ă*, not *a*, can be found in the initial position in Circassian, with the only exception of the interjection *aʔă* 'no' (Urusov 336-337; cf. also Turchaninov, Tsagov 1940: 26).

(3) *Reconstruction of CCirc *ə :*
The Common Circassian **ə* is found in any position other than initial, the feature shared by all West Caucasian languages. Another constraint concerns the position after *ħ* and *ʔ* (< **qʼ*), where occurrence of *ə* is very limited.
(a) **ə* in monosyllabic words: Ad, Kab *txə* 'backbone, spine', *xə* 'sea', *bγʷə* 'side', *tʼə* 'ram', *bzə* 'female', etc.;
(b) the medial **ə*: Ad, Kab *nəbă* 'belly', Ad (Tem) *təγă*, Kab *dəγă* 'sun', Ad, Kab *gʷəγă* 'hope', *śəγʷă* 'to wear mourning', etc.;
(c) the final **ə* is preserved in Adyghe and is regularly dropped by Kabardian: Ad *bzəwə*, Kab *bzəw* 'sparrow, bird', Ad *zăžʷə*, Kab *zăv* 'narrow', Ad *dăgʷə*, Kab *dăgʷ* 'deaf', Ad *bžʼənə*, Kab *bźən* 'onion', etc. The presence vs. absence of the final (stressed) *-ə* in Adyghe can bear grammatical significance, making the distinction between the predicative (with the final *-ə́*) and non-predicative forms (without *ə*) of the words (cf. Kumaxov 1981: 76-77).

(4) *The problem of nasalised vowels*
Rogava and Kerasheva 1966: 24 regarded the final nasalised vowels of Bzhadygh and Shapsygh as vestiges of the old combinations *-*Vn*. Balkarov 1970: 260 argued that Common Circassian distinguished between the two plain and two nasalised vowels. This assertion, however, is not supported by any convincing facts, and is not accepted by other authors (cf. Kumaxov 1981: 72).

While it seems likely that on the level of the word Common Circassian already possessed the three-fold vocalic system similar to that of the modern dialects, on the morphemic level, however, the situation is not clear. In most of the cases the bivocalic contrast, inherited from the Common West Caucasian, prevailed. But in the morphemes of the *CaCa* type, equal to words, the positionally conditioned contrast *a* : *ă* already existed. Cf. again the examples listed above: Ad, Kab *mazə* 'moon', Ad, Kab *mac'ə* 'locust', Tem *qam-p'ă*, Kab *q'a-p'ă* 'dandruff', Bzh *na-pʰă*, Kab *na-pă* 'face'. The only question is, when this contrast became phonemic.

In any case, the distinction **a* : **ă* being non-etymological, in my presentation I follow Kuipers (PC) in his treatment of Common Circassian vowels.

Some irregular vocalic correspondences
In compounds **a* sometimes reduces to *ə*, while, on the other hand, the older **ə* can change into *a*.
(a) **a* > *ə*: Ad *adră-č'*, Kab *adrə-ś'* 'the other side (of the river)', from **a-da-ra* 'another', **č'ə* 'land, earth'; this process resembles the behaviour of the Common Abkhaz vowels in the stressed and unstressed syllables (see above, in the previous chapter);
(b) In Kabardian *Cə-* and *Că-* before *ħ* are not distinguished, being neutralised in *Cə*. Bzh and Sh *Caħə* often corresponds to Tem *Cəħă*, which latter Kuipers considers to be original (PC 81).

Examples:
Bzh *Caħə* : Tem *Cəħă* : Kab *Cəħə* — Bzh *č'aħə*, Tem *č'əħă*, Kab *k'əħ* 'long', Bzh *qʰ°aħə*, Tem *q°əħă*, Kab *q°əħ* 'boat, ship' (cf. Bzh *qʰ°aś°ă*, Tem *q°aś°ă*, Kab *q°afă* 'boat', 'trough, gutter'), Bzh *šx°aħə*, Tem *šx°əħă*, Kab *šx°əħ* 'sorcery' (Ad), 'poison' (Kab), Bzh *šʰ'aħə*, Tem *š'əħă* 'to wrap'. These cases are examples of metathesis of vowels within the units **CVħV*.

(c) Cf. other cases of discrepancies in the sequences **CVħV*:
Cəħə : *Cəħă* : *Caħə* : *Cəħă* — Bzh *cəħə*, Tem *cəħă*, Sh *caħə*, Kab *ʒəħ(ă)* 'faith,

confidence';
Cəħă : *Cəħă* : *Cəħə* — Bzh *śəħă/ə*, Kab *śəħ* 'deer', Tem *č'ə̈ħă-kʷəħă*, Kab *ś'əħ* (< *ś'əħə*) 'esteem, honour';
Caħə : *Cäħə* : *Cəħə* — Bzh, Sh *g°aħə*, Tem *g°äħə*, Kab *g°ərəħ* 'pleasant, tasty';
Caħə : *Caħə* : *Cəħă* — Bzh, Sh *ʔaħə*, Tem *ʔaħ*, Kab *ʔəħă* 'part, share'.

(d) Discrepancies occur in the sequences **CVq'(°)V* as well:
Ad *Caʔă* : Kab *Cəʔă*, cf. Bzh *pʰaʔ°ă*, Tem *paʔ°ă*, Kab *pəʔă* 'cup, hat', Bzh *pšʼaʔ°ă*, Kab *pśəʔă* 'temporary lodging of wattle', Bzh *šʰʼaʔă*, Kab *šəʔă* 'to put up with, withstand' (cf. Bzh *šʰäčʼə*, Kab *šäkʼ* 'to bear, put up with'), Bzh *g°aʔă*, Tem, Kab *g°əʔă* 'to worry, being troubled' (Ad also 'to hurry'); cf. also Bzh *g°əšʰaʔ*, Tem *g°əšʼəʔ* 'word'.
(e) Correspondences to the Bzhadygh sequences *CʰVCV*
Txarkaxo 1963: 105 explains irregular vocalic correspondences between Bzhadygh and Temirgoj (Bzh *a/ă* : Tem *ə*) by the influence of heavy aspiration in Bzhadygh (Bzh *Cʰa/ă* : Tem *Cə*), cf. Bzh *šʰʼaħə*, Tem *šʰʼəħă* 'to wrap', Bzh *šʰax°ă*, Kab *šəx°ă* 'herdsmen of horses', Bzh *tʰädă*, Tem *tədă* 'where (to)?', Bzh *ś°ăwšʰäγ°*, Tem *ś°ăwšʼəγ°* 'sugar', Bzh *šʰäнawt*, Tem *šʼəнawt* 'poison', etc. As I remarked before, the strength of aspiration in Bzhadygh is such that the segment *Cʰ* produces nearly the same influence on the following vowel as would the pharyngal *ħ*.
(f) Sometimes the picture similar to (d) and (e) is observed in the cases where no pharyngals or lax obstruents are involved, cf. Bzh *dadă*, Kab *dədă* 'very, just, exactly', Ad *txawă*, Kab *txəwă* 'to kick (of horse)', Bzh *pčaγă*, Kab *bžəγă* 'number, quantity', etc. Cf. also the instances of correspondence Bzh *ă* : Tem *ə* in Txarkaxo 1963: 104-105.

It is noteworthy that in many of these cases Temirgoj shows more proximity to Kabardian than to Bzhadygh as concerns the vowel-distribution; in addition to the cases given above, cf. also Bzh *xəmă*, Tem, Kab *xamă* 'foreign, stranger', Bzh *q°ăpʰə*, Tem, Kab *q°apă* 'corner', etc.

Other cases of discrepancies:
(a) Ad *a* : Kab *ă* — Bzh *fa-ză*, Kab *x°ă-ză* 'to meet smb';
(b) Ad *a* : Kab *ə* — Bzh *dadă*, Kab *dədă* 'very, just, exactly', Bzh *šʰax°ă*, Kab *šəx°ă* 'herdsmen of horses', Ad *txawă*, Kab *txəwă* 'to kick (of horse)';
(c) Ad *ă* : Kab *ə* — Tem *šʼäjə*, Kab *šəj* 'to stick out (one's arm, finger)', Bzh *čʰäcʼə*, Kab *kəcʼ* 'kid, young goat', Tem *x°ăčʼə*, Kab

tăj-x̌ʷək'' 'to rub, damage by rubbing', Bzh *γă-wə-năškʷə*, Kab *γă-nəškʷ* 'to chew';

(d) Ad *ə* : Kab *a* — Ad *qəbLă*, Kab *q'abLă* 'south';

(e) Ad *ə* : Kab *ă* — Bzh *dăγ°ə*, Kab *dăγ°ă* 'good', Ad *śhafə*, Kab *śhăx°ă* 'separate', Ad *wəžə*, Kab *wəźă* 'weasel', Bzh *šʰəγə*, Kab *śəγă* 'beads', Tem *žʼawə*, Kab *źawă* 'shadow, shade', Ad *Lə-r-γ°ə-*, Kab *Lă-rə-γ°* 'callosity, corn', Bzh *ʔaħə*, Kab *ʔəhă* 'part, share', Bzh *ʔap'λ'ə*, Kab *ʔăp'λ'ă* 'embrace', Ad *psə-j*, Kab *psă-j* 'fir-tree', Bzh *nəǯə*, Kab *nəgă* 'floodlands, water-meadow', Ad *ar mă-pcə*, Kab *ar ma-bză* 'he chisels', Ad *ar mă-xə*, Kab *ar ma-xă* 'he reaps'.

7. RECONSTRUCTION OF THE COMMON CIRCASSIAN STRESS SYSTEM

In Standard Adyghe nouns in non-predicative function bear stress mainly on the final syllable (cf. Rogava and Kerasheva 1966: 25). Paris 1989: 166, on the other hand, fixes the place of the stress in (Syrian) Abadzakh on the vowel preceding the last consonant of the lexeme, which is, in terms of the structure *CVCV*, the penultimate syllable, and which makes such an accentual picture look much the same as in Kabardian. The description of a form of Shapsygh in Turkey by Smeets 1984: 128-129 shows an intermediate situation, when disyllabic words with the original stress on the final syllable can as well get stressed on the penultimate syllable. Probably, it is right to assume that at present some Adyghe isolects are undergoing a process of establishing of a new stress system, levelling the older pattern allowing stress on both syllables (in predicative forms) with the increasingly dominant pattern with the stress fixed on the penultimate syllable. Here these Adyghe isolects just repeat the process Kabardian underwent earlier, with unequal speed of development in different isolects and with variation, which is usual in such transitional situations between the older and the new patterns. In some Adyghe isolects this process has already been completed, as probably demonstrated in the description by Paris 1989. In other dialects the older pattern coexists with the new one, as in the Shapsygh isolect described by Smeets 1984. Such fluctuation is sometimes reflected in Standard Adyghe as well, cf. Ad *bğəbzắ //bğəbzắ* 'damnation', *q°anč'ắ//q°ánč'ă* 'jackdaw' in Rogava 1963: 31, *năfənắ// năfə́nă* 'light' (adv.) in RAR 266, *dəśắ//də́śă* 'gold' in Rogava and Kerasheva 1966: 25, etc.

Rogava 1963: 29 and Rogava and Kerasheva 1966: 25 believe that the Common Circassian stress was fixed on the final syllable, as in most cases of

non-predicative forms in Adyghe, while the Kabardian fixed stress on the penult is, according to them, a result of innovation (cf. also Balkarov 1970: 210-212; Kumaxov 1981: 55; Urusov 48-49). Indeed, from the typological point of view a rather regular stress pattern in Kabardian can be regarded as a more recent phenomenon than the more variable accentuation in Adyghe. But, unlike Rogava and Kerasheva, I believe that it is the Adyghe predicative forms which preserve the older Adyghe, and for that matter, Common Circassian stress patterns with the two possible positions of stress in disyllabic words: on the penultimate and on the final syllable.

The correspondences in stress between Adyghe and Kabardian

The following table shows the correspondences in stress between Adyghe and Kabardian disyllabic words, which allow us to restore the main accentual patterns of Common Circassian with enough certainty. The double slash divides predicative forms from non-predicative ones.

CCirc	>	Ad	:	Kab
**CáCa*		*CáC//CaCắ*		*CáCă*
**CáCə*		*CắC//CắC*		*CắC*
**CɜCa*		*CɜC//CəCắ*		*CɜCă*
**CɜCə*		*CɜC//CɜC*		*CəC*
**CaCá*		*CaCắ//CaCắ*		*CáCă*
**CaCɜ*		*CăCɜ//CăC*		*CăC*
**CəCá*		*CəCắ//CəCắ*		*CɜCă*
**CəCɜ*		*CəCɜ//CəC*		*CəC*

A similar reconstruction was achieved by Nikolayev on the basis of an examination of vocalic correspondences in disyllabic roots between Adyghe and Kabardian (cf. NS 198). It is important to note that the stress patterns of a (synchronically) unanalysable succession of syllables (simplexes) do not differ from the similar successions of obvious compounds, which is shown below. This indicates that it is the syllable that is the bearer of certain prosodic properties, as is seen in Ubykh and Abkhaz as well.

Accentuated Adyghe words used here were recorded from professor Zejnab Kerasheva (speaker of Temirgoj) and Dr. Nux Gishev (speaker of Abadzakh) of Majkop, Adyghea, who kindly agreed to be my informants. In the majority of cases the accentual picture of their speech was identical.

*Reconstruction of the stress on the penultimate syllable: *CV́CV.*

(1) CCirc **CáCa* > Ad *CáC* (pred.)//*CaCắ* (non-pred.) : Kab *CáCă*

Examples:

**wána*	*wán//wanắ*	*wánă*	'saddle'
**q̄ʷánč'a*	*qʷánč'//qʷanč'ắ*	*qʷáńś'ă*	'jackdaw/rook'
**nána*	*nán//naná́*	*nána*	'mother' (Ad), 'grandmother' (Kab)
**mátʰa*	*mát//matắ*	*mátă*	'basket'
**mác'a*	*mac'//mac'ắ*	*mác'ă*	'locust'
**gʲána*	*ʒʲán//ʒʲaná́*	*ʒʲánă*	'shirt'
**wása*	*wás//wasắ*	*wásă*	'price'
**p̄ána*	*pán//paná́*	*bánă*	'thorn(bush)'
**pčʰáyʷa*	*pšʲayʷ//pšʲayʷắ*	*pšʲáyʷă*	'fog'

Comments:

(a) The predicative forms of the Adyghe words lose the final *-ă*, while in Kabardian it is preserved, cf. Ad *mat, wan, ʒʲan* vs. Kab *mátă, wánă, ʒʲánă* 'it is a basket, a saddle, a shirt'.

(b) Rogava considered the Adyghe model *CáCa* to be a secondary development from *CaCá* (cf. also Kumaxov 1981: 55). He thought that the presence of the open *-a-* in these words points to the previous place of stress (Rogava and Kerasheva 1966: 25). The correspondence between the Adyghe and Kabardian forms in (1), however, clearly indicates the presence of the accentual model **CV́CV* in Common Circassian. The examples in (2) and (4) confirm this assertion, as here both Adyghe and Kabardian lose the final **-ə*, which could take place only provided it was unstressed.

(c) To the same stress pattern as (1) belong also Adyghe words of the structure *CăCă*, cf. *zăč''* (pred.) vs.*zăč'ắ* (non-pred.) 'all'.

(2) CCirc **CáCə* > Ad *CắC* (pred.)//*CăC* (non-pred.) : Kab *CăC*

Examples:

**q'á-gʷə*	*ʔăgʷ//ʔăgʷ*	*ʔăgʷ*	'palm of hand'
**λá-gʷə*	*λăgʷ//λăgʷ*	*λăgʷ*	'footsole, floor'
**pχá-(m)bγʷə*	*pχămbγʷ//pχămbγʷ*	*pχăbγʷ*	'plank'
**śʷántə*	*śʷănt//śʷănt*	*fănd*	'wineskin'
**ná-pq̄ə*	*năpq//năpq*	*năp'q'*	'riverbank'
**gʲán/rčʰʲə*	*ʒʲănč'//ʒʲănč'*	*gʲă(r)š*	'bean, pea'

(3) CCirc **CəCa* > Ad *CəC* (pred.)//*CəCắ* (non-pred.) : Kab *CəCă*

Examples:

**γ°ə́-pčа*	*γ°ə́pč//γ°əpčа́*	*γ°ə́bžа́*	'sickle'
**(b)ĝə́-bza*	*bĝə́bz//bĝəbzа́*	*ĝə́bzа́*	'lament'
**də́śa*	*də́ś//dəśа́*	*də́śа́*	'gold'
**psə́-na*	*psən//psənа́*	*psə́nа́*	'well (with water)'
**bž'ə́-γa*	*bž'əγ//bž'əγа́*	*bźə́γа́*	'grease-stain'

(4) CCirc **CəCə* > Ad *Cə́C* (pred.)//*Cə́C* (non-pred.) : Kab *CəC*

Examples:

**nə́bž'ə*	*nəbž'//nəbž'*	*nəbź*	'age'
**txə́-λə*	*txəλ//txəλ*	*txəλ*	'letter, book'
**č'ə́-g°ə*	*č'əg°//č'əg°*	*ś'əg°*	'earth surface'
**čʰə́-pχ°ə*	*šəpχ°//šəpχ°*	*šəpχ°*	'sister'
**ś°ə́zə*	*ś°əz//ś°əz*	*fəz*	'woman'
**bə́nə*	*bən//bən*	*bən*	'(children of) family'

(5) Penultimate stress is also reconstructible in Common Circassian (compound) words longer than two syllables. While the final (unstressed) **-a* in such compounds is normally preserved in both languages, the final (unstressed) **-ə* in the same situation is dropped.

(a) Examples with final **-a*:

CCirc	Ad	: Kab	
**tha-mə́-š(')k'a*	*thamə́č'//thamə́č'ắ*	*thămə́śk'ă*	'poor'
**nəč́ắ-pa*	*nəč́ắp//nəč́ăpắ*	*nəžăbă*	'tonight'
**mə-q'a-rə́-sa*	*mə?ărə́s//mə?ărəsắ*	*mə?ărə́să*	'apple'
**λa-x°á-(m)ba*	*λăx°ámb//λăx°ambắ*	*λăpx°ámbă*	'toe'
**pχa-q'á-ša*	*pχă?áš//pχă?ašắ*	*pχă?ăšă*	'plough'
**λa-g°á-(n)ža*	*λăg°ánž//λăg°anžắ*	*λăg°ážă*	'knee'

(b) Examples with final **-ə*:

CCirc	Ad	: Kab	
**abrág'ə*	*abrăž'//abrăž'*	*abrăž'*	'homeless'/'brigand'
**γ°ən-á-γ°ə*	*γ°ənắγ°//γ°ənắγ°*	*γ°ənắγ°*	'neighbour'
**nəbž'-á-γ°ə*	*nəbž'ắγ°//nəbž'ắγ°*	*nəbźắγ°*	'friend'
**ħapʰə-čʰə́pʰə*	*ħap-šə́p//ħap-šə́p*	*ħăp-šəp*	'thing'

*Reconstruction of stress on the final syllable: *CVCV́.*

(1) CCirc **CaCá* > Ad *CaCắ* (pred.)//*CaCắ* (non-pred.) : Kab *CáCă*

Examples:

**maxˇ(°)čʰá*	*maxˇšắ//maxˇšắ*	*máxšă*	'camel'
**pśaśá*	*pśaśắ//pśaśắ*	*pśáśă*	'girl'
**(n)abγ°á*	*nabγ°ắ//nabγ°ắ*	*ábγ°ă*	'nest'
**maxˇá*	*mafắ//mafắ*	*máxˇă*	'day'
**maśʷˇá*	*maśʷˇắ//maśʷˇắ*	*máfˇă*	'fire'
**mazá*	*mazắ//mazắ*	*mázə*	'moon'
**č'aLá*	*č'aLắ//č'aLắ*	*ś'áLă*	'boy'
**λa-q̄°á*	*λaq°ắ//λaq°ắ*	*λáqʷˇă*	'leg'
**ša-kʷˇá*	*šakʷˇắ//šakʷˇắ*	*śákʷˇă*	'hunter'

(2) Kabardian lost final **-ə* which became weakened after the stress shifted onto the penultimate syllable:

CCirc **CaCə́* > Ad *CăCə́* (pred.)//*CăC* (non-pred.) : Kab *CăC*

Examples:

**mazə́*	*măzə́//măz*	*măz*	'wood'
**k̄'atə́*	*č'ătə́//č'ăt*	*ʒ'ăd*	'hen'
**na-śˇə́*	*năśˇə́//năśˇ*	*năf*	'blind'
**da-g°ə́*	*dăg°ə́//dăg°*	*dăg°*	'deaf'
**zazə́*	*zăzə́//zăz*	*zăz*	'gall, bile'
**bza-g°ə́*	*bzăg°ə́//bzăg°*	*bzăg°*	'tongue'
**śˇawə́*	*śˇăwə́//śˇăw*	*făw*	'honey'
**k̄°ačə́*	*k°ăcə́//k°ăc*	*g°ăʒ*	'wheat'
**waš^ʰʒ́*	*wăšʒ́//wăšˊ*	*wăś*	'axe'

(3) CCirc **CəCá* > Ad *CəCắ* (pred.)//*CəCắ* (non-pred.) : Kab *CəCă*

Examples:

**wəná*	*wənắ//wənắ*	*wənă*	'house'
**g°ə-γá*	*g°əγắ//g°əγắ*	*g°əγă*	'hope'
**məśá*	*məśắ//məśắ*	*məśă*	'bear'
**čˇəLá*	*čˇəLắ//čˇəLắ*	*žəLă*	'village'
**t̄əγá*	*təγắ//təγắ*	*dəγă*	'sun'
**məsá*	*məsắ//məsắ*	*məsă*	'guilty'
**śəná*	*śənắ//śənắ*	*śənă*	'lamb'
**məzˇá*	*məzˇắ//məzˇắ*	*məvă*	'stone'
**k̄°əśá*	*k°əśắ//k°əśắ*	*g°əśă*	'cradle'

(4) In the accentual pattern **CəCə́* Kabardian lost the final **-ə* after the stress moved onto the preceding syllable, while Adyghe, in its turn, drops the final **-ə* in the non-predicative forms of the words belonging to this model.

CCirc **CəCə́* > Ad *CəCə́* (pred.)//*CəC* (non-pred.) : Kab *CəC*

Examples:

**dədə́*	*dədə́//dəd*	*dəd*	'awl'
**bžʼənə́*	*bžʼənə́//bžʼən*	*bźən*	'onion'
**γ°əčʼə́*	*γ°əčʼə́//γ°əčʼ*	*γ°əś'*	'iron'
**čəĝə́*	*čəĝə́//čəĝ*	*žəĝ*	'tree'
**ć°ə-k̄°ə́*	*ć°ək°ə́//ć°ək°*	*vəg°*	'bullock-cart'
**č°ə́ndə́*	*ć°ə́ndə́//ć°ənd*	*vənd*	'rook'
**bzəwə́*	*bzəwə́//bzəw*	*bzəw*	'bird, sparrow'
**wəzə́*	*wəzə́//wəz*	*wəz*	'disease'
**məLə́*	*məLə́//məL*	*məL*	'ice'
**bLənə́*	*bLən//bLən*	*bLən*	'wall'

The Adyghe-Kabardian correspondences demonstrate that Common Circassian disyllabic words (both simple and compound) could bear stress either on the penultimate or on the final syllable. Just as in Abkhaz and Ubykh, some affixes had the power to retract the stress from the stem onto themselves. This accentual system very much resembles the corresponding systems of Ubykh and Abkhaz, allowing us to reconstruct the same system for Common West Caucasian.

8. LOANS IN COMMON CIRCASSIAN

*Common Circassian loans from Ossetic: *apk̄ə* < Oss *avg/avgæ* 'glass; bottle', **bəsəmə* < Oss *fəsəm/fusun* 'host in relation to the temporary guest', **bənə* '(children) of family' < Oss *bən/bun* 'beneath, basis, bottom, heritage', **čʰəmagʷə* < Oss *cævæg* 'scythe', **šawgʷənə* < Oss *sauǯən/saugin* 'priest'.

Comments:

(a) Oss *avg/avgæ* comes back to Iran **āpaka*, from **āp-* 'water' (Abaev I: 84-5). Common Circassian, lacking spirant **v*, changed it into *b*; and the final complex underwent devoicing (**bg* > *pk̄*).

(b) For **bəsəmə* see in Chapter III comments to *Ossetic Loans in Common Abkhaz*.

(c) For **bənə*, beside the Ossetic etymology (cf. Abaev I: 278, 279; PC 12; ES I: 103), Shagirov proposes an alternative Arabic etymology, from *ibn* 'son' > Tu *ibin*

'id.' (ES I: 103).
(d) For **čʰ'amag'ə* cf. comments to CAbx **čbəg(a)* in Chapter III comments to *Ossetic Loans in Common Abkhaz*.
(e) Oss *sauʒən/saugin* is analysed by Abaev III: 45 as *sau* 'black' with the suffix *-ʒən/-gin*.

The following Kabardian loans from Ossetic, not present in Adyghe, may be rather old:
(a) *bad* 'incense, frankincense' < Oss *būd/bodæ* 'aroma, incense'. This Kabardian form with *a*, as compared to the apparently later borrowing *bod* 'id.', shows adaptation of the vowels, which may testify to its antiquity in Kabardian. The Ossetic word comes from Iran **bauda-* 'smell' (Abaev I: 268-9);
(b) *wărdăxˢ* 'wheel's rim' < Oss *wærdæx* 'twisted twig used as cord' (Abaev IV: 91); cf. comments to CAbx **wardəqˢ* in Chapter III, in *Ossetic Loans in Common Abkhaz*.

The supposed Ossetic origin of the following words (cf. Abaev I: 513; III: 67; Abaev 1949: 87; ZL 163) is quite unlikely:
(1) Abaev III: 67-68 derives Circ **sana* 'grape, wine' (Adyghe), 'currant, *Ribes*' (bot.), 'an alcoholic drink' (Kab) from Oss *sæn/sænæ* 'wine', further connected with OInd *śana-* 'hemp'. Shagirov (ZL 156) argues that Circassian could as easily have borrowed this word directly from Old Indian. According to him, if the source was Ossetic, then we would have expected *š*, not *s-* in Circassian (but cf. Circ *bəsəmə* 'host', which is another Ossetic loan with *s*). Abdokov (ZS 112-113) doubts the Alanian (Old Ossetic) origin of CCirc **sana* and suggests its genetic relation to such North Caucasian forms as Avar, Cham *san*, Axv *šani*, Kar *seni*, Tin *sani*, Bezh *sino*, Xvar *āsa*, Hunz *sənu*, Rut *sən*, Tsax *suna*, Chech *sin* (from *sin-tar* 'tree', 'sapling') 'barberry, *Berberis*' (bot.). Of the same opinion are Nikolayev and Starostin, who regard the Ossetic word itself a loan from North Caucasian (NS 971).
(2) **nəba* 'belly', cf. Oss *naf(f)æ* 'navel', in Old Ossetic with **p(p)* instead of *f(f)*; The Ossetic word comes from Iran **nābh-*, with further Indo-European correspondences (Abaev II: 149). Except for the obvious similarity of the Circassian and Ossetic words, there are still doubts as to their connection (cf. Abaev (ibid.) and ZL 159-160). Cf. also Ub *nəẖa* 'lung(s)', *nəbə-ʒ'* 'navel'.
(3) **ć°əndə* 'raven', 'rook', according to ZL 163, comes from Oss *sənt/sunt* 'raven'. Jakovlev (see reference in ES I: 107) analyses the Circassian word as *ć°ə* 'ox', epenthetic *n* and suffix *-də*. I regard the word as native Circassian, cf. comments

in Chapter V under CWC *$ć^{\circ}$ in (6).
(4) Abaev I: 513 tentatively derives CCirc *$g'ana$ 'shirt' from Oss *gæn/gænæ* 'hemp', though Shagirov (ZL 166) doubts it because of the semantic differences.
(5) for CCirc *$\lambda aǎ(^{\circ})ə/ač^{h}ə$ '(the hearth) chain' see comments to CAbx *$raǎ'əš'na$// *$raǎč'ana$ in Chapter III, in *Ossetic Loans in Common Abkhaz*.

Common Circassian loans from Turkic languages
Due to contacts with Krym Tatar and neighbouring Kypchak languages (Karachaj, Balkar, and Nogaj), Common Circassian could possess quite a number of Turkic elements. It is not always easy, however, to distinguish between the Turkic words borrowed during the Common Circassian period (or even earlier) from later loans (especially from Anatolian Turkish), which could be borrowed after the separation of the West and East Circassian. I shall not analyse here this layer of the Common Circassian lexicon, as it needs special examination.

Some other loans
Other loans include Adyghe *bărăskă-źəj* 'Wednesday' (suf. *-źəj* 'little, small'), from Greek παρασκευή 'Friday' with the irregular Kabardian correspondence *bărə-źăj/bără-źăj* 'id.' (ES I: 75), CCirc *$ša(m)bat^{h}ə$ 'Saturday', eventually from Hebrew *šabbāt* via Greek σάββατα or Geo *šabat-i*, CCirc *$ǯ'ərə$ 'cross' < Geo *ǯwar-i* 'id.' (ES I: 576), *$k'aīəw$ 'cat', eventually from Vulgar Latin *cattus*, etc.

CHAPTER V

THE RECONSTRUCTION OF THE COMMON WEST CAUCASIAN CONSONANT SYSTEM

I. THE COMMON WEST CAUCASIAN CONSONANT INVENTORY

	Stops			Affricates			Spirants		Resonants		Glides
Labials	*b*	*p*	*p'*				*f*		*m*		*w*
Dentals	*d*	*t*	*t'*	*ʒ*	*c*	*c'*	*z*	*s*	*n*	*r*	
labialised	*d°*	*t°*	*t'°*				*z°*	*s°*			
lab.-palatal.	*(d°´*	*t°´)*									
Dent.-alveol.				*ʒ́*	*ć*	*ć'*	*ź*	*ś*			
labialised				*ʒ́°*	*ć°*	*ć'°*	*ź°*	*ś°*			
Alveolars				*ǯ*	*č*	*č'*	*ž*	*š*			
labialised				*ǯ°*	*č°*	*č'°*	*ž°*	*š°*			
palatalised				*ǯ´*	*č´*	*č'´*	*ž´*	*š´*			
lab.-palatal.				*(ǯ°´)*			*ž°´*	*š°´*			
Laterals				*Ɬ*	*ƛ*	*ƛ'´*		*λ*	*l*		
labialised					*(ƛ°)*			*λ°*			
palatalised					*(ƛ´)*		*L´*	*λ´*			
lab.-palatal.					*(ƛ°´)*			*λ°´*			
Palatals											*j*
Velars	*g*	*k*	*k'*				*ǧ*	*x*			
labialised	*g°*	*k°*	*k'°*					*x°*			
palatalised	*g´*	*k´*	*k'´*				*ǧ´*	*x´*			
lab.-palatal.	*g°´*	*k°´*	*k'°´*					*x°´*			

Uvulars	*G*	*q*	*q'*	*γ*	*x̌*
labialised	*G°*	*q°*	*q'°*	*γ°*	*x̌°*
palatalised	*(G')*	*q´*	*q''*	*γ´*	*x̌´*
lab.-palatal.	*(G°')*	*q°´*	*q'°´*	*γ°´*	*x̌°´*

Pharyngals	*ʕ*	*H*
labialised	*ʕ°*	*H°*
palatalised	*ʕ´*	*H´*
lab.-palatal.	*ʕ°´*	*H°´*

Comment to the chart:
In brackets I put the phonemes whose reconstruction is rather problematic, either because of the scarceness of the material on which it is based, or because of the comparison's doubtful character. These ten problematic phonemes are the following: **d°'*, **t°'*, **G'*, **G°'*, **ʒ°'*, **č°*, **č'°*, **λ°*, **λ'*, **λ°'*. The number of the more securely reconstructed phonemes is, consequently, 100.

II. SOUND CORRESPONDENCES BETWEEN THE WEST CAUCASIAN LANGUAGES

CWC	CCirc	Ub	CAbx
**b*	**b*	*b*	**b*
**p*	**p^h*/**p̄*	*p*	**p*
**p'*	**p'*	*p'*	**p'*
**d*	**d*	*d*	**d*
**d°*	**d*	*d°*	**d°*
*(*d°'*	**d*	*d°*	**ʒ)*
**t*	**t^h*/**t̄*	*t*	**t*
**t°*	**t^h*/**t̄*	*t°*	**t°*
*(*t°'*	*?(*t^h*/**t̄)*	*t°*	**t°)*
**t'*	**t'*	*t'*	**t'*
**t'°*	**t'*	*t'°*	**t'°*

*g	*g´	g´	*g
*g´	*g´	g´	*g´
*g°	*g°	g°	*g°
*g°´	*g°	g´	*g°
*k	*k^h´/*k̄´	k´	*k
*k´	*k^h´/*k̄´	k´	*k´
*k°	*k^h°	k°	*k°
*k°´	*k^h°	k´	*k°
*k'	*k'´	k'´	*k'
*k'´	*k'´	k'´	*k'´
*k^w	*k^w	k^w	*k^w
*k^w´	*k^w	k'´	*k^w
*G	*q̄	q'	*ɦ
(*G´	*q̄	?	*γ´)
*G°	*q^w/*q̄°	q^w	*ɦ°
(*G°´	*q^w	q'´	*ɦ°)
*q	*q^h/*q̄	q	*q
*q´	?	q´	*x̌´
*q°	*q^h°/*q̄°	q°/ɋ°/ɋ	*q°
*q°´	*q^h°	x̌´	*ɦ
*q'	*q'	q'/ɋ'	*q'
*q'´	*q'	q'´/ɋ'	*q'´
*q^w	*q^w	q^w/ɋ^w	*q^w
*q^w´	*q^w	q'´/ɋ'	*q^w
*ʒ	*ʒ	ʒ	*ʒ
*c	*c̄/*c^h	c	*c
*c'	*c'	c'	*c'
*ʒ́	*ʒ/*ź	ʒ́	*ʒ́
*ʒ́°	*ʒ́°	ʒ́°	*ʒ́°/*ź°

*ć	*s	ć	*ć
*ć°	*ćʰ°/*c̄°	ć°	*ć°
*ć'	*ś'/*c'	ć'/c'/ć	*ć'/*ć
*ć'°	*ś'°	ć'°	*ć'°
*ʒ	*ʒ	ʔ	*ʒ
*ʒ´	*ʒ´	ʒ´	*ʒ´
*ʒ°	*c̄	ʒ	*ʒ°
(*ʒ°´	*ž´	š°	*ʒ)
*č	*čʰ/*c̆	č	*č
*č´	*čʰ´/*c̆´	č´	*č´
(*č°	*š	ʔ	*č°)
*č'	*č'/*č'´	č'	*č'
*č'´	*č'´	č'´	*č'´
(*č'°	*č'´	č'´	*č'°)
*f	*f	f	*f
*z	*z	z	*z
*z°	*ž´	ź	*ž°
*s	*s	s	*s
*s°	*s	ś°	*ś
*ź	*ź	ź	*ź
*ź°	*ź°	ź°	*ź°
*ś	*ś	ś	*ś
*ś°	*ś°	ś°	*ś°
*ž	*ž	ž	*ž
*ž´	*ž´	ž´	*ž´
*ž°	*ž	ž°	*ž°
*ž°´	*ź/*ž´	ž°/ź	*ž°

*š	*šʰ/*š̌	š	*š
*š´	*šʰ´/*š̌´	š´	*š´
*š°	*šʰ/*š̌	š°	*š°
*š°´	*ś (/*šʰ´)	ś°	*š°
*Ł	*tł	L	*l
*ƛ	*š̌´/*šʰ´	ś	*x̌
(*ƛ´	*čʰ´	š´	*x̌)
(*ƛ°	*č̌/*čʰ	č°	*č°)
(*ƛ°´	*č̌´	ǯ´	*ž°)
*ƛ'´	*λ'	ƛ'	*š´
*L´	*L	L	*ž´
*λ	*λ	λ	*š
*λ´	*λ	λ	*š´
*λ°	*x°/*x	š°	*š
*λ°´	*x°	š°	*š
*ĝ	*ĝ	γ/χ	*γ
*ĝ´	*ĝ	ź	*γ´
*x	*x	š(/-x)	*x̌
*x´	*x	š´	*x̌´
*x°	*x°	x(°)	*x̌°
*x°´	*x°	x	*x̌
*γ	*γ	γ/χ	*γ
*γ´	*γ	γ´	*γ´
*γ°	*γ°	γ°/χ°	*γ°
*γ°´	*γ°	γ´	*ź°
*x̌	*x̌	x̌/x̱	*x̌
*x̌´	*x̌	x̌´	*x̌´
*x̌°	*x̌°	x̌°	*x̌°
*x̌°´	*x̌°	x(°)	*x̌´

*ʕ	*γ	γ/χ	*ɦ
*ʕ´	*γ	γ´	*ɦ
*ʕ°	*γ°	γ°	*ɦ°
*ʕ°´	*γ°	γ´/γ	*ɦ°, ɦ
*H	*ħ	x̌/x̲	*ħ
*H´	*x̌/ħ	x̌´	*ħ
*H°	*x̌°	x̌°/x̌, x̲°/x̲	*ħ°
*H°´	*x̌°	x̌´	*ħ°/ħ
*m	*m	m/m̲	*m
*n	*n	n	*n
*l	*L	L	*l
*r	*d-/t̄-, *-r-	L-/d-/-r-	*r-/*l-/*-r-
*w	*w	w	*w
*j	*j	j	*j
*a	*a	a	*a
*ə	*ə	ə	*ə

III. THE RECONSTRUCTION OF THE COMMON WEST CAUCASIAN OBSTRUENTS

1. THE COMMON WEST CAUCASIAN STOPS

1.1. THE CWC BILABIAL STOPS

All three bilabials *b p p'* can be easily reconstructed for Common West Caucasian. As to their timbre modifications, I, contrary to Nikolayev and Starostin (cf. NS 181, 184), do not find enough evidence which would indicate the presence of their labialised, palatalised or labialised-palatalised correlates.

1.1.1. CWC **b* > CCirc **b* : Ub *b* : CAbx *b*

Examples:

(1) **ba* CCirc **ba* interrogative-affirmative particle, Ub *ba* interrogative particle, CAbx **ba* interrogative-affirmative particle

(2) **bə* *'beneath, down': CCirc **ba* 'to slant, bend', **bə* 'to sink, fall', **bə* 'den, burrow', **q"ə-bə* 'to gulp, swallow a mouthful' (**q"ə* 'mouth'), **q"ə-bə* 'to overturn' (**q"ə* 'mouth'), Ub *ba-ć'a* 'under', 'the lower part of the object' (*ć'a* 'bottom'), *ba-xa* 'worm living under the skin of domestic animals' (*xa* 'worm'), cf. also Ub *bələ* 'to swallow' (?), CAbx **lə-b-ħa* 'to descend, go down' (prev. **la-* 'downwards', **ħa* 'to come'), Bz also *a-b-aa-ra* < **b-ħa* 'id.', **l-b-ħa-da* 'to swallow' (**da* 'to lead, carry')

(3) **bə/a* CCirc **wə-bə* 'to pound', **wə-ba* 'to trample, ram', cf. also **śa-ba* 'soft, not hard', **wə-śa-bə* 'to crumble; grind' (**wə-* verbal prefix), CAbx **q"ə-ba* 'to shake the fruit off the tree (by beating with a log)', 'to soap oneself' (**q"ə-* prev. 'mouth'), **r-aba* 'to beat', probably also Tap *k°-ba* 'churn' (**k°ə* 'top, roof' ?)

(4) **baba* CCirc **baba* 'mother' (in baby talk), CAbx **baba* 'dad'

(5) **bəbə* CCirc **bəbə* 'fluffy, downy', **psə-bəbə* 'bubble, blister' (**psə* 'water'), CAbx **bəbə-šə* 'fluffy and (snow-)white' (**šə* 'white'), **bəbə* 'dust'

(6) **bəbə* CCirc **bəbə* 'to fly', 'to flutter', CAbx **bəbə* 'to wreath, roll (of smoke, dust)'

(7) **bərə* CCirc **bərə-sərə* 'noise of flurry, scandal, etc', Ub *bər-bər* 'to crackle (as wood in fire)' (Dumézil, Esenç 1977: 21), CAbx **bərə-bərə* 'growling, grumbling'

(8) **bz/źa* CCirc **bza* 'language', Ub *bźa*, CAbx **bzə* 'tongue' (anat.)

(9) **bzə* CCirc **bzə*, Ub *bzə* 'to cut (in pieces)', CAbx **r-b(ə)zə* 'to sharpen, whet very sharply, thinly', cf. also **bəzə-bəzə* 'to itch', SAbx *a-r-bəz-t"-ra* (*r-* causative, *t"-* transformative suffix) 'to sharpen finely', *a-maq'a-b(ə)z* 'incision on thong' (*a-maq'a* 'thong'), cf. Kab *wə-tħă-bz* 'to mark animals by cutting a piece off the ear' (*wə-* verbal prefix, **tħă* 'ear')

(10) **bžə* CCirc **bžə-ʒa* 'flea', CAbx **b(ə)žə* 'beetle'

(11) **bž'ə* CCirc **bž'ə-γa* 'dirty or greasy spot on clothes' (**-γa* suffix of abstract nouns), Ub *ć°a-bž'* 'physical mutilation', 'sin', 'aberration' (*ć°a* 'skin'), CAbx **bž'ə* 'spoiled, corrupted', **qa-bž'ə* 'scabby, mangy' (**qa* 'head')

(12) **bL'a* CCirc **bLa-* prev. 'by side', Ub *bLa-* prev. 'in, between, among', CAbx **bž'a* '(in) between, among'

(13) **bLʼə* CCirc **bLə*, Ub *bLə*, CAbx **bžʼə* 'seven'
(14) **bfˁa* CCirc **bγˁa*, Ub *bγʼə*, CAbx **tə-bĥa* 'broad, wide'
(15) **bγʼa* CCirc **bγa* 'bosom', Ub *bγʼa* 'upper part', CAbx *bγʼa-* preverb in *bγʼa-tʼa* 'to shovel (as hen), scratch' (**tʼa* 'to ladle, scoop out'), possibly also in **bγʼə-žˁa* 'to pour, roll' (**žˁa* 'to tear')

Comments to the items in no.:
(2) The Abkhaz examples given here have the meaning 'to swallow', which is derived from the meaning 'to go down', which proves the correctness of the Ubykh correspondence; for a broader typological context cf. French *avaler* 'to swallow' < 'to descend'.
(3) The Ubykh counterpart to **bə/a* is not known. Kumaxov (Morf 159) thinks that the Circassian forms are derived from CCirc **ba* 'many', thus **wə-bə* 'to pound', **wə-ba* 'to ram', originally meant 'to multiply', but this does not seem very plausible semantically (cf. especially the Abkhaz examples).

Note that I give the variant vocalic reconstruction (**ə/a*) in cases when a pair of languages display cognates with different vowels (see below, in vocalic reconstruction).
(9) CAbx **bəzə-bəzə* 'to itch' comes from PAbx **bzə-bzə*, a reduplication of **bzə* 'to cut'. In some of the Abkhaz examples given here a secondary influence of CAbx **bzə* 'tongue' could possibly have taken place.
(11) Dumézil 1969: 107 connects the second part of Ub *cˁa-bžʼ* with the verb *bžʼə* 'to fuse, melt'. It is probable that the Abkhaz and Circassian cognates could as well have a deverbal origin.

1.1.2. CWC **p* > CCirc **pʰ*, **p̄* : Ub *p* : CAbx **p*

Examples:
(1) **pa* CCirc **xˁa-pʰa* 'to dress' (**xˁa-* version prefix), Ub **pa* 'to wrap', 'to cover', 'wrapping, cover' (cf. Dumézil 1969: 111), CAbx **qa-r-pa* 'to cover', 'to throw/hang over', 'put on (of clothes)' (prev. **qa* 'head', **rə-* causative)
(2) **pa* Ub *pa-da* 'to swell' (*-da* verbal suffix), CAbx **pa* 'to rise (as dough)' (Tap); cf. also CCirc **p̄a* in **p̄aχa* 'steam' (?)
(3) **pə* CCirc **p̄a* 'to be out of breath', Ad *ză-gˀ-ă-pə* 'to be angry, Bzh (PC 11) *γă-p̄ă* 'to irritate, exasperate smb', Ub *pə* 'to grieve, be annoyed' (often in combination with *gʼə* 'heart'), here maybe belongs also Tap *gˀaqʷə-p-ra* 'trouble, anxiety', *gˀaqʷə-r-pə-ga* 'sth/smb causing anxiety, irritation' (*r-* causative, *-ga* agentive suffix)

(4) **pərə* CCirc **pʰərə* 'onomatopoeia for the sound of bird's flight', Ub *pərə*, CAbx **pərə* 'to fly'

(5) **pλa* CCirc **pλa*, Ub *pλa*, CAbx **pšə* 'to look'

(6) **pHˇ'a/ə* CCirc **pxˇ°ə*, Ub *pxˇ'a*, CAbx **pħa* 'daughter'

(7) **psa* CCirc **psa*, Ub *psa*, CAbx **psə* 'soul'

(8) **pλ'ə* CCirc **pλə*, Ub *pλə*, CAbx **apš'ə* 'red'

(9) **g°'-a-pa/ə* CCirc **g°-a-pʰa* 'pleasure', 'pleasant', CAbx **g°apə* in SAbx *a-čə-r-g°ap-ra* 'to be extremely proud of oneself' (*čə-* reflexive, *r-* causative)

(10) **pa(-pa)* CCirc **λa-pʰa-ra-pʰa* 'to stumble' (**λa* 'foot', **-ra-* interfix), Sh (ShD 115) *păpă* *'to jump' in *psə-q-jă-păpă-x* 'waterfall' (*psə* 'water', *q-* 'hither', *jă-* 3 p.sg. (IO), *-x* 'down'), *šə-γă-pap* 'waterfall' (*šə-* locative preverb, *γă-* causative, i.e. 'to cause to jump'), Ub *čˇə-pāpa* 'waterfall', CAbx **pa* 'to jump', cf. also Tap *ʒ+ħa-ta-pa-r+ta* 'waterfall' (*ʒə* 'water', *ħa-* 'hither', *ta-* 'inside', *pa* 'to jump', *-r-ta* 'place of')

(11) **psə* CCirc **psə* 'water', 'river', **psə-q'a* 'wet', CAbx **psa/ə* 'wet', 'to put to soak'

Comments to the items in no.:

(1) The reconstruction of the Ubykh is based on such Ubykh compounds as *cˇ°-ā-pa* 'cradle' (*cˇ°a* 'to sleep'), *ʒaʒ-ā-pa* 'beehive' (*ʒaʒ* 'bee'), *šˇ°ən-ā-pa* 'wax' (*šˇ°anə* 'honey'), *λa-ms-ā-pa* 'moss' (*λa-msa* 'root', lit. 'cover of the root'); *ā* is a directional affix (cf. Dumézil 1969: 111).

(3) The first part of Tap *g°aqˇ°ə-p-ra* is not clear and the comparison can be valid only if the verb is not altogether borrowed from Circassian.

(9) It is not excluded that Abx *a-čə-r-g°ap-ra* is in fact a borrowing from Circassian. This is certainly the case with Tap *g°apa* 'pleasure, pleasant' (cf. ES I: 228).

(10) The alleged meaning of the Adyghe morpheme **papa* can be corroborated by the given Tapanta word for 'waterfall'; cf. also Kab *psə-q'-jă-λă*, *psə-q'-jă-p'čˇ'ă* 'waterfall', lit. 'the jumping water' (cf. KR 303).

(11) CAbx **psa/ə* is restored on the basis of SAbx *a-ps-aa* 'wet', *a-ps-aa-ra* 'to become wet', *a-r-ps-aa-ra* 'to wet, soak' (*r-* causative prefix), *a-ps-aa-n-c'a-ra* 'to put to soak' (*n* locative, *c'a* 'to put'), Bz (BD 226) *a-ćˇ°ə-psə* 'raw', (BD 362) *jə-psə-wə-p'* 'it is wet', Tap *psa-ra* 'to wet, soak', *psə-tq'a* 'wet'. Besides, in Abkhaz there are traces of a similar root, but with the middle sibilant: **pśə* 'water', 'river', cf. CAbx **pś-ta* 'gorge, ravine' (**-ta* 'place of'), **pś-lə* 'otter' (lit. 'the water hound',

cf. Ub *bzə-wa* 'otter', same structure), **-pśə* a toponymic element in many hydronyms in Abkhazia, etc. (cf. ES II: 16; MS 66-67). This word can in principle represent the same root, and if so, this could suggest the existence of old (Proto-West Caucasian) apophonic change *ə* (**psə*) ~ *i* (**psi*). The possible trace of a similar alternation between *z* and *ź* can be seen in the correspondence CCirc **bza* 'language' : CAbx **bzə* 'tongue' : Ub *bźa* 'tongue'.

It is possible that Ub *bzə* 'water', 'river' also belongs here (cf. Charaia 24-25; Dumézil 1932: 94), though the reasons for the voicing of the cluster **ps-* are not clear. An alternative solution could be to connect Ub *bzə* with CAbx **ʒə* 'water, river', which would suggest CWC **bʒə* (cf. a similar Abkhaz development under CWC **z*, in the comment to (14).

1.1.3. CWC **p'* > CCirc **p'* : Ub *p'*, *p̲'* : CAbx **p'*

Kumaxov 1992: 266 doubts the possibility of reconstruction of the labial **p'* for the West Caucasian period, though, as the presented material demonstrates, there is enough evidence for such a reconstruction.

Examples:

(1) **p'a* CCirc *p'a-śa* 'large, big', 'ancestor', 'grown up' (PC 13), Ub *p'a-q'* 'thick (of things)', CAbx **p'a-źə* 'fat, stout, big', **p'a-ž̑ə* 'plump', **ź̑-p'a* 'thick, dense' (of flat things, liquids, paper, plants)', **š̑-p'a* 'thick, fat'

(2) **p'a/ə* CCirc **wə-p'a* 'to cut open (an animal)', 'to slaughter', 'to skin' (PC 14, 85), Ub *p'a-la* 'to untie, unbind', CAbx **p'-la* 'to husk, shell', **p'ə-t'ə* 'to open (of flowers, leaf-buds)' (**t'ə* 'to open'), cf. also *p'a* in Abzh *a-šaxa s-nap'ə j-a-la-p'a-ʒa-jt'* 'the rope cut into my hand' (*j-* 'it', *a-* '(into) it, *la-* prev. 'in the mass', *-ʒa* emphatic suffix, *-jt'* finite suffix)

(3) **p'ap'a* CCirc **wə-p'ap'a* 'to mould, flatten', CAbx **p'ap'a* 'to plaster, flatten'

(4) **p'ə/a* CCirc **p'ə* in **wə-p'ə-čk̑ə* 'crush, crumble, rumple' (*wə-* 'verbal prefix, **čk̑ə* 'squeeze, crush'), **p'ə-źyə* 'smithereens' (**źya-jə* 'small (as potatoes, change, etc)', Kab also *źyə-ʒ* 'id.', cf. PC 70), Ub *ǵə-p'a* 'to torment, torture, rack' (*ǵə* 'heart') (HV, p. 263) CAbx **p'ə* 'to crumble, break into small particles', **r-p'ə* 'to loosen, hoe', 'to dig making the ground light by crumbling it', **r-p'əp'ə* 'to loosen, crumble' (**r-* causative)

(5) **p'əq̑'ə* CCirc **p'q̑'ə*, Ub *p'q'ə* 'to grow, raise up (as children)', 'to feed', CAbx **p'əq̑'ə* '(leaf-)butt'

(6) **p'ar(a)-p'ar(a)* CCirc **p'ara-p'ara*, CAbx **p'arə-p'arə* '(to) chatter, twaddle' (onomat.)

(7) **p'at'a* CCirc **p'at'a* 'to move, stir (the body, as of snake, worm)', CAbx **p'at'a* 'to say nonsense, chatter', 'confuse, intermix'

(8) **wə/ap'a* CCirc **wəp'-č'a* 'felt', CAbx **wa/əp'a* 'felt coat', **wap'a-ć°a* 'felt' (**ć°a* 'skin')

(9) **p'a/əjə* CCirc **p'əjə* 'to stick out, be visible', CAbx **p'ajə-p'ajə* 'to swell up', 'to be full to overflowing'; does *-p'aj* in Tap *č'a-p'aj*, SAbx *č'-aħ°-ta-p'aj* 'dwarfish man' (**č'a* 'mouth', **aħ°-ta* 'back, behind') also belong here ?

(10) **(č)k'amp'əla* Kab *šk'amp'əl* 'cork' (Urusov 120), Ub *k'amp'əla* 'acorn', Ash, Ahch *k'amp'əl* 'small felt ball'

(11) **p'q'a/ə-* Ub *p'q'ač'a* 'reed', Bz *a-p'q'əz*, Abzh *a-p'q'əš-ra* 'cane, reed'

Comments to the items in:

(2) Dumézil 1976: 9 regards *-la* in Ub *p'a-la* as 'exhaustive', the same explanation can be applied to *la* in CAbx **p'-la*.

(3) In Ubykh there is a morpheme *p̲'a* which might be connected with the Circassian and Abkhaz items in (3), cf. Ub *q̲'ā-p̲'a* 'handful (with fist clenched)'. According to Dumézil 1969: 111, *q̲'ā-p̲'a* is just an expressive pharyngealised form of the normal *q'ā-p'a* 'hand', but the same morpheme is met also in *pšʼa-m-p̲'-* ('to sit down by the whole back)', where no 'hand' is present. It is possible that the semantics of *p̲'a* is 'to press', which makes it possible to compare it with the Common Circassian and Abkhaz material in (3) ?.

(8) The second element in CCirc **wəp'-č'a* can be **č'a* 'thin' (connected with Ub *č'a* 'flat and thin').

(10) It is possible to compare the Kabardian, Ubykh and Abkhaz words (without CAbx **amp'əl* 'ball') as a whole, though such long words certainly represent compounds. For CCirc cf. Tem *-šk'ă* 'lump, chip, splinter, **q'a-čk'a* 'lump, (snow)ball' (PC 54), for CAbx cf. **amp'əl* 'ball'.

1.2. THE CWC DENTAL STOPS

It is possible to reconstruct both plain and labialised dental stops, while no signs of their palatalised correlates have been found. Labialised dental stops were not preserved in Common Circassian, but their presence in Ubykh and Abkhaz makes their reconstruction possible. In two cases ('to give', and 'to be present') Ubykh has a labialised *t°* as a variant to *t*, while Circassian and, what is more significant, Abkhaz does not show any trace of labialisation here. Shagirov (MS 42, 112)

considers labialisation in Ubykh in both mentioned cases secondary. It is noteworthy that in these roots Ubykh shows fluctuation not only in labialisation, but also in vowels: *ə ~ a* (*tˀə//tə ~ tˀa//ta*; cf. HV 192, 206, 476, 481, 1209 (p. 190; should be 1827), 1915). Abkhaz in both cases has *a*, while in Circassian the situation is not that clear. In this language the vocalic change *a ~ ə* bears a distinct morphological function: *ə* often marks transitive verbs, and *a* intransitive ones (e.g. **tʰə* 'to give sth to smb' vs. **tʰa* 'to give'). In the verbal root 'to be present' Circassian has only **tʰə*. One might suppose that the Ubykh fluctuation *a ~ ə* can also reflect some older apophonic variants analogous to those observed in Circassian. Suggesting such explanation for Ubykh, Dumézil adds up also such Ubykh variant forms as *tʷ-//tʷa* 'to go out', *γ-//γa* 'to be suspended', 'to take' (in causative forms). He sees a parallel to Circassian and Ubykh in Abkhaz verbal ablaut *a* vs. *ə*, which distinguishes centripetal and centrifugal forms (Dumézil, Esenç 1971: 31; cf. also Dumézil 1978: 10). If, following Shagirov, we consider labialisation in Ubykh in these cases as secondary, its presence can be probably explained as a trace of an old verbal suffix, i.e. **tə/a-w > tˀ(ˀ)ə/a* (?). Note that the fluctuation *t ~ tˀ* (and *t' ~ tʷ*) in Ubykh is different from a more common (and a more recent ?) variation *tˀ ~ p* (as in *tˀasə//pasə* 'kind of tree', HV 1925), or, similarly, *dˀ ~ b̲* (as in *b̲əb̲ə//dˀədˀə* 'to thunder', HV 262).

The reconstruction of labialised-palatalised dental stops is quite dubious. There are two examples which can be used as evidence for **dˀ'* (but which quite likely represent one and the same morpheme), and one example as evidence for **tˀ'*. I did not find any material which could be used as a basis for reconstruction of **tʷ'*.

1.2.1. CWC **d* > CCirc **d* : Ub *d* : CAbx **d*

Examples:

(1) **da* CCirc **dada* emphatic particle, 'very', Ub *ja-da* 'many', 'very', CAbx **da-ra* 'very', **də-wə//*da-wə* 'big, great' (*-wə* participial suf.)

(2) **də* Ad *a-d-rə̆*, Kab *a-d-rə̆-j* 'the other' (< **a-də-ra-ja*), Bzh *wə-də-rə̆-r* 'the other' (< **wə-də-ra-*), Ad *də-xə̆-r* 'the other ones' (*-xa* plural, *-r* nominative suffix), Ub *aj-da* 'that, the other', *də-* relative prefix 'the one(s) who', *də-ba* 'why' (*ba* interrogative suffix), CAbx **a-də-r-* 'the other, the next', Tap *w-adər-* 'id.' (< **wa-də-r-*), CAbx *də-* prefix of the 3d p.sg. (hum), **da* 'they', **d-ača* 'the other', **da-sə-w* 'any'

(3) *da* CCirc **a-da* 'there', Sh, Bzh *wə-da* '(to) there', CCirc **ma-w-da* '(to) there', **mə-da* '(to) here', **śħa-da* preverb denoting the movement over sth, lit. 'towards the head' (**śħa* 'head'), Ad *tə-də̆* 'where', Ub

-da-k'a 'towards', CAbx **ĥ°a-da* 'upwards' (**ĥ°a* 'up, above'), **la-da* 'downwards' (**la* 'down, beneath')

(4) **č(ʾ)ədə* CCirc **čʰʾədə*, Ub *čədə*, CAbx **čada/ə* 'donkey'

(5) **dada* Ub *dad* 'father', CAbx **dada* 'grandfather', 'father'

(6) **da* CCirc **da-p̄q̄ə* 'wall' (**p̄q̄ə* 'framework', '(part of) body'), CAbx **da-q'a* 'side', 'page' (**q'a* 'flat')

(7) **-da* Ub *-da* verbal suffix expressing hypothesis, supposition or condition, 'if', CAbx **-da* desiderative suffix

(8) **dərə* CCirc **dərə/a* 'to swallow', CAbx **dərə* 'to know'

(9) **da* CCirc **xa-da* 'to choose, pick out' (**xa-* prev. 'in/out the mass'), Ub *-da* a desemanticised derivational verbal suffix, CAbx **da* 'to carry, lead'

(10) **da/ə* CCirc **da-* comitative prefix (e.g. **da-kʷa* 'to go together', **kʷa* 'to go'), CAbx **də-* prev. 'beside, by'; cf. also Ub *-da* in *k'a-da* 'to accompany' (*k'a* 'to go')

Comments to the items in:

(1) *ja* in Ub *ja-da* 'many', 'very' is probably a deictic element (with the comparative meaning).

(6) For CAbx **daq'a* cf. alternatively CCirc **daq̄a* 'hind end', **λa-daq̄a* 'heel' (**λa* 'foot'), **pśa-daq̄a* 'back of neck' (**pśa* 'neck') (PC 17).

(8) The Circassian verb *dəra/ə*, absent in PC, is met in Adyghe (Tem *dərə-jə*, Sh (NM) *dərə* 'to swallow') and in the causative form in Kabardian (*jă-yă-(n)dəră-xə* 'id.'). The comparison with Abkhaz, though tentative, is based on a likely idiomatic development 'to swallow' > 'to understand', 'to (come to) know'. Ub *dərə* 'to swallow' is probably a Circassian loan (cf. HV 572).

1.2.2. CWC **d°* > CCirc **d* : Ub *d°* : CAbx **d°/*d*

Examples:

(1) **d°ə* CCirc **da-* prev. 'in (a plane, flat space)', Ad (Tem) *a-də-č'ă* 'outside', (*-č'ă* < **-k'a* instr. suffix), Ub *d°ə*, CAbx **d°ə* 'field, plane', prev. '(to) outside', SAbx *a-d°-ax̌ə* 'outside' (*-ax̌ə* directional-locative suffix)

(2) **d°əd°ə* Ub *d°əd°a* 'soft, mild', 'sth refine(ly pounded)', CAbx **d°əd°ə* 'to grind (coarse)'

(3) **d°əd°ə* CCirc **dədə* 'to rush, speed along', Ub *d°əd°ə//ḫəḫə* 'to thunder', CAbx *dədə* 'thunder; to thunder'

(4) **ʕ°ə-d°ə* CCirc **γ°ə-də/a* 'gadfly', Ub *γ°ə(n)-d°ə* '(small) bird'; for the first

part cf. CAbx *ĥ°ə 'moth'

(5) *d°a Ub d°a 'to die down (as fire)', CAbx *da 'to abate (as swelling)'

Comments to the items in:

(1) There is not enough certainty that Ub d°ə is not an Abkhaz loan (cf. Dumézil 1975: 112; Charachidzé 1989: 431). R. Smeets connects the Circassian local element *da/ə* with the Circassians item in (3) in 1.2.1. (pers.com). If this is true, the Circassian preverb in (1) does not belong here.

(2) Ub *d°əd°a* 'soft, mild' is likely to be a deverbal noun. The variant with the labialised *d°* in Abkhaz is met only in some Abzhywa isolects, e.g. in the village of *Arasaʒəx´* (E. Kilba, pers.com.). The semantic difference between Ubykh ('to pound finely') and Abkhaz ('to grind coarse') can be secondary, the general meaning being 'to pound, grind'.

(3) CAbx *dədə*, as Abdokov (FL 44) suggested, might have lost labialisation. The Ubykh variant with *ḅ* must be secondary. The semantics of the Circassian word ('to rush along' < *'to rush as a lightning'?, cf. Rus молниеносно 'very quickly, instantaneously', lit. 'carrying lightning') makes its comparison with Ubykh and Abkhaz tentative. In any event, all three forms are probably onomatopoeic by origin.

1.2.3. ? CWC *d°´ > CCirc *d : Ub d° : CAbx *ʒ

Examples:

(1) *d°´a CCirc *da/ə*, Ub *d°ə*, CAbx *ʒa-x̌ə* 'to sew'

(2) *d°´a(-d°´ə) CCirc *dədə*, Ub *d°a*, CAbx *ʒaʒə* 'awl'

Comment to the items in:

(1) For *-x̌ə* in CAbx *ʒa-x̌ə* cf. also CAbx *ǯ´ə-x̌ə* 'iron hook used for getting boiled meat out of cauldron' (*ǯ´ə* 'meat, flesh'), probably the verbal root *x̌ə* 'to take out' (used only with local prefixes). It has been suggested that the Circassian and Abkhaz items in (2) are reduplications of the verb in (1), cf. MS 129. In Ubykh the noun is distinguished from the verb only by the vowel (*ə* in the verb, *a* in the noun).

1.2.4. CWC *t > CCirc *tʰ, *t̄ : Ub t : CAbx *t

Examples:

(1) *tə/a CCirc *tʰə/a*, Ub *t(°)ə/a*, CAbx *ta* 'to give'

(2) *tə/a CCirc *tʰə* 'to stand' (only with preverbs), local preverb *tʰ- 'on, above sth', cf. also *tʰa-gə* 'to stand up, rise' (for *gə* cf. CAbx *gə-la*

'to rise'), Ub *t(°)ə/a* 'to be, exist, be present somewhere', CAbx **ta* 'to be inside', prev. **ta-* 'inside', local suffix **-ta* 'the place of'

(3) **kata* CCirc **kʰatʰə* 'sheep-shed', CAbx **kəta* 'village'

(4) **mata* CCirc **ma(r)īa* 'quantity, measure', CAbx **mata* 'a strip of land which has to be ploughed or hoed'

(5) **-ta* Ub adverbial suf. *-ta*: *məśʷa-ta* 'of the day', CAbx *-ta* in **q-a-ta* 'himself' (**qa* 'head'), **ja-ta* 'again', **x̌ə-ta* 'cold' (**x̌ə* 'cold'), maybe also **x̌an-ta* 'heavy'; cf. also probably CCirc suffix **-tʰa/ə* in Ad *čəʔă-ta-γ(ă)* 'coolness', Kab *ś'əʔă-tə-ʔă* 'cool, fresh' (*čəʔă/ś'əʔă* 'cold'), and in Kab *năx̌ ś'əʔă-tă* 'colder, cooler' (which Urusov 271 regards as a contraction of *năx̌ *ś'əʔă-təʔă*)

(6) **-tə* Bzh *-tʰ* suffix of the second future tense, Ub *-t* suffix of the future tense

(7) **(a)taqa* CCirc **aīaq̄a*, Ub *taqa* 'cock, rooster'

(8) **śʷtə* CCirc **śʷīə* 'to hurl', CAbx **śʷtə* 'to overturn; to rush'

Comments to the items in:

(7) Shagirov (ES I: 56) regards Ub *taqa* as an Adyghe loan, but the absence of the initial vowel in Circassian may speak in favour of genuine character of the Ubykh word.

1.2.5. *Irregular correspondence:* CCirc **t'* : Ub *t'* : CAbx **t*

Examples:

(1) **t(')ə* CCirc **t'ə*, Ub *t'ə*, CAbx **tə* 'ram'

(2) **st(')a* Ub *st'a* 'goat', CAbx **sta* in **šʼabə-sta* 'chamois'

Comments to the items in:

(1) Judging from external (East Caucasian) evidence (cf. NS 406), the glottalisation in Circassian and Ubykh *t'ə* must be secondary. The irregular correspondence *t* ~ *t'* can be found also within the Circassian dialects, cf. Ad *təkʷ*, Kab *t'əgʷ* 'butt (of axe)', Ad *śħă-pxă-təkʷ*, Kab *śħă-pxă-t'əkʷ* 'back of the head' (cf. Urusov 114).

(2) See comments to this correspondence under CWC *λ'.

1.2.6. CWC *t° > CCirc *t^{h}, *$\bar{t}$: Ub *t° : CAbx *t°

Examples:

(1) **t°H°a/ə* CCirc **sə-tx̌ʷə* 'hoarfrost', CAbx **śə-t°ħ°a* 'snowstorm' (CCirc **sa*, CAbx **śə* 'snow')

(2) **t°a* CCirc **tʰa/ə* in **kʷətʰa/ə* 'to pour (dry substances)', **tʰaq̄°a* 'id.' (probably compounds **kʷə-tʰa/ə*, **tʰa-q̄°a*), or alternatively, CCirc **ja-wə-ta/ə* 'to pour (as dry substances), bestrew', in Ad also 'to sow by hand' (**ja-* indirect object prefix, **wə-* verbal prefix), **xa-wə-ta* 'to strew, pour into by shaking the hand' (**xa-* prev. 'in the mass'), Ub *t°a-šxə* 'hail', *t°a-x̌°a* 'river', CAbx **t°a* 'to pour (water)' (used only with preverbs)

(3) **t°a* CCirc **wa-tʰa-psə* 'pus' (**psə* 'water'), Kab *tă-dă* 'to rot', *tă-dă-rə-mă* 'the smell of rot' (ZS 182), Ub *nt°a* 'sterile, barren (as cow)', CAbx *t°a* 'pus'

(4) **t°a* CCirc **tʰa-ś°a* 'glade, field of grass' (**ś°a* 'cover'), CAbx **t°a* 'hay', in dialects also 'grass'

(5) **t°a* Ub *t°a-sə* 'kind of tree', 'beech' (*sə* 'wood'), CAbx **t°a* 'linden'

(6) **t°a* CCirc **wə-ta* 'to pound, thresh (seeds), beat (eggs), knead, break off, shake up, whip', (**wə-* verbal prefix), Ub *t°ā t°a* 'green woodpecker', *t°at°a-wə* 'arms, weapons', CAbx **t°at°a* 'to husk the grain out of ears'

(7) **t°əqə* CCirc **pśa-təq̄ə* 'back of neck, occiput' (**pśa* 'neck'), Ub *t°əq* 'neck', *λa-t°əq* 'ankle' (*λa* 'foot'), *q'a-t°əq* 'wrist' (*q'a* 'hand')

Comments to the items in:

(1) The second part of CAbx **śə-t°ħ°a* is the verb **t°ħ°a* 'to blow (by mouth)'.

(2) The comparison between CCirc **kʷətʰa/ə* and CAbx **t°a*, proposed by Shakryl 1968: 72, is doubted by Shagirov (ES I: 185). The Abkhaz and Ubykh words in *(2)* are compared in NS 205, to which CAbx **t°a* 'to melt, fuse' is also added. For the second part of Ub *t°a-x̌°a* 'river' cf. Ub *x̌°a* 'to pass' and(/or) *x̌°a* in CCirc **x̌°atʰa* 'ravine, gully'. Or can Ub *t°a-x̌°a* and CCirc **x̌°atʰa* be compared as a whole (with metathesis in one of the languages) ?

(3) *n* in Ub *nt°a* is probably a nasal increment. The semantics of the Ubykh counterpart makes its validity somewhat tentative.

(5) The Ubykh name of 'beech' has a secondary variant *pa-sə* (HV 1234).

(6) Ub *t°ā t°a*, *t°at°a-wə* and **t°a-nə* are most likely deverbal nouns, which is proved by their Abkhaz counterpart. Typologically the names for woodpecker are often derived from one or another verb, as, for example, its English name suggests. Cf. also Abx *a-c'la-r-kʷək'ʷ*, lit. 'the splitter (**kʷək'ʷə* 'to scutch, swingle, comb, card (wool)', 'to tear to pieces') of tree (*a-c'la*)', with the causative *r-*, Ad *pxă-wə-ʔ°ə*, Kab *žəĝə-wə-ʔ°ə*, lit. 'to peck (*wə-ʔ°ə*) wood (*pxă*)/tree (*žəĝə*)', Turkish *ağaç-kakan*, from *ağaç* 'tree' and *kakan*, present participle of *kak-mak* 'to prod, nail', etc. Here

can belong also *t°a/ə* in Ub *q'ə-nt°a* 'pestle, stamper (for ramming)', *q'ə-t°* 'to chop, cut (into pieces)'. The alternative counterpart in Circassian might be also **wə-t^{h}a* 'to trample, knead clay with the feet', though the Circassian word in (6) is closer to the Ubykh and Abkhaz items semantically.

1.2.6.1. *Irregular correspondence:* CWC **t°* > CCirc **t̄* : Ub *t°* : CAbx **b*

Examples:

(1) **(a)t°ə* CCirc **(a)t̄a/ə*, Ub *t°ə*, CAbx **abə* 'father'

(2) **(a)t°a* Ub *t°a*, CAbx **aba* 'male'

Comment:

It may be that both (1) and (2) represent etymologically one and the same morpheme. The irregular character of the correspondence can be explained by the word's origin from baby talk, which gave the unmotivated phonetic shift **t°* > **b*. The alternative explanation will be to regard the Abkhaz form as original, i.e. CWC **b* > Ub **t°*, CCirc **t°* > **t̄*. Yet a third possibility remains to dissociate the Abkhaz form from the rest, and reconstruct two CWC roots: **(a)bə/a* and **(a)t°ə/a*. Nikolayev and Starostin reconstruct PWC **(a)p̄ə* 'father' (NS 217), which I find not quite plausible phonetically.

1.2.7. ? CWC **t°ˊ* > CCirc ? : Ub *t°* : CAbx **ć*

Examples:

(1) **t°a* Ub *t°a*, CAbx **ća* 'cherry'

Comment:

The reconstruction of CWC **t°ˊ* is rather tentative, as it cannot be corroborated either by Circassian correspondences, or by other Ubykh-Abkhaz comparisons.

1.2.8. CWC **t'* > CCirc **t'* : Ub *t'* : CAbx **t'*

Examples:

(1) **t'at'a* CCirc **t'at'a*, Ub *t'at'a-q'a*, CAbx **t'at'a* 'mild, soft, glutinous'

(2) **t'a/ə* CCirc **t'a-p'q'ʷə* 'to rip open', **t'a-č'ə* 'to undress', **t'a-t^{h}a* 'to come loose, be unfastened', Ub *t'a* 'to rip', *t'a-la* 'to rip completely' (Dumézil, Esenç 1972: 52), CAbx **t'ə* 'to open', **t'-la* 'to rip', **r-t'-la* 'to untie, unbind' (*r-* causative)

(3) **t'at'a* CCirc **t'at'ə* 'to ravel out' (Kab *zăă-ʔə-t'at'ə*, cf. Morf 195), CAbx **t'ɨ't'a* 'to rip, tear, ravel out'; a reduplication of **t'a/ə* 'to rip'

(4) **t'a/ərə* CCirc **t'ara* > Kab *wə-t'ără-zə* 'to curl (of hair)' (*wə-* verbal prefix),

Ub *t'ər* 'to ooze out, exude (of things in the state of glutinuous liquid)' (Dumézil 1977: 22), CAbx **t'arə* 'to bend (of sth flexible)', **t'arə-t'arə//t'ərə-t'ərə* 'to be flexible, viscous, bending, lithe, tall and elegant'; it is quite possible that CCirc **t'ara* 'to sport, gamble (of horse)' also belongs here

(5) **t'a/əma/ə* Sh *q°ə-t'am(ă)* 'sort of pear with big fruit' (ShD 105) (*q°ə* 'pear'), Kab (Baksan) *t'əmə-ś* 'plump, corpulent', cf. also Kab *bərt'əm* 'id.' (Ocherki 268), CCirc **q̄a-t'a/əmə* 'to swell (of leaf butts)', 'put on weight' (**q̄a-* 'hither'; cf. Urusov 178), Ub *t'əma* 'peach', CAbx **t'ama* 'peach' (in Ash: 'apricot', *ʒən t'ama* 'peach', with *ʒən* 'winter'), CAbx **t'amə-t'amə* 'soft, plump' (especially of ripe juicy fruit)

(6) **t'a* CCirc **t'a* suffix in the names of colours: **šx̌°a-(n)t'a* 'blue, green', **γ°a-t'a* 'dark-reddish', CAbx **š°ə-t'a* 'spot, bruise' (**š°ə* 'to paint', cf. also **š°š°ə* 'dark'), **š°ə-t'a-x̌a* 'to become dark, with dark spots'

(7) **at'a/ə* Circ **jat'a* 'clay, earth, mud', **La-nt'a* 'elastic, supple', Ub *at'ə* 'soft, slightly overripe', CAbx **q'-at'a* 'slushy, diluted (by water)', 'wash', **qʷ-at'a* 'soft, mild' (**qʷə* 'mouth' ?)

(8) **t'ə/a* CCirc *-t'ə* in **wa-t'ə=psə-t'ə* 'wet', 'slush, mire' (**wa* 'sky', 'hail', **psə* 'water'), CAbx **t'a* in SAbx *a-k°a-psa-t'a* 'drizzle' (**k°a* 'rain', **psa* 'to pour'), **t'a* 'diarrhoea'; another alternative is to compare CCirc **psə-t'ə* with CAbx **psa-t'a* as a whole, analysing the CAbx compound as **psa* 'to soak, become wet'

(9) **t'ə-* Kab *t'əg°ə* 'butt, back (as of axe)', Abx (Abzh) *a-t'əqʷ* 'id.'

(10) **t'əq(')ə* Kab *jă-t'ərq'*, CAbx **t'əq'ə* 'to beat unmercifully', Tap *t'əq'-t'əq'* 'description of knock, tap', Bz *a-t'əq'-ħ°a* 'quickly, instantly'; the root is obviously onomatopoeic

(11) **p'at'a* CCirc **p'at'a* 'to move, stir (the body, as snake, worm)', CAbx **p'at'a* 'to say nonsense, chatter', 'to confuse, intermix'

(12) **p'ət'ə* CCirc **p'ət'ə/a* 'to crush, jam, press, pinch', SAbx *q'a-mp'ət'* 'small bit of faeces' (**q'ə* 'faeces')

(13) **k'a/ənt'ə* CCirc **k'ant'a/ə* 'small remains' (PC 52), Abx *a-k'ənt'-rə-š°* 'tiny, wee'

(14) **t'a* CCirc *t'a-kʷə* 'small, little', Ub *t'a* 'the smaller one, of less value'

(15) **-t'ə* Ub *-awə-jt'* suf. of the past in the future tense, *-ajt'* suf. of past indefinite and plu-perfect, CAbx **-wa-j-t'ə* suf. of the present tense (**-wa-* marker of the present tense, **-t'ə* suf. of finite dynamic forms), **-j-t'ə* suf. of aorist, **-x̌'a-j-t'ə* plu-perfect suf.

(16) **(H)ant'a* Sh *ħant'a-r-q°aq°ă*, Tem *ħant'a-r-q°ə*, Kab *ħăndə-r-qʷaqʷă* 'frog',

Ub *ant'a* 'snake'

Comments to the items in no.:

(2) Cf. especially CCirc **bĝə-(n)t'ă* 'ungirded' (*bĝə* 'waist') with CAbx **q'a-(n)t'a-(ma-)źə* 'naked', 'barefooted', **ħ°a/ə-nt'a-źə*, **ħ°a/ə-nt'a-q'a* 'naked', with common element *-(n)t'a* 'open, exposed'.

(7) The first element of CAbx **q'-at'a* is most likely **q'ə* 'faeces', thus the original meaning must be in fact 'dung-wash'. Taking into account the Circassian form, it is possible that it represents a compound (**ja-t'a*, with **ja* 'bad'?), and in this case the CWC reconstruction will be **(a)t'a*.

(9) Tap *t'əg°* 'butt' is a lone from the Kab *t'əg°ə*. This Kabardian word corresponds irregularly to Ad *təkʷ* 'butt (of the axe)', thus CCirc **t(')ək̄°ə*; cf. also CCirc **śħa-pxa-t(')ək̄°ə* 'the back of the head' (**śħa* 'head', **pxa* 'behind'; cf. Urusov 114). The difference in the second consonant of the Circassian and Abkhaz words can indicate that they are in fact compounds.

(12) The presence of *m* in Abx *q'am-p'ət'* and the vowel *a* instead of the expected *ə* makes the comparison somewhat tentative. It well may be a simple increment, and the word in the whole must have meant 'the jammed faeces'. On the other hand, *-m-p'ə* can be analysed alternatively as 'hand' (**ma-pʷə*) (?).

1.2.9. CWC **tʷ* > CCirc **t'* : Ub *tʷ* : CAbx **tʷ*

Examples:

(1) **tʷa/ə* CCirc **t'ə-sə*, Ub *tʷa-sə*, CAbx **tʷa* 'to sit down'

(2) **qʷa(r)tʷa/ə* CCirc **qʷar/nt'a* 'to bend, distort, turn, wind, be twisted', Ub *qatʷə* 'to turn around', CAbx **qʷartʷə* 'joint' (anat.)

(3) **tʷə* Ub *tʷə* 'to come out', CAbx **tʷə* 'to belong'

(4) **t'(°)ə* CCirc **t'ə*, Ub *tʷə* 'to dig', CAbx **t'ə-šə* 'pit, hole'

Comments to the items in no.:

(1) **tʷa/ə-* is an old preverb, probably with the original meaning 'down', preserved also in CCirc **t'ə-λə* 'to lie down' (**λə* 'to lie'). Abkhaz did not preserve the root **sə* 'to sit'.

(2) The items in all three languages are compounds, but their actual composition is not quite clear. In Ubykh *q* might come from **qʷ*, with the loss of both glottalisation and labialisation and compensatory pharyngealisation. The second Ubykh segment *(-tʷə)*, is the suffix meaning 'circularly' (cf. Charachidzé, Esenç 1992-93: 14). Can the same meaning be assigned to the Circassian and Abkhaz items as well ? The alternative Abkhaz comparison can be CAbx **ħ°a/ə(n)t'ə*

'chaos, disorder'.

(3) The comparison was proposed by Dumézil 1975: 28, 38 and 1978: 14, 28. Though the main meaning of the Abkhaz counterpart is 'possession', Dumézil might be right in assuming that its original semantics was closer to that of Ubykh, cf. the examples cited by Dumézil 1978: 14: Abx *a-j°ada-n-t‿ə* 'from above', Ub *a-ẑ°a-sə-w- -t‿ə-n* 'I come down', cf. also SAbx *w-aba-t‿ə-jə-w* 'where are you from ?' (lit. 'where do you belong to?'), Bz *a-šχa-t‿(ə)* 'from the mountain', Ub *mā-w-La- -t‿a-nə-j* 'where do you come from?' (HV 936).

(4) For the second component of CAbx **t'ə-ša* see under CWC **š* in 3.4.6. (1).

1.3. THE CWC VELAR STOPS

Velar stops are well preserved in Abkhaz dialects (except, of course, the labialised-palatalised correlates). In both Circassian and Ubykh the plain correlates merged with the palatalised ones (and the latter became affricates in most of the Circassian dialects).

1.3.1. CWC **g* > CCirc **g´* : Ub *g´* : CAbx **g*

Examples:

(1) **(a)ga* CCirc **-g´a* 'bad, insufficient, lacking', Ub *ag´a* 'bad, evil', CAbx **aga* 'silly, stupid', **gə* 'defect, sth lacking'; also as a verbal root: Ub *g´a*, CAbx **gə* 'to lack, be deficient'

(2) **ga* CCirc **nəg´a/ə* 'floodlands, water-meadow', Ub *ng´a* 'sea or river-shore', CAbx **(a)ga* 'seashore'

(3) **ga* CCirc **-g´a/-k'a*, CAbx **-ga* instrumental suffix

(4) **gə* CCirc **t^{h}a-g´ə*, CAbx **gə-la* 'to stand, rise'

(5) **gaga* CCirc **g´əg´a/ə* 'clear, shiny', 'to be polished, shine', CAbx **gaga* 'shadow, reflection', 'apparition, ghoast'

(6) **ga* CCirc **g´a/ə* 'to read, study; call, announce', CAbx **ga* 'to sound, to spread (of sound)'

(7) **-ag(ʾ)a* CCirc **q'a-g´a* 'handful, many', CAbx **jag(ʾ)a* 'many, much'

(8) **gaʒə* CCirc **g´a(r)ʒə* 'looming', 'haze' (?), **g´a(r)ʒə-pλə* 'pink colour' (**pλə* 'red') (Urusov 99), CAbx **gazə-gazə* 'to surge, swell, oscilate (of masses of water)', cf. also Abx *a-gaz-čaz-ra* 'to awkwardly swing from one side to another', in both cases the reduplication of **gazə* (with a change *g* > *č* usual for this type of reduplication)

(9) **baga* CCirc **bag´a* 'fox', Ub *bag´a-š°* (*š°* 'small, little') 'jackal', CAbx **baga* 'fox, jackal'

(10) **laga* CCirc **tħa-γa-Lag´ə* 'god of threshing, harvesting, agriculture' (**tħa*

'god', *γa* causative), CAbx **laga* 'to grind, mill'

Comments to the items in no.:

(2) *n(ə)* in CCirc **nəga/ə* and in Ub *ngʼa* is probably lost in CAbx (the initial *a-* in the latter can be a remainder of the lost syllable).

(3) The instrumental suffix can be connected with CAbx **ga* 'to carry, bring, take'. If the comparison of Ub *gʼə-gʼa* 'fear' (*gʼə* 'heart') with Abx *a-gˀə-ga* 'horrible, awful' (*gˀə* 'heart', *ga* 'to take') is correct, then the second element in Ubykh can also be included to this correspondence.

(5) In Abkhaz there is another root, **gga* (< **gəga*)'to shine dimly', 'to fade', which can be a variant of the same root as **gaga* in *(5)*, but whose vocalism is closer to that of the CCirc cognate. CCirc **gʼəgʼa/ə* is probably a reduplication, cf. unreduplicated *gʼa* in such items as CCirc **gʼa* 'smooth, polished', **gʼa-śˀa* 'smooth' (*śˀa* 'skin, cover'), **γˀə-(n)gʼa* 'mirror' (**γˀə* 'metal, iron'), i.e. 'polished (and thus shinning, reflecting) metall, iron', Kab *məL-gʼa-j* 'smooth ice' (*məL* 'ice') (cf ES I: 137).

(7) The initial part of CCirc **qʼagʼa* is probably **qʼa* 'hand'.

(8) *r* in CCirc **gʼa(r)ʒə* is an increment. In Abkhaz *z* is probably the result of weakening (< **ʒ*).

(9) The original form of the Circassian word for 'fox' is preserved in the Shapsygh compound *băgʼă-wəc* 'a sort of grass used in popular medicine' (ShD 93), lit. 'fox (*băgʼă*) grass (*wəc*)'. Another Circassian name for this animal, coming from CCirc **baǯʼa*, cannot be compared directly with the counterparts in the sister-languages, as CAbx **g* and Ub *gʼ* do not correspond to CCirc **ǯʼ*. This leaves us with two concurring forms in Common Circassian, **bagʼa* and **baǯʼa*, designating one and the same kind of small predator, vis-à-vis only the single form in the sister-languages. Two possible explanations can be proposed to account for the coexistence of these two forms.

First, one can envisage the compounded character of the West Caucasian words in question: **ba-ǯʼa*, **ba-gʼa*, **ba-ga*, thus establishing the relationship between Circassian and the rest of the forms only on the first part of the word, i.e. **ba-*. Charachidzé (Charachidzé, Esenç 1990-91a: 28) sees in the initial *ba-* in Ubykh the adjective *ba* with the reconstructable original meaning 'grey, greyish, grey-green' and with the semantic development 'wild, non-domesticated', cf. Ub *ba-žˀ* 'old man', lit. 'old grey', *ba-gʼatʼə* 'wild cat' (*gʼatʼə* 'cat'), *ba-šxˀə* 'wild grape'. The second element, in its turn, can have, according to Charachidzé (ibid.), its motivation in Abkhaz: **ga* 'to take, carry, bring'. Such a solution, attractive as it might seem, is confronted, however, with the fact that a root

similar to CWC **baga* exists, according to NS 302, in some East Caucasian languages, cf. Chech *c'oq'-berg* 'ounce, snow leopard' (*c'oq'* 'panther, ounce'), Darg (Ak) *-bug* in *dugeli-bug* 'badger'.

The second solution, which I find somewhat more preferable, might be to regard the CCirc **baǯ'a* as an old contraction of **baga-ǯ'a*, with the suffixal element **-ǯ'a*, denoting a form of fox or jackal. Aþkhaz is especially rich in such different designations of the wild canine species, cf. SAbx *a-bga* 'wolf, fox, jackal', *a-bga-dəw* 'wolf' (*a-dəw* 'big, great'), *a-bga-x̌ʷəč'ə* 'fox' (*a-x̌ʷəč'ə* 'little, small'), TswSa *a-bag-asa* 'jackal' (*asa* 'short-sized, dwarfish'), Bz *aśʷə-bga* (lit. 'Abaza/North Caucasian fox'), *a-kʷt'-rə-bga* (lit. 'chicken fox'), *a-bga-laǯ* 'kind of small jackal', CAbx **baga-ʒa* '(sort of) jackal'. For the possible etymology of CCirc **-ǯ'a* cf. for example, CCirc **ǯ'a* in **ǯ'a-γʷa* 'odious, unpleasant', 'enemy', **ǯ'a-γʷə* 'to get fed up with smb', akin to Ub **ǯ'a* 'grieve, pain, suffering', CAbx **r-ǯ'a* 'to abuse, revile, defame' (possibly semantically derived from **ǯ'a* 'black', preserved in Ubykh).

Ubykh has in fact two more words for the same variaty of animal, namely *baǯ'a* 'fox' and *ƀag'ă-ʒa* 'hyena'. The first of these is believed to be a loan from Circassian (cf. DA III: 219), while the second - the adaptation (with change *b* > *ƀ*) of CAbx **bag'ă-ʒa* 'kind of jackal' (cf. Charachidzé, Esenç 1990-91a: 32).

(10) Traditionally, CAbx **laga* is compared with another Circassian morpheme, namely CCirc **ħaǯ'a/ə* 'to grind' (cf. Deeters 1931: 290; ES II: 117; MS 116-7; ZS 181-2; NS 559-561). But the problem is, as I have already mentioned in the previous comment, that CAbx **g* does not correspond to CCirc **ǯ'*. For PWC Nikolayev and Starostin reconstruct **Ɬʷa-ga* 'to grind', connecting the first part, containing the voiced labialised lateral affricate, with East Caucasian counterparts. But such reconstruction causes serious doubts. First, it is absolutely unclear how the reconstruction of CCirc **ħagə* 'to grind' (NS 561) could be arrived at, while the correspondence Ad *ħaǯ'ă* : Kab *ħažă* 'id.' can point only to CCirc **ħaǯ'a* (cf. PC 80)? Secondly, the supposedly related forms in the East Caucasian languages contain neither affricates, nor laterals, cf. Nakh **ʔaħ-*, Avar-Andi **ʔiχʷVn-*, Tsez **ʔayːʷə-*, Lak *ha=a-*, Darg **ʔurχːʷab*, Lezgi **reχːIʷa*, Xin *zoχ* (all East Caucasian proto-forms are from NS 559). According to NS (ibid.), all these forms come from PNC **Hĕmχ̌wV* 'to grind'. In such circumstances I would prefer to redistribute the material by connecting the first part of CCirc **ħa-ǯ'a/ə* 'to grind' with the very close phonetically East Caucasian material, and separate it from the supposed Abkhaz cognate, thus positing for CWC two roots with similar meaning 'to grind, mill': **ħa-ǯ'a/ə* and **laga*.

It is possible to compare CAbx **laga* 'to grind, mill' with CCirc **tħa-γaLag'ə*

'god of agriculture, harvesting', which originally very likely meant 'god of threshing', as indicated by folklore material. Cf. the Circassian legend "The threshing-floor of *tħaγaLag´* ", that says that the grain harvest is handed over by god into the hands of *tħaγaLag´* (Mizhaev 1973: 21). When Circassians were coming to the threshing-floor for the first time at the beginning of a new harvesting season, they pronounced a kind of prayer asking *tħaγaLag´* to thresh grain as much as possible (Mizhaev 1973: 27). The analysis of at least the first parts of the Circassian word is clear: **tħa-γa-Lagʼə*, with **tħa* 'god' and the causative prefix **γa-*. The rest, **Lagʼə*, whose semantics are in all probability 'to thresh' or 'to grind, mill' ('god causing to thresh/grind') can be compared with CAbx **laga* 'to grind, mill'.

It is possible that CWC **laga/ə* 'to grind' was also a compound. Cf. such CAbx items as **laħ°a* 'to thresh, pound, husk (grains)' (< **la-ħ°a*?, for **ħ°a* cf. **ž´-aħ°a* 'hammer of the smith') and **ləwə* 'mill-stone', 'hand-mill' (< **la-wə*, with **wə* 'to do, make' ?). In CCirc we find **śħa-Lə* 'mill' with the second element probably corresponding to *lə* in CAbx **lə-wə* 'mill' (the first part is **śħa* 'head' ? or related to **ħa-* in **ħa-ǯ´a/ə* ?), cf. also Sh (ShD 126) *wə-la-śă* 'to crush, pound' (*wə-* verbal prefix).

1.3.2. CWC **gʼ* > CCirc **gʼ* : Ub *gʼ* : CAbx **gʼ*

Examples:

(1) **-gʼə* CCirc **-gʼə*, Ub *-gʼa, gʼə*, CAbx **-gʼə* clitic 'and'

(2) **gʼala* CCirc **gʼaLa/ə* 'to slip, fall', CAbx **gʼala* 'to swing, reel, stagger; to gad about'; 'to idle, loaf'

(3) **gʼə/a* CCirc **pʰə-gʼa* 'to butt (as cow), stab' (**pʰə* < *pʰa* 'nose, front'), cf. also **gʼə-ħa* 'to weed with a hoe' (**ħə* 'around') and probably **ħa-gʼa-sa* 'the battle knife' (archaic; **sa* knife'; cf. Urusov 117), CAbx **cə-gʼə* 'to butt (as cow)' (**cə* 'tooth')

(4) **gʼa/ə* CCirc **gʼa/ə* 'to twist, spin (thread)', also probably CCirc **wə-gʼə* 'round dance with singing' (**wə-* verbal prefix), CAbx **gʼa/ə-ǯ´ə* 'to turn, return, go round, come back', 'circle, round'

(5) **gʼa/əgʼa* CCirc **na-gʼəgʼə/a* 'pupil of the eye' (**na* 'eye'), CAbx **gʼagʼa* 'circle, round'

(6) **gʼa/əgʼa* CCirc **λa-wə-gʼəgʼa* 'to fuss, bustle' (**λa* 'foot', **wə-* verbal prefix), Sh (ZS 146) *gʼərgʼa*, CAbx **gʼagʼa* 'to spin, turn, go round', 'to make sth quickly and skilfully'

(7) **blagʼa* Ub *bLāgʼa*, CAbx **bəlgʼa* 'to roll' (in Sa *blagʼa*)

Comments to the items in no.:

(2) The items given here can represent compounds, cf. Kab *z-jă-ǯă-dă* 'to hang about, loaf about' (*ǯă-dă* < CCirc **g'a-da*).

(3) An alternative correspondence to the one presented here can be: PWC **pəga* > CCirc **pʰəga/ə* 'to butt, gore', CAbx **bga* 'to fall in/on, crash down, collaps' (in Tap also 'to rush, dash, dart to somewhere'). Nikolayev and Starostin (NS 1018), who proposed this correspondence, see in the first part the preverb **pə-* 'front part', regarding the voiced *b-* in Proto-Abkhaz as a result of assimilation. Note that Bzyp Abkhaz preserves the non-assimilated form *a-p'ga-ra* (cf. BD 151) with unclear glottalisation. It is possible though that CAbx **bga* can evolve from **bə* *'down' and **ga* 'to take, bring, carry'.

(5) CCirc **g'əg'ə* can be compared with CAbx **g'ag'a* only on the assumption that its original meaning was 'circle, round'. If the original meaning was 'bright, smooth, polished' (CCirc **g'əg'ə/a*), then it should be added up to the correspondence (8) in 1.3.1.

(6) The items given here can be etymologically the same as those in (5), while both can be in fact reduplicated variants of (4). Cf. NS 597, where different West Caucasian roots are mixed.

(7) **blag'a* has an unclear internal structure. In principle *g'a* can be connected with (4). Another alternative is to regard the Ubykh word as borrowed from Abkhaz (which I proposed in Chirikba 1986a: 119-120).

1.3.3. CWC **g°* > CCirc **g°* : Ub *g°* : CAbx **g°*

Examples:

(1) **g°ə* CCirc **g°ə/a*, Ub *g°ə* 'to pound, husk', cf. also **g°ə* in CAbx **g°ə-ʒa* 'fine (of dry substances, as flour, sand)', 'soft, mild'

(2) **g°a* CCirc **g°a* 'to fill, stuff, cram', Ub *g°a-da* 'to dig in, bury, hide' (*-da* verbal suffix), CAbx **g°a* 'to push, shove'

(3) **g°ə* CCirc **-g°a/ə*, Ub *ag°ə*, CAbx **-g°ə* 'short, small'

(4) **g°a-* Ub *g°āγa* 'enclosure, yard', CAbx **g°a-ra* 'fence, (cattle-)yard', **g°-aš°ə* 'gate' (**aš°ə* 'door')

(5) **g°a* CCirc **g°a-* prev. 'beside, by', cf. also Kab *g°a-γ°* 'a pair (to sth/smb)', 'colleague', CAbx **g°a* 'closeby' in: Abx *aa-j-g°a* 'close; recent', Tap *a-r-g°a-nə* 'id.'

(6) **g°ərəmə* CCirc **g°ərəmə* 'to moan, groan; whine (of dog); to coo', CAbx **g°ərəmə* 'to grumble, mumble'; 'to moan, groan'; 'to moo, bellow (of animals)

(7) **g°ərə* CCirc **g°ər(ə)-γə* 'kingpin of cart', CAbx **g°ərə* 'needle'

(8) **g°ag°a* Ub *g°ag°a*, CAbx **g°ag°a* 'to toil along with uncertain step (as old man)'

(9) **g°ərə-g°ərə* CCirc **g°ər-g°ərg°* 'thunder, roar, flash of fire' (cf. Morf 258), Ub *g°ər-g°ərg°* 'the sound of the streaming water, wheel's rumble, thunder, etc.', CAbx **g°ərə-g°ərə* 'sound of noise, rumble, thunder, etc.'

(10) **g°əma* Ub *g°əma* 'cow', CAbx *g°əma* 'animal or human with some defect', cf. especially Abzh *a-ž° g°əma* 'cow with small udder'

(11) **g°əć°ə* Ub *g°əć°ə* 'pole, pillar', CAbx **g°əć°ə* 'tree-trunk'

Comments to the items in no.:

(1) Abx *g°ə-ʒa* can be analysed as **g°ə* 'to pound, grind', and the suffix of intensivity *-ʒa*, thus 'well pounded, well ground'. The translation in HV 778 of Ub *a-z-g°ə-n* 'je mouds très fin' is in fact closer to the meaning of Abx *g°əʒa*, than that of Dumézil's correction (DA III: 229): 'je frappe les grains (sans les piler) pour en faire tomber la balle'.

(2) Here belongs also Ub *g°ə* in *čə-g°ə* 'to crush, smash' (HV 388; DA III: 223).

(3) The West Caucasian material given here is singled out by Shagirov (cf. MS 86). Ub *ag°ə* functions mostly as an adjective, while in the sister-languages the related morpheme is used as a suffix. But cf. Ub *čəg°ə//cəg°ə//č'əg°ə* 'donkey', probably etymologically 'little horse' (the original form must be *čə-g°ə*), structurally parallel to Ash *ħ°ən-g°ə* 'rat' (cf. CAbx **ħ°ən-apə* 'mouse, rat'). Nikolayev and Starostin (NS 445) compare Ub *č'əg°ə* with CAbx **g°əž'ə* 'mule', reconstructing PWC **č'ək̄°ə ~ *k̄°əč'ə*, which presupposes methatesis in Ubykh and unexplained shift **č' > ž'* in Abkhaz, which is not convincing phonetically.

(4) Dumézil 1971: 143 doubts that the material given here is derived form **g°ə* 'heart' (see such etymology in Morf 176). Nikolayev and Starostin (NS 452) add here also Kab *g°ărăn* 'a place in yard', which is probably a different (cultural) term, found also in Avar (*goren* 'enclosure for cattle') and Ossetic (*goren* 'fence'). This cultural term can be perhaps somehow connected with Sem **gurn-* 'threshing floor' > Ugar *grn* 'threshing-floor; law court', Heb *gōren* 'threshing floor', Arab *ğurn-* 'threshing floor', (dial.) 'mortar' (GI 873).

(6) The items given here are onomatopoeic by nature.

(7) The correspondence presented here was established by Abdokov (cf. FL 46). Shagirov (ES I: 119) does not accept it and analyses the Circassian word as *k'ə* 'cart', with an irregular voicing in Adyghe, the instrumental *-rə-* and the stem of the verb *ʔə-γə* 'to hold' (with omission of *ʔə-*). I prefer Abdokov's opinion, though what concerns the meaning of *γə*, Shagirov is probably right. We should not see

'cart' in the first part of the Circassian word, cf. Kab *pśă-g°ərəγ* 'the first part of jugular vertebrae' (KR 312; *pśă* 'neck'), where there is no association with cart. Cf. also CCirc **pśa-g°ər-qə* 'vertebra of neck'/protuberance of thorax' (PC 59).

(10) The comparison given here is not quite plausible semantically. It can be assumed that the original meaning of Ubykh *g°əma* was not 'cow' in a general sense, but 'cow with some physical deficiency (e.g. small udder or, maybe, small horns)' (?).

(11) The correspondence of the Ubykh and Abkhaz items is not certain, as in Ubykh we can quite probably deal with the Abkhaz borrowing, see below, in 1.3.4., comment (a) to (2). If Abkhaz *a-g°əć°* 'head of abscess' is the same word, it surely contains **g°ə* 'heart, centre', which has as a correspondence Ub *ǵə*, not *g°ə*.

1.3.4. CWC **g°́* > CCirc **g°* : Ub *ǵ* : CAbx **g°*

Examples:

(1) **g°ə* CCirc **g°ə*, Ub *ǵə*, CAbx **g°ə* 'heart'

(2) **g°ə* CCirc **g°ə-*, Ub *ǵə-*, CAbx **g°ə-* preverb 'on, on the surface'

(3) **-g°a* CCirc **-g°a*, Ub *-ǵa* suffix of habitual actions; also used as an emphatic particle in imperative forms

(4) **-g°a/ə* CCirc **-g°a* adverbial suffix, Ub *-ǵə* (Charachidzé 1989: 405), *-ǵa* (DA III: 118; Kumaxov 1971: 167) gerundial suffix

(5) **g°əg°ə* Ub *ǵəǵə-* preverb in: *ǵəǵə-s* 'to stay, remain' (*sə* 'to sit'), *ǵəǵə-t°* 'to stay, sojourn' (*t°* 'to be, exist'), CAbx **g°əg°ə* 'to crowd, throng', 'den, lair', AT 19: 'to lie down (of swine)', cf. also as a preverb: SAbx *a-g°əg°-ta-ž́-ra* 'to leave smb/sth without attention' (*a-ta-ž́-ra* 'to put, throw inside'), *a-g°əg°-ta-ăa-ra* 'to become an orphan, to stay without attention or care' (*a-ta-ăa-ra* 'to stay, be stuck inside')

Comments to the items in no.:

(3) The Ubykh suffix and particle are regarded as one morpheme by Dumézil 1972: 45 (cf. also Kumaxov 1984: 265), though in HV 686, 687 they are divided into separate entries. CCirc **-g°a* had a variant **-wa*.

(5) There is an alternative possibility for comparing CAbx **g°əg°ə* with Ub *g°ag°a* 'to curl up, roll up, shrivel', which also matches the Abkhaz counterpart semantically and by its consonants, though the vocalism shows discrepancy. This makes me prefer the Ubykh item with the palatalised velar.

1.3.5. *Irregular correspondence:* CCirc **w* : Ub *ǵ* : CAbx **g°*

Example:

(1) **g°ǎš°ə* CCirc **waš^{h}ə*, Ub *g'aš°a* 'axe', CAbx **(aj-)g°aš°ə* 'small axe'

Comment:
Charachidzé 1990-91: 234 analyses Ub *g'aš°a* 'axe' as **g'a* 'axe' (cf. *g'a-(n)ć'a* 'handle (*(n)ć'a*) of axe (*g'a*)'), connecting the second part with *aš°a* 'scythe, sickle', derived from *š°a* 'to shave'. Such an analysis needs to be conformed with cognates in sister-languages. The initial **aj* in South Abkhaz form is probably a fossilised (verbal ?) prefix. Correspondence of *w* in one language to a velar or an uvular in the other(s) is found in some other cases as well, cf. Kab *g°arcă* vs. Malka Kab *warcă* 'dung' (cf. Ocherki 308),

1.3.6. CWC **k* > CCirc **k^{h}'*, **k̄'* : Ub *k'* : CAbx **k*

Examples:

(1) **kata* CCirc **k^{h}ǎt^{h}ə* 'sheep-shed', CAbx **kəta* 'village'

(2) **kə-ć°ə* CCirc **k^{h}ə-ć°ə* 'twigs, dry branch with leaves', Ub *k'əć°ə* 'prickle, bush', CAbx **kəć°ə* 'little thin dry stem, stalk', Abx *a-kəć°-məć°* 'dry stems; hairs'; cf. also CCirc **k^{h}ə-jə* 'wattle made of supple brances', Ub *k'a* 'granary (made of branches)'

(3) **kə/ac(')ə* CCirc **kə/ac'ə* 'kid, young goat', Sh (ShD 108) *k'əc-k'əc* 'call for goats', Kab (Morf 258) *k'ăcă-k'ăcă* 'id.', *k'ăc* interjection used to drive away goats, Ub *k'ac-k'ac* 'call for goats', CAbx **kac-kac// kəc-kəc* 'call for goats'

(4) **ka/əmə* CCirc **k^{h}amə* 'to be insufficient, lack', CAbx **kəmə-kəmə* 'to be greedy'

(5) **ka-* CCirc **k̄'apə* '(lower) side, side (of body, hill, etc.)', CAbx **kada* 'side(s)'

Comments to the items in no.:
(1) Similar words found in other languages (cf. Avesta *kata-* 'mud-hut', Pers *käd* 'house', cf. Abaev I: 590) can suggest that we are probably dealing with cultural migrational term.
(2) CCirc **k^{h}ə-ć°ə* is restored on the basis of the Shapsygh evidence only (ES II: 129), and the quality of the affricate (lax or tense ?) is not known. The first part is CCirc **k^{h}ə* 'brushwood, twig', while *-ć°ə* is not clear. For the latter cf. CAbx *ć°ə* in **k°ə-ć°ə* 'top of the tree' (*k°ə* 'top'), **q-ć°ə* 'hair' (**qa* 'head'). Shagirov (ES II: 129) assumes in Ubykh a loan from Circassian.
(5) Because of the unclear composition of both Circassian and Abkhaz words, the comparison is not very certain.

1.3.7. CWC *k´ > CCirc *k^h´ (, *$\bar{k}$´) : Ub *k´* : CAbx *k´*

Examples:

(1) *k´ala/ə* CCirc *k^h´a/əLə, CAbx *k´ala* 'hut'

(2) *ħak´a* Kab *ħăk´ă-ħăpsă-w* (adverb) 'in a hurry, hastily', 'being tired of hasty actions or movements', CAbx *ħak´a-psa/ək´a* 'to puff, pant' (Tap also 'hastily, harry-scurry')

(3) *k´a* CCirc *k^h´a* 'spleen', CAbx *k´a-msa* 'third stomach (of ruminant animals)' (SAbx, Tap), 'human stomach' (Ash)

Comment:

The Abkhaz word in (3) has also the variant *ka-msa*, i.e. with the plain velar. The second part of the word can be connected with *-msa* in *ʒ´ə-msa* 'eyebrow' (cf. Ub *bLa-msa* 'eyebrow', with *bLa* 'eye'), *ka-msa* 'shaggy'.

1.3.8. CWC *k° > CCirc *k^h°, $\bar{k}$° : Ub *k°* : CAbx *k°*

Examples:

(1) *k°ə* CCirc *k^h°ə 'to dare, venture to', Ub *k°a* 'to dare, risk', CAbx *k°ə* 'to swear, vow', 'vow, oath', *k°ə-k'ə* 'to aim at', 'to decide, plan, intend' (*k'ə* 'to take, hold')

(2) *k°ak°a* CCirc *k'a-k^h°ak^h°a* 'to be all shivering', Ub *k°ak°a* 'to be wrinkled, creased, to contract, shrink, shrivel up', CAbx *k°ak°a* in *qə-r-k°ak°a* 'to hang one's head', 'being depressed, downcast' (*qə < *qa* 'head', *r-* causative)

(3) *k°a/ə* Ub *k°ə*, CAbx *k°a* 'rain'; cf. also CCirc *k^h°ə in Kab *γ°ă-ź-k°ə-j// ħăž-k°ə-rə-j* 'whirlwind' (for *γ°ă* cf. CCirc *γ°a-zə* 'steam', *q^{w}ə-γ°a* 'smoke', cf. Urusov 96, 117)

(4) *k°ə* CCirc *k^h°ə 'centre, middle', CAbx *k°ə* 'top, roof'

(5) *k°a* CCirc *k°^{h}a in *č^{h}a-c^{h}ə-k^h°a* 'spool, bobbin' (text.), Abx *k°a* in *a-mar-k°a* 'shuttle' (?)

(6) *k°a* CCirc *k^h°a 'hip, thigh', Ub *č´ə-k°a* 'back' (anat.), 'the back side of shoulder-blade', CAbx *za-k°a* 'back (with shoulder-blades)'

(7) *k°a* CCirc *$\bar{q}$ə-rk^h°a* 'lump, clot' (Kab), CAbx *k°ak°a* 'lump(s) of thin dough'

(8) *k°a/ə* CCirc *k^h°ə-pλə* 'brick-red, orange' (*pλə* 'red'), CAbx *aj-k°a* 'dark (colour)'; cf. also CCirc *č^{h}a-k^h°a* '(unfiltered) wax', as opposed to *č^{h}a-x°ə* '(filtered) wax', with *x°ə* 'white', opposed to *k^h°a* 'dark' (?)

(9) *k°əśa//k°aśə* CCirc *$\bar{k}$°əśa* 'cradle', CAbx *k°aśə* in reduplicated form *k°aśə-k°aśə* 'to mince, go at a jog-trot'

(10) **k°ərə-k°ərə* CCirc **k̄°ərə/a-k̄°ərə/a*: Tem *k°ər-k°ər* 'call for turkeys', Sh *k°ərk°ər* 'turkey' (ShD 103), Kab *g°əră-g°əră* 'call for turkeys' (KR 39), CAbx **k°ərə-k°ərə* 'to neigh'

Comments to the items in no.:

(4) Shagirov (ES I: 214-215) regards CCirc **kʰ°ə* as a phonetic variant of **g°ə* 'heart', which I doubt very much. The voiceless *k°* in Tap *k°ta* 'centre, middle' can be a result of assimilation by *t* (cf. Abx *a-g°ta* 'id.').

(5) The analysis of the two first elements in **čʰ́a-cʰə-kʰ°a* is given by Urusov 84 as **čʰ́a* 'to carry, bring, take, lead', **cʰə* 'wool', while the element *kʰ°a* is admitted to be unclear. The comparison can be invalidated by the fact that the Abkhaz word can in fact be borrowed from Kartvelian languages, cf. Geo *mako* 'shuttle', Svan *margw* 'id.'. A similar word is attested in Ayssor (Neo-Arameic) as well: *mäkük* 'shuttle' (SMOMPK, XXII, otd. II, p. 182). But Abkhaz has another related term, *a-marśa* 'pivot of the shuttle'. Though Bgazhba (BD 203) assigns the latter to the Abzhywa dialect only, it is known to my Bzyp informant as well, who pronounces it with the middle spirant (*-ś-*). The last syllable thus could be **śa* 'to shave, cut' (?).

Thus we have two possibilities: Abx *a-mark°a* is borrowed from Kartvelian (also with unclear etymology), and thus cannot be compared with Circassian. The alternative possibility is that this word is genuine, and its similarity to Kartvelian is either fortuitous, or can be explained by its borrowing from Abkhaz.

(6) The first parts of Ub *čə-k°a* and CAbx **ʒa-k°a* are not clear. Cf. also CCirc **kʰ°ač'ə* 'lap (portion of body)'.

(7) The given comparison is not very reliable as the composition of the Circassian word is not clear.

(8) *aj* in CAbx **ajk°a* must be a prefix. In Circassian cf. also **ʒ°a-kʰ°ə* 'red-hot coals'.

(9) The original meaning of CCirc *k̄°əśa* is probably 'shaking, rocking'.

(10) Ub *k°ərk°ər* and Sa *a-k°ərk°ər* 'turkey' can be loans from Adyghe.

1.3.9. CWC **k°´* > CCirc **kʰ°* : Ub *k´* : CAbx **k°*

Example:

**k°´a* CCirc **kʰ°a(n)də* 'much, many', Ub *k´a* plural element in the verbs *q°a* 'to take, catch', pl. *q°a-k´a* (HV 1503), *-č´a-wə* 'to close', pl. *-č´a-k´a* (HV 1595), *-q°a* 'to close', pl. *-q°a-k´a* (HV 1606), and the plural prefix, replacing the prefix *wə-* in a number of verbs (cf. HV 797), CAbx **-k°a* nominal and (more rarely) verbal plural suffix

Comment:
The resonant *-n-* in CCirc **kʰ°a(n)də* is epenthetic; the second part of this likely compound (*-də*) is not quite clear. The instances of the plural prefix in Ubykh are: *wə-ć* 'to steal', pl. *kʼa-ć* (HV 203), *wə-ʒʼ* 'to bring', pl. *kʼa-ʒʼ* (HV 2085), etc.

1.3.10. CWC **kʼ* > CCirc **kʼʼ* : Ub *kʼʼ* : CAbx **kʼ*
Examples:
(1) **kʼa/ə* CCirc **kʼʼa* 'seed, stone (of fruit), egg', Ub *-kʼʼ* in *ać'ə-kʼʼ* 'stone (of fruit), grain, seed', *tʼa-kʼʼ* 'louse', *-kʼʼ* suffix denoting singleness, CAbx **jakʼa/ə* 'one', **-kʼə* suffix denoting singleness
(2) **kʼakʼa* CCirc **kʼʼa(n)kʼʼa* 'egg', CAbx **kʼakʼa-na* 'walnut' (Abx), 'nut' (Tap)
(3) **kʼakʼa* CCirc **kʼʼakʼʼa* 'to chirp', CAbx *kʼakʼa* 'to cackle'
(4) **kʼara//kʼərə* CCirc **kʼʼərə* 'thick, dense (of wool, beard, etc.)', 'long (of hair)', 'high (of grass)', CAbx **kʼakʼara* 'grove; thicket'
(5) **jakʼa* CCirc **jakʼʼa* 'crest; topknot, tuft of hair' (Ad), CAbx **jakʼa* 'cock's comb'
(6) **kʼa-* CCirc **kʼʼa-rə-* prev. 'on the surface of an object which is in a vertical position', CAbx **kʼa-* prev. 'on a flat (vertical or horizontal) surface'
(7) **bəkʼə* CCirc **pʼkʼʼə* 'to cut dough', 'to trample down, beat (a road)', 'to stamp leather', 'to sharpen (a sickle)', Ub *bakʼʼə* 'to press, squeeze, pinch', CAbx **bəkʼə* 'to pinch', 'to pinch the edge of patties, cookies while preparing them'
(8) **kʼarə-kʼarə* Ub *kʼarkʼar//kʼərkʼər* (Dumézil, Esenç 1973: 34), CAbx **kʼakʼarə* 'to cackle (as chicken)'
(9) **kʼə* CCirc **kʼʼə* 'handle, haft (of implement, axe, knife)', CAbx **kʼə* 'to catch, keep, grab, hold', **kʼə-ga* 'handle' (**-ga* instr. suffix)

Comments to the items in no.:
(2) The resonant *-n-* in CCirc **kʼʼa(n)kʼʼa* is epenthetic, cf. Sh *kʼʼakʼʼă* 'egg' (ShD 108). The opinion that CAbx **kʼakʼa-na* '(wal)nut' is borrowed from Geo *kʼakʼal-* 'id.' (cf. Schmidt 1950: 19; Genko 1955: 88; Djonua 1985: 24) seems doubtful phonetically (one has to suppose a shift **l* > *n(a)*, which is uncommon for Abkhaz, cf. Meg *sa-kʼakʼal-o* 'snack', *kʼakʼal-ua* 'to have a snack', borrowed into South Abkhaz as *a-kʼakʼal* 'snack, breakfast', *a-kʼakʼal-kʼ-ra* 'to have a snack, breakfast'), and by the fact that it has a good Circassian cognate. The Proto-Abkhaz form in NS 731 is **kʼakʼanə*, i.e. with the final *-ə*, but Genko 1955: 46 cites the Tapanta form with final *-a* (*a-kʼakʼana*), which, if it was not a mistake

or a misprint, proves that we should reconstruct final **-na*, which is a diminutive suffix in Abkhaz. Similar roots are widespread in related East Caucasian languages, but also in Kartvelian (cf. NS 730-731), as well as in dialects of Armenian, Kurdish and Greek.

(4) Kuipers (PC 51, 52) compares CCirc **k'ərə* with **k'ə/a* 'to come out, bud, grow', **k'əsa* 'to sprout, shoot (of plant)', which suggests the compounded character of CCirc **k'ərə* (< **k'ə/a-rə*). The same might apply for Abkhaz as well. It is not clear whether the Abkhaz emphatic suffix *-k'ak'ara* (for instance, in colour-terms) also belongs here. Cf. also CCirc **-k'a-jə* 'very'.

(5) The reconstruction of CCirc **k''* is conditional, as I failed to find the Kabardian or Shapsygh cognate to Temirgoj *jač'ă*.

(6) Urusov 216 analyses the Circassian preverb as consisting of **k'a* 'tail, end' and interfix *-rə-*, which cannot be considered plausible. In Adyghe the preverb is met also in the form *č'ă-λə-rə-* (Urusov, ibid.).

(7) Kuipers (PC 53) unites CCirc **p'k'ə* with **p'k'ə/a* 'to fly off, to jump', which I wouldn't do on semantic grounds.

(8) The Ubykh item is a rare example of a non-palatalised *k'*. The word is clearly onomatopoeic by origin (like (3)).

(9) Nikolayev and Starostin (NS 728) compare the CCirc **k'ə* with Ub *k"ə* 'handle', which I find phonetically implausible.

1.3.11. CWC **k''* > CCirc **k''* : Ub *k''* : CAbx **k''*

Examples:

(1) **k'anə* CCirc **k'anə* 'nucklebone (used in bone game)', Ub *k'ana* 'spindle', SAbx *a-k'an* 'big funeral candle with hanging sweets', 'high pole without twigs'

(2) **-k'a/ə* CCirc **mask'a* 'spark', cf. also Ad *-sk'ă* 'lump, chip, splinter' (PC 54), Kab *x̌°/q°a-sč'ă* 'spark', *La-sk'ă* 'splinter' (Urusov 112), Ub *ya-śk'ə* 'red-hot cinder', Abx *a-mac'k'ar* 'splinter'

(3) **(č)k'amp'əla* Kab *šk'amp'əl* 'cork' (Urusov 120), Ub *k'amp'əla* 'acorn', Ash, Ahch *k'amp'əl* 'small felt ball'

(4) **k'ač'ə* CCirc **k'ač'ə*, CAbx **k'ač'ə* 'short'; 'a kind of jacket, blouse'

(5) **k'əjə* CCirc **k'əjə* 'to shriek, howl', CAbx **k'əjə* 'to miaw', 'to caw (of some birds, e.g. raven)'

(6) **k'a* CCirc **k'a* 'tail, back, end (of space, time)', CAbx **k'a/ə* 'end, margin'

(7) **k'a/ə* CCirc **k'ə* 'to come/go out of sth' (only with local prefixes)' (PC 51), CAbx **k'a-č°ə* 'jutting out, sticking up, protruding', **k'a-ĥ°ə*

'sticking up', 'standing apart, alone', cf. also CAbx **k'ʼa-k'ʼa* 'erect, upright', 'to stand on toes (as of dance)', 'top' (?)

(8) **k'ʼarda* Ub *k'ʼārda* 'little stick for hitting ball in the game', CAbx > LAbx *a-k'ʼarda* 'comma (in writing)'; Sa *a-k'ʼarda* has the same meaning as Ubykh

(9) **k'ʼərə(-k'ʼərə)* Ub *k'ʼər//k'ʼər-k'ʼər* (Dumézil 1977: 22), CAbx **k'ʼərə-k'ʼərə* 'to neigh (as horse)'

(11) **k'ʼat'ʼ/da* Ub *k'ʼāda* 'to tremble, rock, shake, swing', CAbx **k'ʼat'ʼa-k'ʼat'ʼa* 'to rock, swing (of a thin top of sth, e.g. of tree), cf. also CAbx **k'ʼant'ʼ/da* 'to swing, rock, bend', Tap *k'ʼant'ʼa* 'elastic, resilient'

(12) **k'ʼə* CCirc **γ°ə-k'ʼa* 'blacksmith' (**γ°ə* 'metal'), **k'ʼə-šʰʼə* 'smithy' (**-šʰʼə* place of'), Ub *k'ʼə* 'to forge', *k'ʼə-ś* 'smithy'

(13) **k'ʼə-ʕə* CCirc **k'ʼə(r)γə* 'to squeak, creak', CAbx **k'ʼəɦə* 'infant's cry, peep', 'to peep (of infants)'

Comments to the items in no.:

(2) Ub *māsk'ʼa* is likely to be borrowed from CCirc **mask'ʼa*, as it was suggested by T. Esenç (cf. HV 1059). In Ubykh there is another word which could in principle be compared with the Circassian and Abkhaz data given in (2): *šk'ʼə* 'steel (used for kindling fire)' (HV 1147), but the second consonant is probably to be analysed as *k'ʼə* 'to forge'.

(4) Shagirov (ES II: 134) regards Abx **k'ʼač'ʼə* as a Circassian loan, but in this case, as Starostin rightly pointed out, we would have expected a palatalised affricate in Abkhaz as well (NS 729). On the other hand, I agree with Shagirov (pace NS 729) that the adjective 'short' and the name of clothes is etymologically one and the same item: **k'ʼa* 'end, margin, tip', **č'ʼa* (> CCirc **č'ʼa*) 'to cut', i.e. 'with cut end', cf. typologically the etymology of Russian куртка 'short coat for men' < Polish *kurt-ka*, from Latin *curtus* 'short', and *-ka* Polish diminutive suffix (Tsyganenko 1970: 231).

(6) CAbx **k'ʼa/ə* is singled out from the following material: Tap *na-c'ʼə-k'ʼa(-ra)* 'until' (*na* 'thither', *c'ʼə* 'to pass of time'), *aǩ'-k'ʼa-la* 'toward (a nonhuman object) (*aǩ'-* 'there'), **k'ʼa-ɦ°ə* 'crooked, bent' (**ɦ°ə* 'to turn', i.e. 'the turned end, tip'), Bz *k'ʼa-m(a)ś°aś°a* 'tip, end (of the fat tail of the sheep, of hen's tail'), *a-k'ʼə-pś* 'very thin (of flat things)', 'sharp (of tip, end)', Abx *a-k'ʼə-pš'* 'edge', 'the outer side of the corner' (**pšʼə* 'side'), **k'ʼə-śə* 'to touch' ('to beat (**śə*) the end, tip'), **k'ʼa-cə* 'to touch', Abzh *a-k'ʼənca* 'corner', etc. Cf. also CCirc **c̄a-k'ʼa* 'edge, end', CAbx **ʒ°a-k'ʼə-śa* 'rib (anat.)' (**ʒ°a* 'rib; side', **śa* 'small').

(7) The alternative Circassian cognate could also be **k'ʼə/a* 'to come out, bud,

grow', **k'ə-sa* 'to sprout, shoot (of plants)' (PC 51).
(8) Here one cannot exclude the possibility of internal borrowings.
(9) The Ubykh word can be in fact borrowed from Abkhaz.
(11) Dumézil 1959: 21 analyses Ub *k'ādа* as *k'a* 'to go' and the verbal suffix *-da*, which, given the Abkhaz cognates, might not be correct.
(13) CWC **k'ə-ʃə* is a compound with **ʃə* 'to yell, bellow' (cf. also CWC **q°a/ə-ʃə* 'to howl (as dog)', 'to yell, bellow'). It is possible that the first part of it is the same as in **k'əjə* in (5).

1.3.12. CWC **k"* > CCirc **k"* : Ub *k"* : CAbx **k"*
Examples:
(1) **k"ərə* CCirc **k"ərə//k"ara* 'to fall', Ub *k"ərə* 'to slip, slide', CAbx **k"ərə* 'to roll (of small objects), slide, crawl'
(2) **(t')k"a-* CCirc **t'k"a/ə* 'to melt, thaw, drip', Ub *k"ak"a* 'to drip (of water)' (DA III: 157), CAbx **k"ək"a* 'to trickle down, drop'
(3) **k"ə* *'small, little': CCirc **c'ə-k"ə* 'small', **t'a-k"ə* 'few, (a) little', Ub *ak"ə* 'short, of small stature' (DA III: 217; HV 105), CAbx **č'-k"ə-na* 'boy, youth', 'young, small, little'
(4) **k"ə* Ub *za-k"a* 'straight, direct, right, correct' (*za-* reciprocal prefix), Abx *j-ak"ə-m* 'improper, wrong, shameful' (*j(ə)* 'it', *m* 'not')
*(5) *k"ə* Ub *ak"ə* 'bush, shrub', SAbx *k"ə* in *a-k"əmə/arγ'aγ'* 'haw-thorn, Crataegus microphylla', *a-k"əma(r)k'at'əl* 'greenbrier, Smilax excelsa', Bz *a-k"ərmaxˇc* '(long) switch, dry branch', SAbx *a-k"ək"əmdər* 'bush(es)', cf. also *k"ə* in CCirc **ħam(š)k"ə(n)t'ə* 'haw-thorn berries' (Urusov 116), *k"a* in Kuban Kab *k"a-ndă* 'thicket' (vs. Ad *k°a-(n)dă*; for the second part cf. Ad *śħa-nda* 'thicket', with *śħa* 'head', cf. Ocherki 237)
(6) **(s)k"a(-k"ə)* CCirc **p'a-sk"ə/a* 'to pinch', Ub *k"ak"ə* 'to pluck (as chicken)', 'to card (as wool)', 'to pull out' (Charachidzé, Esenç 1992-93: 20-21), CAbx **k"ə-k"ə* 'to scutch, swingle, comb, card (wool)', 'to tear to pieces'
(7) **č(')k"a* CCirc **č'k"a/ə* 'to squeeze, crush', **wə-p'ə-č'k"ə* 'to crush, crumple, rumple', CAbx **čˇk"a-čˇk"ə* 'to hew, trim'
(8) **k"əb/mə-* Ub *k"əməj*, CAbx **k"əbrə* (< **k"əbərə* ?) 'mosquito'
(9) **k"a* Ub *k"ak"* 'back, small of the back', *ša-k"(a)* 'the upper part' (*ša* 'head'), CAbx **k"a-c°ə* 'jut, prominence, sth erect, top'; cf. also *k"a* in Kab *txə-nc'a-k"a* 'cross-beam in the upper part of the roof of the house' (the first part is *txə-c'a* 'back (anat.)', 'top, mountain chain,

roof of the house', with the epenthetic *-n-*)

(10) **Ła-kʷəma* CCirc **tħa-kʷəma*, Ub *La-kʷəma* 'ear'

(11) **kʷaHa* CCirc **kʷa/əħə* 'to mix up, connect with sth' (used with preverbs), CAbx **kʷa/əħa* 'to knead, puddle (as dough, clay, mud)', 'to trample, stamp'

(12) **kʷada* CCirc **kʷadə/a* 'to disappear, get lost, spoiled, perish', CAbx **kʷada* 'weak', 'not tight'; cf. also Ub *kʷə* 'to kill' (?)

(13) **kʷa* CCirc **kʷa-c'ə* 'innards, inside, interior', CAbx **kʷa* '(in) bosom', cf. perhaps also **kʷa* in Ub *kʷa-x̌ə* 'enclosure' (*x̌ə* 'round') and in CAbx **kʷaćə* 'meat'

Comments to the items in no.:

(1) CCirc **kʷərə//kʷara* is usually used with preverbs and suffixes, cf. Kab *wə-kʷərə-jə*, Ad *wə-kʷără-jə* 'to fall'.

(2) The Abkhaz and Ubykh forms are reduplicated.

(3) For the final *ə* in Ub *akʷə* see Ub *za-cʲəj-akʷə-šʲ* 'little hut' (*za* one', *cʲəja* 'house', *-šʲ* diminutive suffix, cf. HV 105). The first element in CAbx **čʼ'-kʷə-na* also means 'little', while *-na* is a diminutive suffix.

(4) Though *akʷə* in Abx *j-akʷə-m* formally coincides with the verb **akʷə* 'to be', the possibility of the semantic derivation from the latter is not likely. Furthermore, the negative form of the verb *akʷə* 'to be' has the stress on the first, not on the last syllable, cf. *j-ák ʷə-m* 'it is not him/it' vs. *j-akʷə́-m* 'it is improper', 'it is shameful, wrong'. The comparison can be tentatively added by CCirc **ja-kʷə* 'fitting, proper', neg. **ja-mə-kʷə* 'wrong, shameful' (*ja-* objective prefix, *mə* 'not'), which can be derived from the verb **kʷə* 'to go over sth' (with the indirect object prefix **ja-*), as was suggested by Kuipers (PC 60), who gives as a parallel English '(un)becoming'; cf. also Abx **na-ħa-la* 'to become, fit', lit. 'thither-hither-go'. If so, the Abkhaz root in (4) cannot be connected with Ubykh, as the regular Ubykh cognate to CCirc **kʷə/a* 'to go' is Ub *kʼ'a* 'id.'.

(5) The comparison is not very convincing, given the lack of a reliable etymology for both Abkhaz and Circassian words. For the second part of SAbx *a-kʷək ʷə-mdər* cf. CAbx **ćʼə́ćʼə-ndəra* 'strawberry' and probably also Bz *a-žʲə-mdər* 'fatty tumour' (*žʲə* 'flesh').

(6) For CCirc **pʼa-* cf. also **wə-pʼa-qʷə* 'to pluck (a bird)'. The initial *s-* in Circassian is not clear. The Abkhaz form is reduplicated.

(7) Cf. also CAbx **kʷa* 'to rough-hew (of mill-stone)', 'to sharpen, whet (a scythe), Tap *cʼ'kʷa* 'id.', CAbx **kʷa//*kʷa-kʷa* 'to make light, friable (the earth)'.

(9) Cf. also CAbx **kʷakʼ'ə* 'corner'. Phonetically a less probable alternative

comparison to Ub *k"ak"* 'back, small of the back' could be CAbx **q"aq"a* 'back (anat.)', 'pelvis, hip-bone', 'sacrum (of the back)'.
(12) Abdokov (FL 16, 45) analyses CAbx **k"ada* as **k"a*, related to the first part of Ad *k"a-č'ă*, Kab *g°a-ś'ă* 'force, effort, labour', and privative suffix *-da*, but I find this explanation less probable. The Circassian word can have the meaning 'to perish', cf. CCirc **q'a-č'a-k"ada* 'to spend involuntarily', 'to kill accidentally' (**q'a-č'a-* prev. 'accidentally', cf. Urusov 223), which can suggest its connection with Ub *k"a* 'to kill' and thus its compound character (which can be true for its Abkhaz counterpart as well).
(13) Kumaxov (Morf 177), who proposed this correspondence, analyses the final *-c'a* in Circassian as 'bottom'. Shagirov (ES I: 217) does not find such an analysis convincing, arguing that 'bottom' in Common Circassian is **č'a*, not **c'ə*. This latter morpheme is contained, according to Shagirov (ES I: 216), also in CCirc **kʰ°ə-c'ə* 'brain' (**kʰ°ə* 'middle'). Nikolayev and Starostin (NS 735) compare CCirc **k"ac'ə* with PAbx **k"aćə* 'meat', reconstructing PWC **k"ać'ə*. Finally, Kuipers 1987: 92 connects *-ćə* in CAbx **k"aćə* with *ć* in Bz *a-x̌°a-m-ć* 'trunk, body' and compares it with *p'c'a* in CCirc **Lə-p'c'a* 'flesh' (**Lə* 'flesh, meat'). I analyse CAbx **q°a-mćə* differently, singling out **mćə*, found also in CAbx **təʒa-mćə* 'the wall (of the house)' (**təʒə/a* 'house').

An alternative Abkhaz correspondence to CCirc **k"ac'ə* in (13) might be CAbx **wac'a* 'insides (of the body)', 'inside (the village, etc)'. But **wac'a* can in fact be a compound, cf. probably related to it Ub *c'a* in *γa-c'a* 'insides, innards', '(in)side' (*γa-* 3d p.sg. possessive prefix), **c'a* in CCirc **txə-c'a* 'backbone, spine' (**txə* 'id.'), **c'ə* in CCirc **kʰ°ə-c'ə* 'brain'.

1.3.13. CWC **k"'* > CCirc **k"* : Ub *k''* : CAbx **k"*
Examples:
(1) **k"'a* CCirc **k"a/ə* 'to go, cover a distance', Ub *k'a* 'to go', cf. also **k"a* in CAbx **k"a-ša* 'to dance' (for the second element cf. **ša* 'to wind, twine')
(2) **mark"'a* CCirc **mark"a*: Ad *mark"ă* 'mulberry, blackberry' (Tem), 'wild strawberry' (Sh), Kab *mărak"ă* 'berries' (generic), *mărak"a-p'c'ă* 'blackberry' (*-p'c'ă* 'black'), *mărak"ă-ʔărəsă* 'garden strawberries' (*ʔă-rə-să* 'planted with hand', i.e. 'cultivated'), Ub *mək'a-* 'berry' in: *mək'ă-d(ə)γ°a* 'strawberry', or 'mulberry', or 'a species of buckthorn' (HV 1087), *mək'a-p'ć'a* (HV 1088)//*mə(r)k'a-p'ć'a* (DA III: 234) 'blackberries', CAbx **mark"ə-* 'kind of berries or fruit': Bz *mərg°ə-źə* 'fat, plump (of man)', 'with big fruit (of cultivated kinds of fruit-

trees)', Sa *a-mark*ʷ*ə-sa* 'mulberry' (*-sa* < **śa* 'small, little')

Comments to the items in no.:

(1) For the type of composition in CAbx *k*ʷ*a-ša* cf. CCirc **k*ʷ*a-t*ʰ*a* 'to move (forward)' with **k*ʷ*a* 'to go' in preposition. Shagirov (MS 104) compares CCirc **k*ʷ*a* with CAbx **q*ʷ*a* in **nə-q*ʷ*a* 'to walk', 'walk, trip', which is less probable phonetically.

(2) Cf. also CCirc **mat'k*ʷ*a* 'berry', absent in PC. CCirc **mat'k*ʷ*a* and **mark*ʷ*a* can be phonetic variants of one and the same root. Shagirov (ES I: 266) regards Ub *mək'a-* as a loan from CCirc **mark*ʷ*a*. Though the element *-p'ć'a* in Ub *mə(r)k'a-p'ć'a* is certainly borrowed from Circassian *-p'c'a* (< *ś*ʷ*əc'a*) 'black' (cf. Kab *mărak*ʷ*a-p'c'ă* 'blackberry') and the variant with *(r)* can in principle be influenced by Circassians forms, the phonetic differences (Ub *ə* vs. Circ *a*, Ub *k'* vs. Circ *k*ʷ) make this assertion not quite plausible. The second element in Ub *mək'ā-d(ə)γ°a* can be analysed as *də-γ°a* 'whose yellow' (with the relative-possessive prefix *də-* 'whose'), i.e. 'the (mul/straw)berry which is yellow'. Cf. also Ub *mat'aśa* 'mulberry'.

In NS 804-805 CCirc **mark*ʷ*a* and Ub *mə(r)k'a-*, together with Abaza *marak*ʷ*a* 'mulberry', Balkar *marako* 'strawberry' and Ossetic *murk'ä* 'snowball tree', are considered to be loans from Nakh **mor* 'snowball tree', with the Nakh suffix *-ik'*. From the above-mentioned forms at least Abaza and Balkar are certainly borrowed directly from Kabardian. As to the Nakh origin of the Circassian and Ubykh forms in question, this seems rather improbable: phonetically Nakh *-ik'* cannot be a source of Circassian *-k*ʷ*a*. Besides, are there any other Nakh borrowings found in West Caucasian languages? Cf. also ES I: 266; Balkarov 1965: 21; Abaev 1949: 289.

1.4. THE CWC UVULAR STOPS

Voiced uvular stops were not preserved in any of the contemporary languages, but the sound correspondences indicate their presence in Common West Caucasian.

1.4.1. **G* > CCirc **q̄* : Ub *q'*, *ʁ'* : CAbx **ħ*

Examples:

(1) **Ga-* CCirc **q̄a-*, CAbx **ħa-* preverb 'hither'

(2) **waGə(jə)* Kab *waq'əj* interjection for driving away calf or cow (< **waq̄əjə*), Ub *wa(n)q'ə* 'goat'

(3) **Ga* CCirc **c̄a-q̄a* (**c̄a* 'tooth'), Ub *ʁ'ə*, CAbx **c-ħa* 'to bite' (**cə* 'tooth')

Comments to the items in no.:

(1) Shakryl 1961: 134 and Kumaxov (Morf 190) connect CCirc **q̄a-* with the Abkhaz local-directional suffix *-q'a*, while the comparison given here is found also in FL 30 and ES I: 222.

(2) The comparison was proposed by Shagirov (MS 74), but the difference in the meaning between the Kabardian and Ubykh words makes it not quite reliable. Ub *wa(n)q'ə* has its parallels in East Caucasian, cf. Tsax *wąq'ą* (TF 257; SS 25; in NS 1949 *woq'a*), Archi *baq'ari*, Tab *jaq*, Agul *uq'ar*, Xin *wuq'ar*, Bud, Kryz *wiq'er*, Darg *muq'ara* 'young ram, lamb' (TF 257; NS 1049-1050).

(3) The original Abkhaz form must have been **cə-ĥa* > **c-ĥa* > **cĥa*, with **ĥ* assimilating to **c*.

1.4.2. ? **G'* > CCirc **q̄* : Ub ? : CAbx **γ'*

Example:

(1) **-G'a* CCirc **-q̄a* affirmative suffix, CAbx **ć‿a-γ'a* affirmative suffix meaning 'precisely, exactly'

Comment:

The reconstruction of CWC **G'*, though structurally motivated, is not based on a reliable material and thus remains tentative.

1.4.3. **G°* > CCirc **q‿*, **q̄°*, **qʰ°* : Ub *q‿* : CAbx **ĥ°*

Examples:

(1) **dG°ə* CCirc **t'q‿ə*, Ub *t'q‿a*, CAbx **ĥ°ə* 'two'

(2) **G°ə* CCirc **q̄a-q‿ə* 'to resound, be heared, spread (of rumour)' (**q̄a-* 'hither'), CAbx **ĥa-ĥ°ə* 'to resound, be heared' (**ĥa-* 'hither'), CCirc **da-q‿a* 'to listen, obey', Ub *La-q‿ə*, CAbx **ʒə-r-ĥ°ə* 'to listen'

(3) **-aG°a* CCirc **ħaqʰ°a* 'water-trough for cattle' (Ad), 'trough' (Kab), CAbx **jaħ°a//*jaĥ°ə* 'trough'

(4) **t'əG°a* CCirc **tq̄°a* 'crocodile' (> Tap *t'q‿a* 'id.'), CAbx **t'əĥ°a* 'monster eating moon or sun (during the eclipse)'

(5) **bəG°ə* CCirc **p̄q̄ə* 'carcass, skeleton', CAbx **ba/əĥ°ə* 'bone'

Comments to the items in no.:

(1) The initial **t'-* in Circassian and Ubykh is supposed to be a fossilized prefix (cf. MS 51).

(2) Though there are attempts to connect the first elements in the verb 'to listen' (i.e. **da-*, *La-* and **ʒə-*) in all three languages as well, I believe that they

represent etymologically heterogeneous material (pace ES I: 150): CCirc **da-* is connected with **da* in CCirc **da-g˚a* 'short-eared', **da-g˚ə* 'deaf', Ub *La* is the same element as in *La-kʷəma* 'ear' (CAbx **lə-mħa* 'ear'), **ʒə* is CAbx **ʒə* 'news, sth heared'. Shagirov (ES I: 150) is quite right in analysing *-r-* in Abkhaz as the causative affix (pace Starostin in NS 756; cf. also FL 26), the literal meaning of the Abkhaz form being 'to cause (*-r-*) news (*ʒə*) be heared (*ĥ˚ə*)'.
(3) The difference in the first consonant of the Circassian and Abkhaz items does not allow us to restore with certainty the anlaut consonant in Common West Caucasian.
(4) As the Ubykh counterpart to the Circassian and Abkhaz items is not known, the CWC reconstruction could as well be **t'əG˚'a*.
(5) In the Circassian item delabialisation of the uvular is supposed to have taken place. It is possible that **q̄˚ə* in CCirc **q̄˚ə-pśħa* 'bone' (**śħa* 'head, top') preserves the original labalisation (with the loss of the initial bilabial).

1.4.4. **G˚'* > CCirc **qʷ* : Ub *q'* : CAbx **ĥ˚*
Example:
G˚ə/a* CCirc **-qʷə* in **č'ə-qʷə* 'button, fastening', Ub *q'ə* 'to fasten', CAbx **qa-ĥ˚a* 'to close, shut up', 'lid, cover' (qa* 'head', 'top')

Comment:
The reconstruction of **G˚'* is rather tentative, as it is based on one example only. The first segment in CCirc **č'ə-qʷə* is not clear. Non-ejective *č'* in Tem *č'əʔ˚ə* is due to dissimilation, cf. Bzh *č'əʔ˚ə*, Kab *ś'əʔ˚ə* (PC 36).

1.4.5. CWC **q* > CCirc **qʰ*, **q̄* : Ub *q* : CAbx **q*
Examples:
(1) **qa* CCirc **qʰa*, Ub *qa* 'grave'
(2) **qa* CCirc **qʰa-(m)p'a* 'dandruff', Kab also 'husk of grain', Ub **qa* 'little pimples', 'chaps'
(3) **(a)taqa* CCirc **aīaq̄a*, Ub *taqa* 'cock, rooster'
(4) **qə* CCirc **q̄ə* 'to be benumbed, dumbfounded, speechless', 'to harden', Ub *qə* 'to congeal, harden, be benumbed'
(5) **t˚əqə* CCirc **pśa-t̄əq̄ə* 'back part of the neck, occiput' (**pśa* 'neck'), Ub *t˚əq* 'neck', *λa-t˚əq* 'ankle' (*λa* 'foot'), *q'a-t˚əq* 'wrist' (*q'a* 'hand')
(6) **aqa* Ub *ʒ˚aqa* 'late (time)', CAbx **aqa* 'night'
(7) **qa/ə* CCirc **wə-q̄ə* 'to open wide, distend' (**wə-* verbal prefix), CAbx **qa* 'to pull'

Comments to the items in no.:
(2) The comparison is tentative because of the uncertain meaning of Ub **qa*, extracted from *ša-qa* 'bald' (*ša* 'head'), cf. DA III: 243; the comparison with Circassian see in MS 130 and ZS 135.
(3) Ub *taqa* can represent as well an Adyghe loan.
(6) The initial consonant in Ub *ẑ°aqa* is most likely *ẑ°ə* 'old' (cf. Dumézil 1959: 25). There is another *qa* in Ubykh, which seems rather enigmatic: *ẑ°ə-qa* 'old age', with *ẑ°ə* 'old' in preposition. In principle, it can be the same morpheme as in *ẑ°aqa* 'late (time)', but if the first element in the latter word is from *ẑ°ə* 'old', then we shall have to distinguish between *aqa* in *ẑ°-aqa* and *qa* in *ẑ°ə-qa*. Such a solution seems plausible, as Ub *ẑ°ə-qa* has a direct parallel in CAbx **aẑ°ə-m+ta-qa* 'one's old age', from **aẑ°ə-m+ta* 'period of one's old age' (**aẑ°ə* 'old', suffix *-m+ta* 'result of'), and *-qa*. It is only natural to connect the element *-qa* with the analogous *qa* in Ub *ẑ°ə-qa* as cognates. In Common Abkhaz **qa* is met in another designation of time, namely **q°ə-la-pə-č-qa-nə* 'in the evening' (**q°ə-la-pə* 'evening', *-č-qa* 'at the head', *-nə* 'at the time of'). The problem is, however, that the element *qa* is quite likely to be CAbx **qa* 'head', while 'head' in Ubykh is *ša*. One might argue that in this case we would have had in South Abkhaz regularly *x̌ə*, not *x̌a*, cf. SAbx *a-x̌ə* 'head' vs. Sa *a-x̌a*, Ash, Tap *qa*. But in certain cases we have *x̌a* in South Abkhaz as well. In the names of time and periods (**aẑ°ə-m-ta-qa*, **q°ə-la-pə-č-qa-n*) *qa* could be fossilised (cf. Bzyp *aẑ°ənt̆x̌a*, *x̌°əmčx̌an*) and its original meaning 'head' > 'beginning' could have been forgotten, which could save the final vowel *-a* from being (regularly) reduced to *ə*. The other argument which supports the etymology of *qa* as **qa* 'head' is structurally parallel Circassian words, where the word *śħa* 'head' is also used to denote temporal semantics ('the time of'), cf. Kab *źə-śħă* 'in one's old age' (*źə* 'old', *śħă* 'head)', *pśəħăśħă*, Ad *pčʼəhaśħ* 'evening' < CCirc **pčʰʼə-ħa-śħa*, with **pčʰʼə-ħa* 'evening' (see its analysis in ES II: 26-27; Morf 236) and **śħa* 'head'. All these considerations can lead, as far as Ubykh is concerned, to different solutions: (a) Ub *qa* is preservation of the old name for 'head', akin to CAbx **qa* (and the same could be suggested for *-ħa* in CCirc **pčʰʼə-ħa* 'evening'), or (b) Ub *-qa* in at least *ẑ°ə-qa* 'old age' is borrowed from Common Abkhaz. The third solution could be to suppose that both Ub *-qa* and Abx *-qa* are cognates denoting time and not connected with CAbx **qa* 'head'. Yet another possibility is to compare CAbx **aqa* 'night' with the first part of Ub *t̆x̌a-La* 'yesterday' (*La* 'to pass (of time)').

1.4.5.1. CWC cluster **tq* > CCirc **t̆x̌* : Ub *t̆x̌* : CAbx *q*
Examples:

(1) **tqa* CCirc **tx̌a* 'to prosper, live in abundance', 'to eat much and tasty', CAbx **qa-ħa* 'sweet, delicious, tasty' (**-ħa* suffix)
(2) **tqə* CCirc **k'a-(n)tx̌ə* 'remains, sediment on bottom', CAbx **qə* 'wine sediment'
(3) **tqamə* Ub *tx̌amə*, CAbx **qamə* 'fur-coat'

Comments to the items in no.:
(1) The alternative Abkhaz correspondence to the Circassian item is **qa* in Bz *a-ź-x̌a-ra* 'enough' (*a-źə* 'for'), cf. Ad *ə-ya-tx̌ă-w* 'completely, in full, to one's heart's content' (*ya-* causative). Or is it one and the same morpheme? Without suffix the CAbx **qa-ħa* 'sweet, tasty' is met in **cə-qa* 'white turnip', lit. 'sweet radish' (**cə* 'radish' < 'root'), as opposed to **cə-ca* 'radish', lit. 'bitter (**ca*) radish'. If this analysis of CAbx **cə-qa* is right, then Nikolayev and Starostin's (NS 913) explanation of CAbx **qa-ħa* as dissimilated form from PAbx **q'aq'V* will not hold (note an obvious misprint in NS: **q'aq'V* > **q'aq'V*, instead of > **q'aħV*).
(2) The first part of the Circassian item is probably **k'a* 'end, back', while *-n-* is epenthetic.

1.4.6. CWC **q´* > CCirc ? : Ub *q´* : CAbx **x̌´*, **q*
Examples:
(1) **q´a* Ub *q´a* 'horn', 'ant's antenna', Abx (Abzh) *x̌´a* in *a-cʲ-x̌´a* 'horn for wine' (*a-cʲ* 'ox')
(2) **q´a* Ub *-q´a* 'tip', 'little part' in *pć'a-pa-q´a* 'tip of leaf', *pć'a-wa-q´a* 'id.' (HV 1365, 1366; *pć'a-pa*, *pć'a-wa* 'leaf'), *qʷə-q´a* 'a hair' (HV 1553; *qʷə* 'hair'), CAbx circumfix **ćə—x̌´a* 'the remnant of' (**ćə* 'with') in Tap *cə-fa-x̌´a* 'leftovers of food' (*fa* 'food'), *čʲčʲa-x̌´a* 'shavings, chips' (< *c-čʲa-x̌´a*; *čʲa* 'to plane, shave'), *cə-čʲa-x̌´a* 'cigarette-end, cigarette-butt' (*čʲa* 'to smoke' < 'to suck'), etc., suffix *-x̌´a* in Common Abkhaz **tʷa-x̌´a* 'spinster' (**tʷa* 'to sit')
(3) **məq´a* Ub *mə/aq´a* 'bosom', CAbx **maqa* 'joint of arm', 'thigh, haunch', 'arm', 'shoulder with forearm', 'wing', cf. also LAbx *a-kʷadər maxa* 'pommel of the saddle' (*a-kʷadər* 'saddle')

Comments to the items in no.:
(1) Cf. also Abx *x̌´* in *a-patx̌´* 'horn for wine', the first part of which is not clear. For Ubykh cf. also *čʲəwana-q´a* 'handle of cauldron' (*čʲəwana* 'cauldron'). CWC **q´a* 'horn' has good Daghestanian correspondences, which proves its antiquity in West Caucasian, cf. Lak *q'i* (KK I: 45) or *qi* (NS 903), Darg (Chirag) *qe*,

(Sirgokala) *qi* 'horn' (NS 903). The Ubykh word is usually compared with CCirc *q̄°a* in **bźa-q̄°a* 'horn', CAbx *ĥ°a* in **t'°əĥ°a* 'horn' (cf. FL 42; NS 903), but in view of CAbx **x̌'a* < **q'a* this correspondence must now be rejected.
(2) I am not sure that Ub *-q'a* is not the same morpheme as in (1). If so, the Ubykh-Abkhaz correspondence in (2) must be dropped. Another problem is that CAbx **-x̌'a* here can be connected with perfective suffix **-x̌'a*, which has other correspondence in sister-languages (cf. under CWC **x'* in 5.5. (3)).
(3) This comparison, proposed in NS 829, seems satisfactory both phonetically and semantically, though there are certain problems. The Abkhaz word can be easily analysed as **ma* 'hand' and **qa* 'head'. The Ubykh word, in its turn, can contain the same morpheme as in (1) or/and (2).

1.4.7. CWC **q°* > CCirc **q^h°*, **q̄°* : Ub *q°*, *q̣°*, *q̣* : CAbx **q°*

Examples:

(1) **q°a-* CCirc **q^h°aja* 'cheese', CAbx **q°a-r-ta* 'small basket for keeping cheese' (**-r+ta* 'place of')

(2) **λa-q°a* CCirc **λa-q̄°a* 'leg, foot', probably also **q̄°a-psə* 'rhizome, part of the root' (Kab), 'handle, haft, ear (of vessel)' (Ad), CAbx **š'-q°a* 'heel' (**λa*, **š'a* 'leg, foot')

(3) **q°ə/a* CCirc **q̄°ə* 'to thrash, beat', *q̄°ə-t^{h}a* 'to smash, break up, chop', CAbx **q°a-q°a* 'to beat, strike, thrash', cf. also CAbx **r-q°a* 'to castrate' (**r-* causative prefix)

(4) **q°ə/a* CCirc **q̄°ə* 'to fill up (e.g. a sack with flour)', **ja-q̄°ə* 'to push, pull' (**ja-* objective prefix), **q̄°ə-za* 'to compress' (**za* 'to turn'), CAbx **q°a* 'to press grapes to prepare wine', 'to felt, full (cloth)'

(5) **q°a* CCirc **q̄°a/ə* in CCirc **č'ă-γa-q̄°ă* 'to prop up, support' (**č'ă-* prev. 'under', **γa-* causative prefix), Kab *xăbzǎ-ś'ă-q'°* 'one who upholds the tradition' (*xabzǎ* 'tradition', *ś'ă-* prev. 'under'), *k°ə-q'°* 'crossbeam' (< **k^h°ə-q̄°ə*, with **k^h°ə* 'middle') (PC 71), CAbx **q°a* 'to help, support'

(6) **q°a* CCirc **wə-q̄°a* 'top part drops down' (*wə-* verbal prefix); here belong also CCirc **q̄°a-p^{h}a* 'corner, angle', (Sh) 'twig' (**p^{h}a* 'nose, front'), **wana=q̄°a-p^{h}a* 'pommel of saddle' (**wana* 'saddle'), **q̄°a-(n)c^{h}a* 'branch with twigs, branchy' (**-c^{h}a* 'hairy'), **q̄°a-(n)č^h'a* 'crooked', **q̄°a-γa* 'corner', **q̄°a-γ°ə* 'id.', **bźa-q̄°a* 'horn (of cattle)' (**bźa* 'horn', 'horn material', in compounds also 'nail, hoof'), **q̄°a-ba=bźa-ba* 'crooked log', 'with many boughs' (**ba* 'much', **bźa* 'horn'), Ub *q̣ə-λə* 'corner', CAbx **q°a* 'to bend', 'bent, crooked, curved', **q°a-q°a*

'id.'

(7) **q°a* CCirc **q̄°a* in **q̄°a-γ°ə* 'skinny, lean' (**γ°ə* 'dry'), **q̄°a-č'a* 'flap, tail, skirt (of coat)' (**č'a* 'beneath, bottom'), **q̄°a-p'c'a* 'dark-haired, swarthy', Kab also 'lean' (**p'c'a* < **ś‴əc'a* 'black'), CAbx **q°a-mćə* 'trunk, body' (**mćə* 'id.'), **q°a-pšə* 'to look at smb/sth' (**pšə* 'to look'), **q°a-č'əč'a* 'to smile to smb'; the general meaning of both CCirc **q̄°a* and CAbx **q°a* seems to be 'body'

(8) **q°a* CCirc **pχa-q̄°a* 'torch' (**pχa* 'wood'), Ub *mʒa-q°a* 'moonlight' (*mʒa* 'moon'), CAbx **ś°a-q°a* 'ray, beam'

(9) **q°ama//*maq°a* CCirc *q̄°ama*, CAbx **maq°ə* 'twig', cf. also CAbx **ma-q°-č'a* 'wrist' (**ma-q°ə* and **č'a* 'mouth, face, front')

(10) **q°a* CCirc **q̄°a*, Ub *q°a* 'son'

(11) **q°a* CCirc **q̄°a*, Ub *q°a* 'valley, ravine'

(12) **šəq°a/ə* CCirc **šəq̄°ə* 'vessels, plates and dishes', CAbx **ašq°a* 'boat'

(13) **q°a/ə* CCirc **ħa-q̄°ə/a* 'to bark, make noise' (**ħa* 'dog'), **q̄°ə-γə* 'to howl (as dog)', Ub *q̣°ə* 'to bark', CAbx **q°a-ħ(ħ)ə* '(to) howl, yell, bellow, shout'

(14) **q°aLa* CCirc **q̄°aLa* 'raven, crow', Ub *q̣aLa* 'jackdaw', 'green woodpecker'

(15) **q°a* CCirc **z-a-q̄°a* 'lonely, one, the only' (**zə* 'one'), Ub *zāq̣a* 'id.'

(16) **q°ə-* CCirc **q̄°ə-ħa* 'to go behind sth, disappear' (**ħa* 'to enter'), Kab *dəγă-r q‴ə-ħa-ś* 'the sun disappeared', *q‴ə-ħa-γ°a* 'the time of sunset' (*-γ°a* 'the time of) (KR 242), CAbx **q°ə-la* 'to fall (of night, twilight)', 'getting dark' (**-la* 'to enter')

Comments to the items in no.:

(1) The comparison was made by Abdokov (FL 54), who regards CAbx **q°a* here as the forgotten word for cheese. The element *-ja* in Circassian is not clear.

(2) It is possible that CWC **q°a* is one and the same morpeme as in (6) and probably in (15). Cf. also CCirc **q̄°a-k̄°a* 'hornless, one-horned, one-eared' (**-k̄°a* 'truncated'), **t'q‴a-(r)q̄°a* 'bifurcation, dual, in two' (**t'q‴a* 'two').

(4) Perhaps the same morpheme is contained in Tem *jə-q°ə* (*jə-* prev. 'inside') 'it suffices', Kab *jə-r-əj-q‴* 'to be content, satisfied with', *jə-q‴ə-č'ă* 'very, rather, quite'; cf. for the semantics CAbx **g°-a-q°a* 'to like', 'happiness, joy' (**g°ə* 'heart', *a* 'to it', **q°a* 'to help, support').

(8) The first part of CAbx **ś°a-q°a* is probably the same element as in CAbx **ś°-ajk°a* 'evening-glow', 'black glow, clouds' (**ajk°a* 'black'), **ś°-apšə* 'daybreak, dawn, glow' (**apšə* 'red').

(9) **ma-* in CAbx **ma-q°ə* is probably **ma* 'hand'. CCirc **maq̄°ə* 'hay' is closer

phonetically to CAbx **maqˀə*, but the difference in meaning makes this comparison less plausible.

(12) The semantic correlation between the Circassian and Abkhaz items is typologically quite usual, cf. English *vessel*, meaning both 'a hollow receptacle especially for liquid, as a cask, pot, bottle' and 'a ship or boat'.

(13) The pharyngealisation of the Ubykh uvular must be expressive. Note that in Dumézil, Esenç 1971: 28 the Ubykh word is given without pharyngealisation (a misprint or a non-expressive variant ?). The CCirc **q̄ˀə-γə* and Abx **qˀa-ħ(ħ)ə* represent the CWC compound **qˀa/ə-ħə* with **ħə* 'to yell, bellow' (gemination of *ħ* in CAbx is expressive).

(14) Shagirov (ES I: 203, 232) believes that the Ubykh words given here and in (15) are loans from Circassian.

1.4.7.1. CWC cluster **tqˀ* > CCirc **tx̌ˀ* : Ub *tx̌ˀ* : CAbx **qˀ*

Examples:

(1) **tqˀa* CCirc **tx̌ˀa* 'to grow grey (of hair)', 'dun, grey (colour of horse)', **čʰə-tx̌ˀa* 'dun, grey(ish) horse' (**čʰə* 'horse'), Ub *tx̌ˀa* 'ashes', *tx̌ˀa-čˀa* 'grey' (i.e. 'the colour of ashes'; *čˀa* 'skin' > 'colour'), CAbx **qˀa* 'ashes', 'grey' ('the colour of ashes'), **čə-qˀa* 'grey(ish), grey-blue horse' (**čə* 'horse')

(2) **tqˀa-* CCirc **wə-tx̌ˀaja* 'to get covered with mould' (**wə-* verbal prefix), CAbx **qˀa-pa(-jə)* 'mould' (**pa* 'to cover'), **qˀə-tʷə* 'to grow mouldy, musty' (**-tʷə* transformative suffix)

(3) **tqˀa* CCirc **šʰˀə-tx̌ˀə* 'to praise, flatter' (**šʰˀə-* 'location'), Ub *ša-tx̌ˀa* 'praise', CAbx **čqˀa* 'to boast'

Comments to the items in no.:

(1) The semantic development in CCirc is supposed to be 'ashes' > 'the colour of ashes', i.e. 'grey', cf. Tap *qˀa* 'ashes', *qˀa-čˀa* 'grey' (*čˀa* 'colour, appearance' < 'skin'). The meaning 'ashes' is likely to be preserved in Ad *tx̌ˀă-mza-šx̌ˀă*, Kab *tx̌ˀă-bza-śx̌ˀă* 'sulphur' and Ad *măśʷă-tx̌ˀa-bz* 'flame' (*mzǎ*<*//bzǎ* 'tongue', *šx̌ˀă/śx̌ˀă* 'sorcery, poison', *măśʷă* 'fire'), cf. the comments in Chapter IV, *Irregular correspondences in clusters*, (3.1.1) (b).

(3) Kuipers (PC 76) considers the Circassian item to contain CCirc **tx̌ˀə* 'butter'. But in the light of the supposed Abkhaz and Ubykh counterparts such an explanation is not plausible on phonetic grounds: we have CAbx **čqˀa* 'to boast' and **x̌ˀə* 'butter', Ub *tx̌ˀa* 'praise' vs. *tx̌ˀə* 'butter'. Shagirov (ZL 27) regards the Abkhaz word as a loan from Circassian. But such an assumption is confronted

with obvious phonetic difficulties: CAbx *q° instead of CCirc and Ub x°, which is found in the genuinely connected material, but not in loans. I regard the Ubykh word also as genuine (*ša-* can be **ša* 'head', with the reflexive meaning 'to praise oneself, boast'). This makes me still consider the items in (3) as genetically connected, and probably having no relation to Circ, Ub *tx°ə* 'butter'.

1.4.8. *Irregular correspondence:* CCirc *q° : Ub q° : CAbx *q°

q(')°ə CCirc **q°ə-jə* 'hairless, bald', Ub *q°ə* 'hair', 'colour of the hair', CAbx **q°ə* 'hair'

Comment:
Nikolayev and Starostin (NS 931), who proposed this correspondence, explain the final *-jə* in Circassian as a "privative suffix", meaning probably the adjective **jă* 'bad'. Glottalisation in Ubykh might be secondary.

1.4.9. *q°´ > CCirc *$q^{h\circ}$: Ub *x´* : CAbx **ħ*

Example:

**q°a* CCirc **q°ə-źə*, Ub *x´a*, CAbx **ħa* 'pear'

Comment:
Abdokov (FL 54) suggests delabialisation in Abkhaz. The reconstruction of CWC *q°´ is tentative, as it is based on the single correspondence.

1.4.10. *Irregular correspondence:* CCirc *$q^{h\circ}$, *q° : Ub x°, χ° : CAbx **ħ°*
This correspondence can be used in principle as evidence of pharyngealisation (phonemic or expressive) in Common West Caucasian, which could cause the irregular character of correspondence.

Examples:
(1) CCirc **tharəq°a*, Ub *daxʷa* 'pidgin, dove', CAbx **laħ°a* 'rook, raven'
(2) CCirc **q°a*, Ub *χ°a*, CAbx **ħ°a* 'pig, swine'

Comments:
Shagirov (MS 73) suggests that the Circassian word in (1) can contain **tha* 'god', which seems plausible. If it were not for the Ubykh form with its initial *d-*, the CWC form could be reconstructed as **laH°a*. But the Ubykh anlaut *d-* points rather to a CWC **raH°a*, with the initial **r-*, preserved in Circassian, due, as it was suggested by Abdokov (ZS 121), to its inlaut position in the compound. Two

variant forms should probably be reconstructed here, the one reflected by Circassian and Ubykh, **raH°a*, and the other one, being continued by Abkhaz: **laH°a*. Of course, the (irregular) Abkhaz anlaut **l-* can in principle be secondary, cf. in Abkhaz such duplicate forms as **l-aš°a//r-aš°a* 'to weed', with the secondary *l-* from **rə-* (causative prefix). On the other hand, it is noteworthy that the apparently related Daghestanian forms also demonstrate variation of the initial resonants: Darg *nex°a*, (Ak) *laha*, *lahwa*, (Xajdak) *lihwa*, (Uraxi) *lawha*, (Muiri) *lah°a*, (Kajtag) *lax°a*, (Kubachi) *nax°a*, Tab *luf*, Agul *luf*, Lezgi *lif*, *luf*, Rut *lirx°aj//lirx°oj// lirfoj//lirf*, Tsax *nurxaj*, Kryz *lɨf* 'pigeon, dove', Avar *miƚi*, (Antsux) *mihi*, Lak *x̄i*, (Khosrekh) *x̄°i* (KK II: 85; XS 15; NS 750). Contrarary to Klimov 1967: 302 and Abdokov (ZS 121), Nikolayev and Starostin (NS 748-749) prefer to compare the West Caucasian words with different Daghestanian material, which seems to me less probable.

1.4.11. **q'* > CCirc **q'* : Ub *q'*, *q̇'* : CAbx **q'*

Examples:

(1) **q'a* CCirc **q'a*, Ub *q'a-p'a* 'hand, arm', CAbx **q'a* in **q'a-c'a* 'to do, make'

(2) **q'a/ə* CCirc **wə-q'a* 'to wound' (**wə-* verbal prefix), Ub *-q'ə*, CAbx **-q'a/ə* 'to cut, chop' (in Ub and Abx only with preverbs)

(3) **q'a* CCirc **q'a*, Ub **q'a*, CAbx **q'a* 'to be, exist'

(4) **q'a* CCirc **q'ə-* local preverb, Ub *q'a* 'place', CAbx **-q'a* directional suffix 'to/in the place', cf. also locative prefix *q'a-* in Tap *q'a-ć°ax-ra* 'to hide'

(5) **q'a* CCirc **q'a* 'taste' in **q'a-ś°ə* 'sweet' (**ś°ə* 'good'), Ub *q'a* in *q'a-q'ə* 'sweet'

(6) **-q'a/ə* CCirc **-q'a* in **psə-q'a* 'wet(ness), moisture' (**psə* 'water'), **č'ə-q'a* 'cold', **g°ə-q'a* 'to worry, care' (Ad), 'grieve, sob' (Kab) (**g°ə* 'heart'), *na-q'a* 'attention, care' (**na* 'eye'), Ub *-q'ə* in *q'a-q'ə* 'sweet', *ǯə-q'* 'to salt' (*ǯə* 'salt'), *ǯ°a-q'* 'to make sour', maybe also in *š°a-q'* 'to esteem, honour' (**š°a* 'price'), CAbx **q'ə* 'to ram, press, squeeze'

(7) **q'a* Ub *q'a* 'speech'; 'to speak', CAbx **q'a-ɦa* 'to shout, bellow, cry; to speak very loudly'; cf. also *-q'a* in CCirc **g°əčə-q'a* 'word, speech', 'joke'

(8) **q'a/ə* Ub *La-q'a* 'damage, evil', CAbx **q'a-t°a* 'to inflict damage on smb by forestalling him', cf. probably also **q'ə* 'to damn', 'to be influenced by evil eye'

(9) **p'q'a/ə-* Ub *p'q'ač'a* 'reed', CAbx **p'q'əźə*, **p'q'əšə* 'reed'

(10) **q'ə* Ub *q'ə-tˤ* 'to cut in pieces', *q'ə-ʒa* 'to cut, trim the trees', CAbx **q'ə* 'to hollow, chisel, peck', **q'ə-cˤə* 'to plane, hew, trim'

(11) **q'aq'a* Ub *q'aq'ə* 'to chew', CAbx **q'aq'a* 'to chew, gnaw, crush (by teeth)'

(12) **q'a* CCirc **q'a-tʰə*, Ub *q'a-śa* 'to raise, lift'

Comments to the items in no.:

(1) The analysis of the first element in CAbx **q'a-c'a* as the old word for 'hand', related to CCirc **q'a*, Ub *q'a-* was suggested by Dumézil 1967: 21. Lomtatidze 1956: 225, 226, 228 sees in the same element SAbx *q'a-* 'to be, exist', suggesting its connection with CAbx **q'a* 'place'. G. Hewitt (pers.comm.) also thinks that 'put into existence' is more realistic a derivation for 'to make, do', than 'to put into hand'. Dumézil 1972: 11 unites both CAbx **q'a* 'hand' (in **q'a-c'a* 'to do, make') and **q'a* 'to be, exist', adding here also Ub *q'a-γə* 'to have', lit. 'to be suspended to hand' and Circ *jə-ʔă* (< **jə-q'a*) 'to have', with possessive prefix **jə-* (cf. ES I: 190). Dumézil 1976: 20-21 unites Ub *q'a* 'place' and Circ *ʔă* (< **q'a*), Abx *q'a* 'to be'. Kumaxov (Morf 85) and Nikolayev and Starostin (NS 599) unite CCirc **q'a* in **jə-q'a* 'to have' with **q'a* in **šʰə-q'a* 'to be, exist' (the latter authors include here also CAbx **q'a-(z-)la* 'to become, be, exist', and Ub *q'a-γ*, cf. NS, ibid.). Cf. also ES I: 190. Though some of these items can certainly be etymologically connected, here I prefer so far to abstain from reducing the number of independent morphemes. The second element in CAbx **q'a-c'a* is most likely **c'a* 'to put'.

(3) CCirc **q'a* is used in combination with the preverb **šʰə-* 'place of'; cf. also **jə-q'a* 'to be a possession of'. The Ubykh cognate is met in the complex verb *č'a-q'a* with the morpheme *č'a* 'good' serving as a preverb, cf. *č'a-w-q'a-gʲə* 'welcome!' (*w* 'you', *-gʲə* gerundial suffix), *č'a-w-q'a-x̌* 'id.' (*-x̌* optative suffix) (HV 400), the literal meaning of which is likely to be 'be (*q'a*) good, well (*č'a*)!'. In NS 599 the items in (3) and (4) are etymologically united.

(4) In Circassian the local element **q'ə* is met in the complex preverb *zə̆-ʔə-*, with the reciprocal prefix *zə̆-* (cf. ES I: 208-209). Cf. also *q'a-* in CCirc **λə-q'a-sə* 'to reach to, get to' (**λə-q'a* 'trace', **sə* 'to move'), **q'a-gˤə* 'courtyard' (**gˤə* 'surface'). Ub *q'a* 'place' is found in different compounds: *gʲə-q'a* 'emplacement, place where sth is placed' (*gʲə* 'surface'), *q'ā-La* 'place' (found in compounds), *λa-q'a* 'trace' (*λa* 'foot'; cf. CCirc **λə-q'a-sə*), *q'a-ʒ* 'to approach sth' (*ʒ* 'to reach'), *za-Lā-q'a* 'interval, between' (*za* 'one', *La* 'with'; cf. Dumézil 1976: 19), *a-šˤa-q'a* 'interior' (*šˤa* 'to be lowered, be beneath').

(5) Dumézil, Esenç 1971: 50 give an alternative analysis of CCirc **q'a-śʷə* as **q'a* 'hand' and **śʷə* 'good' (cf. also ES II: 158-159), which seems to me

semantically implausible. Ubykh has also a variant *q'əq'ə*. The second part of the Ubykh word is linked by Shagirov (ES II: 159) with *q'ə* 'to like, feel good, appropriate' (used in combination with *gʲə* 'heart', e.g. *sə-gʲə w-a-q'ə-n* 'I love you'). Nikolayev and Starostin (NS 913) add here also CAbx **qa-ħa* 'sweet, tasty', which I compare with other Circassian material.

(6) The original meaning of the Circassian and Ubykh items seems to be preserved in Abkhaz. Dumézil 1976: 19 sees in Ubykh *-q'(ə)* the verb *q'ə* 'to cut'. Cf. also Ub *q'ə-ntˤa* 'pestle, mortar'.

(8) The first element in Ub *La-q'a* is probably **La* < **la* 'eye', used without prefix *b-* (normally *bLa* 'eye'), cf. CAbx **la//*bla* 'eye'. Another instance when Ub *La* 'eye' occurs without *b-* is *fa-La* 'face', lit. 'nose-eye', same as CCirc **na-pʰa* 'face' (**na* 'eye', **pʰa* 'nose', with a different order of constituents). For the type of composition in Ub *La-q'a* cf. CAbx **la-pšə* 'evil eye' (**la* 'eye', **pšə* 'to look, watch'). The second element in CAbx **q'a-tˤa* is not clear (cf. **tˤa* 'to melt, fuse' or **tˤa* 'to pour' ?).

(9) Ub *p'q'ač'a* is found in MP 222 and repeated in HV 1354. Dumézil (DA III: 237) argues for its elimination from the dictionary, which I wouldn't do given the possible Abkhaz cognate (and trusting Mészáros !). The Ubykh and Abkhaz words are probably compounds with *-č'a, -ʒə, -šə* (**šə* 'white') as second elements.

(10) It is possible that Ub *q̡'* in *q̡'ə* 'to cut (the wool of sheep, ears of cereals by sickle)', *q̡'ə-č'ə* 'to cut, make notches' is but an expressive variant of the verb in (11). Dumézil and Esenç 1971: 50 see in Ubykh verbs *q̡'ə* 'to bite' and *q̡'ə* 'to cut (the wool of sheep, ears of cereals)' one and the same morpheme, the first one being its intransitive, and the second its transitive variant.

1.4.12. **q''* > CCirc **q'* : Ub *q'', q̡'* : CAbx **q''*

Examples:

(1) **q'a* CCirc **q'a-ja* 'bad, ugly', Ub *q'ə-ćʷə* 'to soil, dirty', *q'ə-ćʷ-q'a* 'dirty' (*-q'a* adjectival suffix), CAbx **q'ə-ćʷə* 'wet, saturated with water', 'rotten, tainted, spoiled (of food)', **q'ə* 'excrement, manure', **q'ə/a-šʲə* 'dirty', 'to dirty, soil' (**šʲə* 'to smear')

(2) **q'ə/a* Ub *q'ə-da* 'to nail', *q'ə-cˤə* 'to separate small parts by tapping with a knife' (both in DA III: 239), CAbx **q'a* 'to beat, strike, break', cf. also Abx *q'əćʷ-q'əćʷə* 'by parts, little by little, slowly'

(3) **q'a* CCirc **-q'a* affirmative suffix in **śʲ-q'a* 'to know' (tr.), 'to perform (itr.), CAbx **-ćʷa-q'a* affirmative suffix, 'precise, accurate'

(4) **q'a-la* Ub *q̡'aLa* 'turbulent, noisy (as child or animal)' (DA III: 239), CAbx

**q'a-la* 'vagrant, itinerant', 'stray, lost', 'tramp', 'to be confused, bewildered'

Comments to the items in no.:

(1) The second element in CCirc **q'a-ja* is either **ja* 'bad', or the verb **ja/ə* 'to smear, coat (as the walls of a house)', which parallels the structure of CAbx **q'ə/a-šʼə*. Dumézil and Esenç 1971: 50 analyse the CCirc **q'a-ja* as **q'a* 'hand' and **ja* 'bad', which (concerning the meaning of the first segment) seems to me less plausible.

(3) The CCirc reconstruction is based on Shapsygh *śʼq'ă* 'to know', vs. *śʼă* in all other Circassian dialects. The element *-q'a* is supposed to be an affirmative suffix, connected with the Kabardian suffix *-q'ă* with the same meaning (ES II: 152), though such connection is not obvious given the irregular character of the correspondence: Kab *-q'ă* goes back to CCirc **-q̄a* (affirmative suffix), while Sh *q'a* retains CCirc **-q'a*.

(4) I am not sure that the Ubykh item is not a loan from Abkhaz, which can be analysed as **q'a* 'to sway' and **la* 'to go'.

1.4.13. **q˝* > CCirc **q˝* : Ub *q˝*, *q̱˝* : CAbx **q˝*

Examples:

(1) **q˝ə/a* CCirc **q˝ə* '(cavity of the) mouth; orifice', preverb 'at, by/off sth/smb', **q˝a* 'to speak', 'to sing, crow (of birds)', CAbx **q˝ə-* pre verb 'from/off (*the mouth)'

(2) **q˝a* CCirc **q˝a* 'to thresh', **q˝a-tʰə* 'to rumple, crumple', **śˤa-q˝a-ča* 'implement for softening leather' (**śˤa* 'skin, hide', **ča* 'tooth'), Ad *wə-că-ʔˤə* 'to chew' (*wə-* verbal prefix, *că* 'tooth'), Ub *q˝a* 'to trample down, press, rumple, crumple, knead', *q˝a-ča* 'to break in pieces', *cˤa-q˝a* 'to tan (hide)' (*cˤa* 'skin, hide'), CAbx **q˝a-q˝a* 'to cut, cleave, slit, section, crush', cf. also Tap *r-q˝aq˝a-ra* 'to soften by beating, thrashing' (*r-* causative prefix)

(3) **q˝a/ə* CCirc **śˤa-q˝ə* '(to turn) sour', CAbx **q˝ə-ja* 'to steam body or its parts (as a remedy)' (**ja* 'to lie' ?), cf. also CAbx **q˝ə-kʼə* 'mould', 'musty, mouldy, stuffy' (**kʼə* 'to hold, seize'), **q˝a* 'poisonous, heady (of honey)', 'rotten (with musty smell)', **ša-q˝a* 'rotten (e.g. egg)'

(4) **q˝a* CCirc **q˝a-śħa* 'barrow, hill' (**śħa* 'head, top'), Ub *šə-q˝a* 'upwards, on the hight' (*šə* < *ša* 'head, top'), CAbx **q˝a-ra* 'coast, shore', **tˤa-q˝a* 'stack, rick' (**tˤa* 'hay'), **čʼa-q˝a* 'shock, stook, heap' (**čʼa* 'wheat'), **mčʼə-r-q˝a* 'piled fire-wood' (**mčʼə* '(fire)wood'), **q˝a-q˝a*

'back (anat.)', 'pelvis, hip-bone', 'sacrum (of back)', in South Abkhaz also 'top of the roof'

(5) *$q^{w}a$ CCirc *$q^{w}a$ 'pen, fold, wattle fence (for cattle)', also in *$pš'ə$-$q^{w}a$ 'temporary lodging', *$bž'a$-$q^{w}a$ 'bee-garden' (*$bž'a$ 'bee'), Ub $g'ə$-$q^{w}a$ 'to close' ($g'ə$ 'surface'), $məγ'a$-$q^{w}a$ 'ambush' ($məγ'a$ 'road'), where $q^{w}a$ is probably the verb $q^{w}a$ 'to catch, grab', CAbx *$q^{w}a$ in Bz *a-ʒ-aj-χ̌a-q^{w}a* 'spring fenced by stones' (*ʒə* 'water', *aj-* reciprocal prefix, *χ̌a* preverb 'head, top' < **qa* 'head')

(6) *$q^{w}a$ CCirc *$-q^{w}a$, Ub $-q^{w}a$ suffix denoting small quantity or intensity of sth, cf. also CAbx *$q^{w}a$- in *$q^{w}a$-n-da* 'a bit warm (of liquids)', with the verb **nə-da* 'to cool (warm water or air)'

(7) *$q^{w}a$ Ub $q̣^{w}a$ 'covered gallery', 'cave', CAbx *$q^{w}a$ 'bow' as in *$ć^{ə}a$-$q^{w}a$ 'rainbow' (*$ć^{ə}a$ 'skin' ?)

(8) *$q^{w}ə$ CCirc *$č'ə$-$q^{w}ə$ 'upper part, top side', *$p'λ'a$-$q^{w}ə$ 'upper back, shoulders', cf. also **tħa-q^{w}ə* 'boot-top', **śħa-q^{w}ə* 'top edge' (Ad), 'front part of bride's haidress' (**śħa* 'head, top') (Kab), **txə-bə-q^{w}ə* 'humpback' (**txə* 'back'), Ub $q̣^{w}ə$, CAbx $q^{w}ə$ 'to bend, incline, bow', CAbx *$ʒ'ə$-$q^{w}ə$ 'humpback'

(9) *$q^{w}əq^{w}ə$ Ub $q̣^{w}əq̣^{w}$, CAbx *$q^{w}əq^{w}ə$ 'to huddle oneself up', 'to squat'

(10) *$č(')aq^{w}ə/a$ Ub $čaq̣^{w}ə$ (DA III: 223) 'basin', CAbx *$č'aq^{w}ə/a$ 'big wooden mug'

(11) *$q^{w}ada$ Ub $q^{w}ada$ 'trough', CAbx *$q^{w}ada$ 'coagulated, clotted blood' (?)

Comments to the items in no.:

(1) The connection of CCirc *$q^{w}ə$ and *$q^{w}a$ was set forth by Kumaxov (Morf 178). The reconstruction of CAbx *$q^{w}ə$ 'mouth' from the preverb see in ZS 76. It is possible that the form *$q^{w}ə$ expresses the extravert verbal meaning (with the only exception of *$q^{w}a$-c'ə* 'to leave smb alone', alongside *$q^{w}ə$-c'ə* 'to stop doing sth; to get rid of smb'). The nominal basis of this preverb, besides *$q^{w}a$-ra* 'coat, shore' (cf. CCirc *psə-$q^{w}ə$ 'riverbank', *$q^{w}ə$-$ś^{ə}a$ 'shore, bank, edge', with *psə* 'water, river', *$ś^{ə}a$ 'surface' and *$q^{w}ə$ 'mouth'), is obvious in such words as *$q^{w}a$-pa=ć'a-pa* 'uneven, bumpy (of relief)' (*$q^{w}a$ 'mouth', *$ć'a$ 'mouth, face', *pa* 'to jump'), *$q^{w}a$-$ź^{ə}a$ 'big, stout', 'plump, fat' (cf. CCirc *$q^{w}ə$-$ź^{ə}ə$ 'thick (layer), fluid', 'fat (person)'), *$q^{w}a$-$ž^{ə}ə$ 'plump (of a child)', *$q^{w}a$-šə* 'white, pale' (*šə* 'white'), etc.

CCirc *$q^{w}a$ 'to tell, say' is being compared with Ub $q'a$ 'to speak' and CAbx *$ħ^{ə}a$ 'to tell, say' (cf. Trubetzkoy 1930: 88; Dumézil 1971: 157; MS 123-124; cf. also in FL 30 the comparison of CCirc and CAbx), which is difficult to accept for phonetic reasons.

(3) The first segment in CCirc *ś‿a-q‿ə is probably akin to CAbx *ć‿ə 'sour'. Cf. also CCirc *ħa-q‿ə 'mushroom' (the initial segment is either *ħa 'dog', or *ħa-, a usual prefix in the names of wild plants and some reptiles).
(5) Cf. also CCirc *q‿ə-ś'a 'dam' (*ś'a 'to do, make').
(7) An alternative Abkhaz comparison to Ub ɋ‿a is given in MS 66: SAbx *a-q‿ara* 'the stony bank of the river', cf. also Ash *ħa-q‿ara* 'shore' (CAbx *ħa 'stone').
(9) The Ubykh and Abkhaz items probably represent the reduplicated forms of Ub ɋ‿ə, CAbx *q‿ə in (9). The resemblance of this root with the Georgian root *q'uq'* in *cha-q'uq'-eb-a* 'to squat' (G. Hewitt, pers.comm.) can be either fortuitous, or be explained by the onomatopoeic nature of West Caucasian and Georgian roots. In the latter case the supposed connection with CWC *q‿ə 'to bend, inclined' would be impossible.
(10) The correspondence Ub č : CAbx č́ is irregular.

1.4.14. *q‿ˊ > CCirc *q‿ : Ub q'; ɋ' : CAbx *q‿

Examples:

(1) *p'əq‿ə́ CCirc *p'q‿ə 'to grow, raise up (as of children)', Ub *p'q'ə* 'to grow, raise up (as children)', 'to feed', CAbx *p'əq‿ə 'butt'
(2) *q‿ə́na CCirc *q‿ənа 'nail', Ub *ɋ'ənа* 'clasp', CAbx *q‿ənа 'metallic decoration on the belt, gird, bridle, saddle-girth, etc.'
(3) *p'q‿ə́a CCirc *p'q‿a 'place', 'to cover', 'cover, lid, shell', Ub *p'q'a* 'case, sheath'

Comment:

In (2) Ubykh supposedly lost palatalisation due to (expressive ?) pharyngealisation: these two features never coincide. Another possible example of such development can be seen in Ub *ɋ'aLa* 'turbulent, noisy (of a child or an animal)' (DA III: 239), connected with CAbx *q'a-la* 'vagrant, itinerant', 'stray, lost', 'tramp', 'to be confused, bewildered' (or borrowed from Abkhaz ?).

Nikolayev and Starostin (NS 527) compare CCirc *q‿ənа (in their reconstruction *ʔ‿ənа) with Ub *nəq'ə* 'nail' and with the second part of CAbx *ć‿ə-ĥ‿anə 'stake'. I compare the Abkhaz item with different West Caucasian material (cf. under *ʕ‿). Ub *nəq'ə* actually could be a possible alternative to *ɋ'ənа* if we suppose metathesis < *q'ə́nə, but I am inclined to think that it falls rather under the comparison in (2).

Jakovlev and Ashxamaf 1941: 230 analysed the Circassian word in (2) as the verb *ʔ‿ə* 'to stick, drive into' and *nă* 'eye', but the existence of cognates in

sister-languages renders this explanation as unlikely.

2. THE COMMON WEST CAUCASIAN SIBILANT AFFRICATES

Front affricates in Common West Caucasian did not have palatalised or labialised correlates, as the older palatalised and labialised dental sibilants formed a distinct series of dental-alveolars or, in other terminology, middle sibilants. There are almost no traces of labialised-palatalised affricates, which have supposedly merged with their labialised counterparts, and only in the series of back affricates can one example be used for a tentative reconstruction of a labialised-palatalised correlate (*ǯ˚ʼ). Middle affricates are well preserved in Ubykh and Abkhaz, but in Circassian only the glottalised correlates (spirantised in Common Circassian) remained, while the rest have merged with other sibilants.

2.1. THE CWC FRONT SIBILANT AFFRICATES

2.1.1. CWC *ʒ > CCirc *ʒ : Ub ʒ : CAbx *ʒ

Examples:

(1) **ʒa* CCirc **pʰə-ʒa* 'to add to, attach, continue' (**pʰə* 'nose'), Ub *q'a-ʒə* 'to approach' (*q'a-* 'place'), *bLa-ʒa* 'pearcing eye' (*bLa* 'eye'), *gʲə-ʒa* 'great', suffix *-aw-n-ʒa* 'till, up to', CAbx **ʒa* 'to reach', intensity suffix **-ʒ(ʒ)a* (e.g. in **də-wə-ʒʒa* 'great'), suffix **-nə-ʒa* 'till, up to'

(2) **bəʒə* CCirc **bəʒə*, Ub *bəʒ* 'woman's breast'

(3) **ʒəʒa* CCirc **ʒaʒə-wə* 'infant', **ʒəʒa* 'breast' (in baby talk), CAbx **ʒəʒa* 'woman's breast'

(4) **cəʒa* CCirc **c̄əʒa* 'marten', 'otter', 'squirrel', Ub *ćaca* 'beaver', SAbx *a-pšʒa* 'marten', Tap *ʒəʒəc* 'weasel'

(5) **ʒə* Ub *ʒə* 'to fall (of snow, hoar-frost, hail)', CAbx **aʒə* 'hoar-frost'

(6) **məʒa* CCirc **maza*, Ub *məʒa*, CAbx **məʒa* 'moon, month'

(7) **məʒa* Ub *məʒa* 'light, device for producing light, candle', CAbx **mza* 'lamp',**ćʷa-mza* 'candle' (**ćʷa* 'wax')

(8) **məʒa* CCirc **mazə* 'forest', Ub *məʒa-γʷənə* 'spruce, silver fir' (*γʷənə* 'tree'), CAbx **mza* 'pine(-tree)'

(9) **ʒa* CCirc **bγʷə-ʒ/za* 'narrow, tight' (**bγʷə* 'side, edge'), CAbx **ʒa* 'thin', **ʒa-ra* 'waist' (**-ra* abstract suffix)

Comments to the items in no.:

(1) The original (verbal) meaning of the morpheme **ʒa* is preserved in Abkhaz. The first element of Ub *gʲə-ʒa* is analysed by Charachidzé 1990-91: 230-231 as

'surface'. The second part he regards tentatively as a loan from Abkhaz *a-ʒa-ra* 'to measure', but I think that this *-ʒa* is semantically equal to the Abkhaz suffix of intensity. The element *-n-* in Ub *-aw-n-ʒa*, Abx *-n-ʒa* has a local meaning. The first element in Ub *q'a-ʒə* Dumézil and Esenç 1976: 19 analyse as *q'a* 'hand', though I suggest seeing it here as a locative prefix < **q'a* 'place'.

(2) As Shagirov (MS 54) remarks, here the borrowing of the Ubykh word from Circassian is not excluded.

(3) The element **-wə* in the Circassian word is probably a fossilised suffix with an uncertain meaning. The Circassian baby word *ʒəʒă* is cited in ZS 74. For the same suffix cf. also Ad *nanə-wə* 'baby'.

(4) The alleged **cəʒa* underwent certain phonetic changes in all three languages. Thus, in Adyghe (Bzh *cəză*) the affricate, preserved in Kabardian, was replaced by a homorganic spirant. In Ubykh the original affricate in the second syllable (*ʒ*) must have been assimilated to the first affricate. Note that the Ubykh word is found only in Dumézil 1959: 70, and the same author later suggested to eliminate it as unreliable (cf. DA III: 222). In Abkhaz, in its turn, a supposed older **c* was transformed, probably because of tabooistic reasons and by association with CAbx **pšəʒa* 'beautiful', into a cluster *pš*. Another enigmatic form is Tap *ʒəʒəc* 'weasel' which can be either borrowed from Kabardian (*ʒəʒă*), but then the final *-c* remains unexplained or, as was suggested by Nikolayev and Starostin (NS 360), retains the original Proto-Abkhaz form, which however also underwent metathesis and partial reduplication. The Ubykh word, if it really existed, might indicate that the Common West Caucasian form could be **ćəʒa*.

(5) Ub *ʒə* is found in *ẑ°a-ʒə* 'snow' (*ẑ°a* 'sky, atmosphere'), *ma-ʒə* 'hoarfrost', *t°a-šx̌ə-ʒə* 'hail', *t°a-šx̌ə ʒə* 'to fall (of hail)', *ʒə* 'to snow'. Abdokov (FL 70) compares Ub *ʒə* with CCirc **wa-sə* (**wa* 'sky, atmosphere'), CAbx **śə* 'snow', while Nikolayev and Starostin (NS 675) connect the Ubykh morpheme with *sa* in CCirc **wasa-psə* 'dew', with Bz *ʒaʒa* 'dew' and Tap *aʒ* 'hoarfrost'. I find the phonetic differences between all these forms too great to accept their relationship. The reconstruction of CAbx **aʒə* is based only on Tap *aʒ* 'hoarfrost', which means that the latter can reflect the form with a middle affricate (i.e. **aʒə*) as well, which would weaken the reliability of the comparison.

(6) The affricate **ʒ* is restored in CAbx **məʒa* on the basis of Ash, Sa, Ahch *a-məʒ*. In Circassian and in the rest of the Abkhaz dialects the affricate was changed to a spirant.

(7) I think there is no reason to doubt the reliability of Mészáros's (MP 240) and Dirr's (p. 110) recording of the Ubykh item, pace DA III: 234. Perhaps Mészáros might be right in connecting the Ubykh words in (7) and (8), though it is not

clear what is primary here: 'candle' —> 'the tree of candle' (cf. Meszaros's analysis of Ub *məʒa-γ°ənə* as "Leuchtmittel-Baum") or, vice versa, 'pine' —> 'candle (made of pine)'. Cf., by the way, a similar connection between CCirc **wastəγa* 'lamp, torch' (cf. CAbx **k"aśtxa//*k"aźdγa* 'fire-brand') and CCirc **wastəγa-ja* 'silver fir' (Ad), 'pine-tree' (Kab), which Shagirov (ES II: 91) considers to be derived from the word for 'lamp, torch'. Quite suspicious is also the formal identity of the items in (7) and (8) with the West Caucasian words for 'moon' in (6). On the other hand, Shagirov's (MS 77) comparison of CCirc **mazə* 'forest' with Ub *məʒə* 'prickle' is much less plausible because of the irregular correspondence between sibilants.

2.1.2. CWC **c* > CCirc **c̄*, **cʰ* : Ub *c* : CAbx **c*

Examples:

(1) **ca* CCirc **c̄a*, Ub *ca-k'ə*, CAbx *cə* 'tooth'

(2) **ca* CCirc **c̄a-sa* 'spit (for roasting)', Ub *ca* 'hot', 'to burn', CAbx *ca* 'hot'

(3) **ca/ə* CCirc **c̄a* 'grain, pellet of grain, grain (of sand, etc.)', Ub *caca* 'small, little' (a reduplication ?), CAbx **cə* 'grain', as a prefix or suffix means also 'one', 'one small piece, a particle'

(4) **cəγ°a/ə* CCirc **c̄əγ°a* 'mouse', CAbx **c(')əγə* 'marten'

(5) **waca/ə* Kab *g°arcă*, Malka Kab (MS 125) *warcă*, CAbx **wacə* 'dung, manure'

(6) **ca* Ub *ca* 'to get used to', *č́ə-ca* 'to tame the horse' (*č́ə* 'horse'), CAbx **š́-ca* 'to get used to' (**š́-* < **šʲa* 'foot'); here belongs probably also CCirc **sa* 'to accustom oneself to', 'to become tame, trained (e.g. of horse)', Kab *să* 'adaptable', if we suppose spirantisation in Circassian; cf. also CCirc **q'a-sa* 'tame, quiet' (**q'a* 'hand')

(7) **maca* Ub *ma/əca=q'ā-La* 'in vain, for nothing, for free', CAbx *maca* 'only, just, alone' (if the Ubykh word is not a lone from Abkhaz !)

(8) **x̌°aca* Ub *x̌́aca//x̌́acaca* 'quick', CAbx **x̌°aca* 'quickly, instantaneously'

(9) **ca* Ub *γ°a-ca* 'to get rusty' or 'to get red' (cf. HV 2439; DA III: 256; *γ°a* 'yellow'), CAbx **ž́ag'a-ca* 'to get rusty' (**ž́ag'a* < Oss)

(10) **-cəšə* Ub *ca(n)cəš* (Dumézil 1975a: 146), CAbx **ħ°ən-cəšə* 'lizard'

(11) **ca* Ub *wa-ca* 'that (past) night' (DA III: 246; *wa-* is deictic pronoun), CAbx **la-šʲca* 'darkness, dusk', 'to darken' (**la* 'eye')

(12) **-cə* CCirc **λa-x̌cʰə* 'offshoot from the root' (**λa* 'foot'), CAbx **-cə* 'root' in **da-cə* 'root', **cə-ca* 'radish' (**ca* 'bitter'), **cə-qa* 'white turnip' (**qa* < **qa-ħa* 'sweet'), **bəγ'ə-cə* 'leaf'; cf. also perhaps *cə* in Ub *c°əcə* 'thicket'; for the first part of the Ubykh word cf. 2.2.5. (5)

Comments to the items in no.:

(1) The second element in Ub *ca-k'ə* is the suffix of singularity. It is possible that items in (1) and (3) represent etymologically one and the same morpheme. Cf. Ub *ca-k'ə* 'tooth', used also in the meaning 'one piece of': *məšˀə ca-kʼ'* 'grape' (*məšˀə* 'grapes').

(2) The second part in CCirc **c̄a-sa* is 'knife' (ES I: 165). Adyghe *ca-că* is the result of assimilation, though Shapsygh has both *ca-că* and *ca-să* (Kuipers 1963: 68-69; ShD 132). Shagirov (ES I: 164) thinks that the affricate in the compound **c̄a-sa* is original, while in the separate morpheme it underwent spirantisation (cf. CCirc **s(ī)ə* 'to burn', **s(ī)ə-rə* 'hot, bitter').

(4) Abkhaz seems to have lost labialisation of the second consonant. In Tapanta the affricate is glottalised (*c'əγ*), while in Bzyp occur the forms either with *c* or *c'*. If it is not the local Abkhaz innovation (glottalisation being expressive ?), the alternative CWC reconstruction must be **c'əγˀa/ə*. The related East Caucasian forms, however, confirm that the original affricate was not glottalised (cf. NS 322).

(5) In principle *-r-* in the Kabardian forms can be epenthetic. Kuipers 1960: 79 sees in Kab *-ca* the morpheme *ca/cə* (< **cʰa/ə)* 'hair, wool'. This would mean that in the Abkhaz form we have either a loan from Kabardian, or a cognate which preserves the old word for 'hair'. An alternative solution can be to compare the second part (CCirc **-cʰa*, CAbx **-cə*) with CAbx **ccə* 'to shit' (< **cəcə*), cf. also **cʰa* 'pedere' (< **cə-ʰa*); cf. also Tem *că-dă* 'to make dirty'.

(8) Dumézil (DA III: 249) remarks that Ub *x̌'acaca*, given by Vogt, is impossible. The Ubykh material can be analysed in a different way: *x̌'a-* can be a benefactive prefix, while the rest (*ca* or *caca*) can be compared to CAbx **cca-k'ə* 'to hurry, haste' (**k'ə* 'to catch').

(10) The Ubykh word is probably partially reduplicated. The Abkhaz counterpart has a variety of dialectal forms, due to which the given CAbx reconstruction is only tentative. Cf. Abzh *a-jənćˀəš*, Bz *a-jˀənćʷˀəš//a-jənćˀəš//a-janćˀəš*, Tap *arcəš*. I divide the Abkhaz forms into two parts, comparing the second one (*-ćʷˀəš//-ćˀəš//-cəš*) with the Ubykh word. Judging from the latter and from the Tapanta forms, the labialisation (as well as glottalisation) in South Abkhaz can be regarded as secondary (labialisation due to the influence of **ʰˀə-*). For the first part cf. CAbx **ʰˀan* < **ʰˀanə* 'tree', found in **ćʷˀə-ʰˀanə* 'stake, picket' (cognate with Ub *γˀənə* 'tree'), which renders it possible to analyse **ʰˀən-* as 'tree', thus 'tree lizard'; according to a Bzyp informant, the word refers to a green lizard.

(11) The initial *š'-* in the Abkhaz form is unclear.

(12) Abdokov (FL 58) connects CCirc **λa-x̌cʰə* with CAbx **š'a-ća* 'grass', which

can hold only for the first part (CAbx **šʹa* 'foot').

2.1.3. CWC **c'* > CCirc **c'* : Ub *c'* : CAbx **c'*

Examples:

(1) **c'a* CCirc **kʷa-c'ə*, Ub *γa-c'a*, CAbx *wa-c'a* 'inside(s)'

(2) **(p')c'a* CCirc **c'a*, Ub *p'c'a* 'name'

(3) **c'ərə-c'ərə* Ad *c'ər-šʹər* (Dumézil, Esenç 1977: 21)//*c'ərəw-šʹərəw* (RAd 255) 'chirping, twittering , *c'ərə-wə* 'to rasp (of grasshopper)' (RAd 902), Kab *ħăž=c'ər-c'ər* 'mantis', *c'əră-c'əră* 'dragon-fly', Ub *c'ər-c'ər* 'to cheep, peep' (Dumézil, Esenç, ibid.), CAbx **c'ərə* 'to shout', **c'ərə-c'ərə* 'to squeak, cheep, peep', 'cicada; cricket'

(4) **p'c'a/ə* CCirc **wəcə-p'c'a* 'thick grass' (**wəcə* 'grass'), Ub *šxʷa-mc'ə* 'green grass, vegetation' (*šxʷa* 'grass')

(5) **c'ərə* Bzh *c'ər-tʰă* 'to emit sparks', Tem *c'əră* 'to gush, spring forth (of water)', Ub *c'ər* 'to dirt by suddenly spatting with dirt, blood, etc.' (cf. Dumézil, Esenç 1977: 22)

(6) **c'a* CCirc **k'a-c'ə* (**k'a* 'egg'), CAbx **c'a* 'to lay eggs'

(7) **c'a* CCirc *na-c'a* 'to wish, desire, hanker for' (**na* 'eye', i.e. 'to lay eye'), CAbx **c'a* 'to put, lay' (only with preverbs)

(8) **c'əwə* Tem *c'əw-šʹəw* 'to peep, cheep', Kab *c'əw* 'to squeak, cheep', SAbx *c'əww* 'a high-tone sound (like that of mosquito, of shriek, etc.)', CAbx **r-c'əwə* 'grass-hopper' (**r-* causative)

(9) **c'əc'ə* CCirc **c'əc'ə* 'to crumple', Tap *c'c'a-ħʷa* 'to eat noisily', Ash *c'c'ə* 'to gnaw, eat (nuts, seeds, etc.)'

(10) **c'ə(r)γ( )ə* Ad *c'ərγ-šʹərγ* 'twitter, chirp', Kab *c'ərγă-c'ərγă* 'rattle', Ub *c'əγγ* 'squeak (of the door)' (Dumézil, Esenç 1973: 34), Tap *c'əγʲγʲə* '(to) squeal, screech'

Comments to the items in no.:

(1) *γa-* in Ub *γa-c'a* is the possessive prefix 'its'. The probable etymologies of the given West Caucasian words are discussed in ES I: 217. Circ *c'ə* in **kʰʷə-c'ə* 'brain' (**kʰʷə* 'middle, centre') (ES I: 216) and in Tem *c'ə-j* 'belly, insides' can also belong here.

(2) The initial *p'-* in Ub *p'c'a* is regarded by Shagirov (ES II: 125) as increment, which, given the Daghestanian cognates, seems to be true.

(3) The items given here are onomatopoeic by origin. In Dumézil and Esenç 1973: 34 the Ubykh counterpart is given as *ć'ər-ć'ər* (a phonetic variant of the same word or a misprint in one of the publications ?) In SAbx *a-c'ər-c'ər-ra*

means also 'sound produced by dragon-fly, snake, etc.'.
(6) One can think of adding here also Ub *ć'ə* in *ć'ə-q'a* 'to lay eggs' (cf. its corrected form in Dumézil 1969: 116), with an unclear second part. If so, it would be the only example for the correspondence CCirc **c'* : Ub *ć'* : CAbx *c'*. But, apart from the irregular character of such a correspondence, there is another reason to separate Ubykh *ć'ə*: unlike *c'ə/c'a* in Circassian and Abkhaz, it is a nominal, not verbal morpheme. Its literal meaning is 'egg', cf. *dəma-ć'* 'egg' (*dəma* 'hen'), *t'a-ć'* 'nit' (*t'a-k'ʷ* 'louse'); its possible further connections in Ubykh are discussed in Dumézil 1969: 117. One can wonder whether the items in (6) and (7) are not one and the same root. Cf. also Ub *ać'ə-k'ʷ* 'stone of the fruit' (DA III: 217).
(7) The comparison given here was first made by Mészáros (MP 293-294) and later
repeated in NS 627, but is analysed differently by Shagirov (cf. ES I: 281). The items in (6) and (7) in NS (ibid.) are linked together. For the analysis of CCirc **nac'a* see MP 293-294.

2.2. THE CWC MIDDLE SIBILANT AFFRICATES

2.2.1. CWC **ʒ* > CCirc **ʒ*, **ź* : Ub *ʒ* : CAbx **ʒ*

Examples:

(1) **ʒa/ə* CCirc **ba-ʒa* 'fly', **bžə-ʒa* 'flea', Ub *ba(n)ʒə* 'fly' (cf. also *ʒaʒ* 'bee'), CAbx **ʒə* 'flea'

(2) **ʒa* CCirc **ʒa*, Ub *ʒā-da* 'to throw', Ub *fā-ʒa* 'to fall (of light and small things)', 'to throw', 'to wean (a child)' (*fa-* preverb 'nose, front'), *ć°a-fa-ʒa* 'to lose colour, become pale' (*ć°a* 'skin', 'colour'), *ša-ʒa* 'to remain; to escape' (*ša* 'head'), CAbx **ʒə* 'to get lost, disappear'; cf. also **ʒa* in CAbx **k'anʒa* 'to wither, fade (of plants)' (?)

(3) **ʒa/ə* CCirc **źa*, CAbx **ʒə* 'to roast, bake'

(4) **ʒə* CCirc **źə-jə* 'small of animals' (in compounds), CAbx **ʒə-śə* 'kid, goatling' (**-śə* diminutive suffix)

(5) **ʒa* Ub *ʒa* 'covered enclosure for cattle', *t°a-ʒa* 'enclosure for goats' (*t°a* 'billy-goat'), *nt°ā-ʒa* 'the exterior door' (*nt°a* 'door'), cf. CAbx **təʒə/a* 'house, building', 'household', 'wall of the house'

(7) **ʒa* Ub *bə-ʒa-q'a* 'wet, moisten', *ć'ə(n)-ʒa* 'to moisten, make wet, to water', CAbx **aj-ʒa* 'wet', also probably **ʒa-ʒa* 'dew'

(8) **ʒə/a* Ub *q'ə-ʒa* 'to rough-hew', CAbx **maʒa* 'to carpenter' (**ma* 'hand' ?)

(9) **ʒa(-rə)* CCirc **za* 'cornel fruit', **zarə-g'a* 'berries of snowball tree' (**g'a* 'bad', cf. ES I: 207), CAbx **ʒarə* 'cornel fruit'

(10) **(a)ʒ́a* CCirc **zə*, Ub *za*, CAbx **r-aʒ́a* 'to decant, filter'

Comments to the items in no.:
(2) The semantics of the supposed Abkhaz counterpart renders its relation to Circassian and Ubykh rather tentative. No better solution is to alternatively compare these latter with CAbx **ʒ́a* 'to steal', 'to hide, conceal'.
(3) The old Circassian affricate is probably preserved in the Ubykh borrowing from Adyghe: *ʒ́a-pxă* 'pan', cf. contemporary Adyghe *ź́a-pxă(ă)* 'pan with handle'. It is possible that the Ubykh cognate to these items is contained in the metaphoric expression *sə-g°ə wa-ʒ́a-n* 'I feel sorry, pity', which can be understood literally as 'my heart burns amidst sth' (cf. structurally Abx *s-g°ə Ø-bəl-wa-jt'* 'id.', lit. 'my heart burns'), though *ʒ́a* here may also be the verb 'to fall' (cf. comparison under (2) above). Cf. also *ź́a* in Ubykh is *qā-ź́a* 'pap remaining on the bottom of the cauldron' (?).
(5) The Abkhaz word, if it is really a compound, contains **ta* 'place, stand, home'.
(7) The comparison can be valid only if the Ubykh element *ʒ́a* expresses the idea 'something wet', and is not the verb *ʒ́a* 'to fall (of light objects)', 'to throw'.
(9) The CAbx reconstruction is based on Bz *a-bgə-ʒ́ər*, Tap *zarə* 'cornel fruit' (*bgə* < **baga* 'jackal, fox, wolf'). In Circassian an irregular spirantization (**ʒ́a* > **ź́a* > **za*) is supposed to have taken place.
(10) It is possible that Ub *za* is just a lone from Circassian (despite the difference in the vowel). The Abkhaz verb contains the causative prefix **r-* and the root-initial **a-*. Sometimes CAbx **aʒ́a* is regarded as being derived from **ź́a* 'to settle and become clean (of liquid)' or, as adjective, 'settled, clean (of liquid)' (cf. ES I: 212), which is not plausible either phonetically (cf. **aʒ́a* vs. **ź́a*) or semantically.

2.2.2. CWC **ʒ́°* > CCirc **ʒ́°* : Ub *ʒ́°* : CAbx **ʒ́°*, **ź́°*
Examples:
(1) **ʒ́°a* CCirc **ʒ́°a* 'to dam, fill, block up', **ħa-(n)ʒ́°a* 'haystack, rick' (**ħa* 'barley'), CAbx *ʒ́°a* 'to vomit'; cf. perhaps also *ʒ́°ə* in SAbx *a-γə-r-ʒ́°ə* 'sperm' (*a-γə* 'penis')
(2) **ʒ́°a/ə* Ub *ʒ́°a*, CAbx **ź́°ə* 'to drink'
(3) **ʒ́°a* CAbx **ʒ́°a-ʒ́°a* 'to wash' (a reduplication)

Comments to the items in no.:
(1) The comparison given here is rather tentative because of the semantics. For the semantic developments cf. typologically similar OInd *vápati* 'ejaculates

semen', *vápra-* 'earthdam' (cf. GI 515). Nikolayev and Starostin (NS 553) prefer to connect CCirc **ʒ̑ʷa* with the Abkhaz item in (3).

(2) In Abkhaz the spirantization of **ʒ̑ʷ* is supposed (cf. MS 40, 100). I agree with Shagirov (ibid.) that CCirc **ʂ̑ʷa* 'to drink' might not belong here, though I compare it with a different Abkhaz root from Shagirov (cf. below, under CWC **ʂ̑ʷ*).

2.2.3. CWC **ć* > CCirc **s* : Ub *ć* : CAbx **ć*

Examples:

(1) **ća* CCirc **-sa* in **t̄əγʷa-sa* 'yesterday', **ʐ̑ʷa-sa-* 'day before yesterday', CAbx **-ća* in **ja-ća* 'yesterday', **ʐ̑ʷa-ća* 'day before yesterday'

(2) **ba/əća* Ub *bəća* 'a sort of deep basket without handles' (HV 222), 'shed made of branches' (DA II: 193), *bəć-akʷ* 'small basket' (*akʷ* 'short-tailed, little'), CAbx **ba/əća* 'twigs for wattle'

(3) **ćə* Ub *t'qʷa-ć* 'fork' (*t'qʷa* 'two'), Bz *ajxa-ć* 'iron hooks for climbing rocks' (*ajxa* 'iron')

Comments to the items in no.:

(1) CCirc **ʐ̑ʷa-sa-* is restored on the basis of Kab *văsă-* 'day before yesterday' (cf. MS 83).

(2) The Ubykh words could mean etymologically 'sth wattled of twigs, branches', cf. CAbx **ba/əća-q'a* 'sth wattled', 'wattled planking' (**q'a* 'flat'), Bz *a-bəća-q'' jʷnə* 'wattled hut' (*a-jʷnə* 'house').

2.2.4. CWC **ć°* > CCirc **ć^h°*, **c̄°* : Ub *ć°* : CAbx **ć°*

Examples:

(1) **ć°a/ə* CCirc **ć^h°a/ə* in **bza-g°ə-ra-ć^h°a/ə* 'tongue-tied, inarticulate' (**bza-g°ə* 'tongue', **-ra-* instrumental affix), **ć^h°a-x̌°a* 'to creep, slide', Ub *bźa-ć°ə* (HV 92), *bźā-ć°a* (DA III: 220) 'stuttering, stammering' (*bźa* 'tongue'), *q'ə-nć°a* 'to make mistakes while speaking' (*q'a* 'to speak'), *λa-ja-nć°a* 'to slip while walking' (*λa-ja-* 'under the foot'; cf. Dumézil 1975: 211)

(2) **(a)ć°a/ə* Ub *ać°ə* 'bad, evil', 'damage' (DA III: 217), CAbx **aj-ć°a* 'worse' (**aj-* comparative prefix), **ć°ə-g'a* 'bad, evil'

(3) **ć°ə* CCirc **c̄°ə*, Ub *ć°ə*, CAbx **ć°ə* 'bull'

(4) **ć°a* CCirc **c̄°a-bza* 'ploughshare' (**bza* 'to cut', itr.), CAbx *ć°a-γ°a* 'to plough', Ub *ć°a/ə-χ°ə* 'earth', *jə-ć°a* 'land, earth'

(5) **ć°ə* Sh *k'ə-ć°ə* 'twigs with leaves' (*k'ə* < **k^h'ə* 'brushwood, twigs', *-ć°ə* <

either *ć^{h}°ə, or *ć́°ə), Ub *ć°ə* in *ć°əcə* 'thicket', CAbx *kəć°ə* 'small thin dry stem, stalk', cf. also *ć°ə* in CAbx *k°ə-ć°ə* 'top, head (of tree, mountain)' (*k°ə* 'top, roof'), *qə-ć°ə* 'plait, braid, hare', 'comb, crest of bird' (*qa* 'head')

(6) *ć°əndə CCirc *ć́°əndə* 'rook, raven', 'black', CAbx *ć°əndə-r-š°š°ə* 'swarthy, blackish' (*-r-* is either connective, or causative affix, *š°š°ə* is 'dark', connected with *š°ə* 'to paint')

(7) *ć°a Ub *ć°a-šχə*, CAbx *žə-ć°a* 'to spit', Abx also 'spittle', cf. also CAbx *ć°ə-ħa* 'humid, wet', *ć°ə-k^{w}əbarə* 'drop', *ć°ə-k°ə-r-pa* 'wave' (*k°ə* 'top', *r-* causative, *pa* 'to jump')

(8) *ć°a Ub *ć°a*, CAbx *ć°a* 'skin, hide'

(9) *ć°a Ub *-ć°a* 'finger' in *q'a-(n)ć°a* 'finger' (*q'a* 'hand'), *λa-(n)ć°a* 'toe' (*λa* 'foot'), CAbx *ma-ć°a* 'finger' (*ma* 'hand'), *šʼa-ć°a* 'toe' (*šʼa* 'foot')

(10) *ć°a CCirc *ć^{h}°ə-* prefix adding to the verb the meaning of the intensity of the action, cf. Ad *txə* 'to scratch, tear (off)', *ć°ə-(n)txă* 'to tear apart', *ć°ə-(n)txa-k^{w}ă* 'predator, robber', Ad *zăxă-ć°ə-(n)txă*, Kab *zăxă-fə-txă* 'to tear out, apart, scratch all over' (*ză-* reciprocal prefix, *-xă-* 'mass'), Ub *-ć°a* verbal and nominal suffix of excessiveness (e.g. *a-s-fə-ć°a-n* "it-I-eat-to excess", 'I eat too much'), CAbx *-ć°a* verbal suffix of excessiveness, plural suffix of 3 p.pl. (hum)

(11) *ć°a/ə Sh (NM) *ć°ə-λə*, CAbx *ć°a* 'to suck'

Comments to the items in no.:

(1) Shagirov (ES I: 93) regards CCirc *ć^{h}°a/ə* as onomatopoeic element, which is rather doubtful. Kuipers (PC 30) justly connects this Circassian morpheme with *-ć^{h}°a* in Bzh *ʔă-bə-ć^{h}°ă* 'mitten' (*ʔă* 'hand', *bə* 'hollow') and the verb *ć^{h}°a-x̌°a* 'to creep, slide'.

(4) All West Caucasian items given here can represent presumably the CWC root *ć°a* 'land, earth'. CCirc *ć́°a-bza* could be analysed then as 'earth-cut', CAbx *ć°a-γ°a* as 'earth-press' (cf. CAbx reduplicated verb *γ°a-γ°a* 'to press'). The independent word for 'earth' is preserved in Ubykh, cf. examples in (4). *jə-* in Ub *jə-ć°a* Dumézil 1971: 152 regards as the deictic prefix: 'cette terre-ci'. In Abkhaz this root can be supposedly seen also in CAbx *na-r-ć°ə* 'the other side of the river, sea' (*na* 'thither', *-r-* connective), *ħa-r-ć°ə* 'this side of the river, sea' (*ħa* 'hither'). Abx *a-ʒ-nə-r-ć°* 'the other side of the river, across the river' (*a-ʒə* 'water, river') structurally resembles Kab *ps-a(n)drə-śʼ* 'across the river, the other side of the river' (*psə* 'water, river', *a-(n)d-rə* 'the other', *śʼə* 'land, earth'; Urusov 82),

which can support the analysis of the Abkhaz compounded word. Another Abkhaz word where the alleged **ć°a* 'land, earth' might be preserved, is *a-ć°ə-msarpəl* 'mole' (with an unclear second part), cf. structurally Kab *ś'ə-ɬ°ə-b* 'mole', with *ś'ə* 'land, earth' in the first part. Nikolayev and Starostin (NS 602) alternatively reconstruct the original meaning of PWC **ć°a* in (4) as 'plough'.

(5) Ub *ć°ək°a* 'lock (of hair)' is probably borrowed from Abkhaz (cf. Chirikba 1986a: 118).

(6) The Abkhaz word is found in Jashyra isolect of Bzyp. Shagirov (ES I: 107) suggests that the Circassian word is an old borrowing from Oss *sənt//sunt* 'raven' (connected with Pamir *šönd* 'id.'), which is very doubtful: Ossetic *su-* could give in Common Circassian **šʷ-, šw-, sw-*, or **ś°-*, but not **č°-*.

(8) Many authors add to the Ubykh and Abkhaz items also CCirc **ś°a* 'id.', ignoring the irregular character of such correspondence (cf. MP 344; ES II: 100; ZS 76; NS 228-9); cf. Kuipers 1963: 57.

2.2.5. CWC **ć'* > CCirc **ś'*, **c'* : Ub *ć'*, *c'*, *ć* : CAbx **ć'*, **ć*

Examples:

(1) **ć'a* CCirc **ś'-q'a* 'to know', Ub *ć'a* 'to know, learn', CAbx **ć'a* 'to learn', **ć'-ħa* 'to ask'

(2) **(p')ć'a* CCirc **p'c'a/ə* 'sharp', 'to sharpen', Ub *-ć'a* *'sharp', CAbx **ć'a-ra* 'sharp'

(3) **p'ć'a* CCirc **p'c'a-na* 'naked', Ub *p'ć'a* 'clean'

(4) **ć'ə* CCirc **c'ə-na* 'wet, green', Ub *ć'ə-(n)ʒa* 'wet, humid'

(5) **mać'a* CCirc **mac'a* 'locust', CAbx **mć'ə* 'fly'

(6) **ć'a* CCirc **c'a*, CAbx **ć'a* 'louse'

(7) **m/nć'ə(ra)* CCirc **c'ə* in Ad *qa-mc'ə-č'*, Kab *ħă-mc'ə-ra-č'ă* 'wart', CAbx **ć'ə* in **k'(')an-ć'ə(ć'ə)-ra* 'wart', cf. also Tap *c'ənk'ŕa* 'id.'

(8) **ć'ə/a* CCirc **c'ə-kʷə* 'small, little', Ub *ć'a* 'new, fresh, young', CAbx **ja-ć'a* 'younger' (**ja-* comparative prefix), **ć'ə-kʷ-man* 'small (of people, animals)', **ć'ə-śə* 'new', 'small, little'

(9) **(p)ć'a/ə* CCirc **p'c'a-šx̌°a* 'swallow' (**šx̌°a* 'blue'), Ad (Urusov 111) *p'c'a-wă* 'small butterfly', Ub *ć'ə-t°a* 'kind of bird' (*t°a* 'motley (colour)'), CAbx **ć'ə-śə* 'bird' (**-śə* diminutive suffix)

(10) **məć'a* CCirc **p'c'ə*, Ub *məća*, CAbx **məćə* 'lie, falsehood'

(11) **ć'a* Ub *ća-* comparative prefix, 'more', CAbx **c'a* in SAbx *jə-c'a-gʲə*, Tap *rə-c'a(-gʲə)* 'more' (*jə-* 'its', *rə-* 'their', *-gʲə* 'and')

(12) **ć'a* Ub *ć'a* 'bottom' (cf. *ba-ć'a* 'id.', *ša-ć'a* 'cushion', with *ša* 'head'), CAbx **c'a* 'bottom'

(13) **bəć'ə* Ub *bəc'ə*, CAbx **r-bəć'ə* (**r-* causative) 'to crush, crumple'
(14) **ć'a* CCirc **ś'a*, Ub *c'a*, CAbx **ć'ə* 'to pass (of time)'
(15) **məć'ə* Ub *məć'ə*, CAbx **mć'ə* 'narrow, tight'
(16) **ba/əć'ə* CCirc **p'c'a* 'entire, massive, thick', 'to thicken, become a jelly-like mass', Ub *baćə* 'to become thick, fat, swollen', 'be abundant, numerous', CAbx **qa-bəćə* 'to fly round, stay in swarm, crowds (of birds, insects, people)'

Comments to the items in no.:

(2) The Circassian morpheme is found in CCirc **məẑ°a-wə-p'c'a* 'whetstone' (**məẑ°a* 'stone', **wə-* verbal prefix), **pʰa-p'c'a* 'sharp-pointed' (**pʰa* 'nose'), **wə-pʰa-p'c'ə* 'to sharpen (a pointed object)'. The Ubykh cognate is contained in *fa-ć'a* 'nose', 'end' (**fa* 'nose'), cf. CAbx **pə-n-ć'a* 'nose' (**pə* 'nose', *-n-* locative affix (Shakryl 1968: 23), connective affix (NS 1046) or just an increment, cf. MS 59). Dumézil 1974: 25 analyses *-ć'a* in Ub *fa-ć'a* as 'case', but it is difficult to separate this Ubykh morpheme from *-ć'a* in CAbx **pə-n-ć'a*, whose connection with CAbx **ć'a-ra* 'sharp' is very likely (cf. Shakryl, ibid.; NS 1046). Abdokov (FL 62) regards the initial *p'-* in Circassian as a fossilized class marker. It is tempting to compare the Abkhaz and Ubykh words with Kab *pănc'əv* < **pă-n-c'əẑ°ə* 'tip of the nose', cf. Ash *pənc'əž°* 'nostril' (cf. FL 62), but its etymology remains uncertain. Shagirov (ES II: 10) analyses it as *pă* 'nose' and *c'əv* 'beetle, cockroach' (with epenthetic *-n-*), which is not quite convincing semantically. I would rather agree with Nikolayev and Starostin (NS 1046) who regard the Kabardian word as a loan from Ashkharywa. The latter is analysed by Starostin as *pənc'a* 'nose' and *-ž°* expressive suffix. It is important, though, to check whether we really have in Ashkharywa *-ž°*, or *-ẑ°*, as the cited Ashkharywa form is borrowed from the Standard Abaza dictionary (AbR 312), which fails to distinguish between *-ž°* and *-ẑ°*, both present in Ashkharywa.

Shagirov (MS 92) connects CCirc **p'c'a/ə* with different Ubykh and Abkhaz material.

(3) The Circassian morpheme **pć'a* is found also without the suffix **-na*, cf. **λa-p'c'a* 'barefooted' (**λa* 'foot'), **śha-p'c'a* 'with uncovered head' (**śha* 'head'), etc (MS 92).

(4) Ub *c'əna* 'wet' is borrowed from Circassian (ES II: 126).

(5) The comparison given here is valid only if CAbx **mac'a* and Ub *māc'a* are really loans from Circassian, about which I am not quite sure. Nikolayev and Starostin (NS 824) regard these Ubykh and Abkhaz words as genetically connected to CCirc **mac'a*, rejecting the idea of their borrowing from Circassian.

(8) The second element of CCirc **c'ə-kʷə* and CAbx **ć'ə-kʷə* is found also in CAbx **č'-kʷə-na* 'young (boy)' (*-na* diminutive suffix). For Ubykh cf. also *ć'ə-śə* 'to crumple, break into little particles', *ać'ə-k'* 'stone (of fruit)'.
(9) The second part of the Circassian word means 'blue' (ES II: 50). The similar Ubykh forms like *c'ərxa, c'əšxa, c'āšx̌ʷa, p'c'āšx̌ʷa* are risky to add here, as they are most likely loans from Circassian, as was suggested by Shagirov (ES II: 50).
(10) Ubykh and Abkhaz, though having lost glottalisation, probably retain the older form of the word for 'lie'. This assertion can be supported by a possible etymology of the CWC word: **mə-ć'a* 'lie', 'non-truth', with the negative affix **mə* and **ć'a* 'truth', preserved as such in Abkhaz. The development in Circassian thus was **mə-ć'a* > **mć'ə* > **p'ć'ə* > **p'c'ə*.
(15) The Abkhaz morpheme **mć'ə* is reconstructed by Shagirov from Abzh *a-g˚-a-mc'-ra*, Bz *a-g˚-a-nć'-ra* 'to worry, trouble', lit. 'the narrow, tight heart (*a-g˚ə* 'heart')', cf. CCirc **g˚ə-zaẑ˚a* 'to worry, trouble', with **g˚ə* 'heart' and **zaẑ˚ə* 'narrow, tight' (cf. MS 90). Dumézil 1975: 169 analyses the Ubykh word in a different way.
(16) If CCirc **p'c'a* is really connected with the given Ubykh and Abkhaz material, the evolution in Circassian then must have been as follows: CWC **bə/ać'ə* > PCirc **p'ć'ə* > CCirc **p'c'a*.

2.2.6. CWC **ć*ʷ > CCirc **ś*ʷ : Ub *ć*ʷ : CAbx **ć*ʷ

Examples:

(1) **ć*ʷ*a* CCirc **ś*ʷ*ə*, Ub *ć*ʷ*a*, CAbx **(g˚-a-)ć*ʷ*a* 'liver'

(2) **ć*ʷ*a/ə* CCirc **ś*ʷ*a-* 'sharp point, tip, end, spike', 'peg, hook', cf. also **ś*ʷ*a-λa* 'the front legs' (**λa* 'foot, leg'), Ub *γa-nć*ʷ*ə-n* 'the front part' (Dumézil 1959: 15; *γa-* possessive prefix), *an-ć*ʷ*ə* 'before; earlier', CAbx **ć*ʷ*ə* 'stick with sharpened end', 'spit (for roasting)', 'bolt, spigot'

(3) **ć*ʷ*a* CCirc **ś*ʷ*a-məč'ə*, Ub *g'a-(n)ć*ʷ*a* 'coal'

(4) **ć*ʷ*a* CCirc **ś*ʷ*ə-c'a* 'black', cf. also **ś*ʷ*ə-(n)k'ə* 'dark', **pčа-ś*ʷ*a* 'lead', Ub *-ć*ʷ*a* in *wə-ć*ʷ*a* 'iron', etymologically probably 'the black metal', cf. Ub *wə-ś˚a* 'copper', lit. 'the light (*ś˚a* 'white') metal' (cf. FL 48), cf. also CAbx **ć*ʷ*a* in such colour terms as **ajk˚a-ć*ʷ*a* 'black', **ja-ć*ʷ*a* 'blue, green'

(5) **ć*ʷ*a* Ad *(-)ś*ʷ*a*, Kab *-f'ă* emphatic particle (Ad), adjectival suffix denoting big quantity of sth: Ad *kʷač'a-ś*ʷ, Kab *g˚aś'a-f'ă* 'strong, energetic' (*kʷač'a/g˚aś'ă* 'strong'), CAbx **ć*ʷ*a-q'a* particle 'precise, just', *-ć*ʷ*a* emphatic particle (*d-g˚ərγ'a-ć*ʷ*a* '(s)he (being) very

happy')

(6) **ć‟ać‟a* Ub *ć‟ać‟ə* 'to feel pain, suffer', CAbx **-ć‟ać‟a* emphatic particle of intensity (as colour, cold)'

(7) **ć‟a* CCirc **ś‟a-ʔ°ə*, Ub *ʒ°a-q'ə*, CAbx **ć‟ə* '(to turn) sour', cf. also Tap *č‟-q'a* (< **ć‟ə-q'a*) 'sour'

(8) **ć‟ə* CCirc **ś‟a-jə* 'dirt(y), filth(y)', Ub *q'ə-ć‟ə* 'to soil, make dirty', *q'ə-ć‟-q'a* 'dirty', CAbx **ħ°ən-ć‟ə* 'dirt, filth', **q'ə-ć‟ə* 'wet, saturated with water', 'rotten, tainted, spoiled (of food)'

(9) **(ja-)ć‟a* Ub *ć‟a-(n)k'*, CAbx **jać‟a* 'star'

(10) **ć‟a/ə* CCirc **ś‟ə-jə* 'to squeak, cheep', Ub *ć‟a*, CAbx **ć‟ə-wa* 'to cry, weep', **ć‟a-ħ(ħ)a* 'to cry, shout, squeal'

(11) **ć‟ə* Ub *ma-ć‟ə* 'morning', CAbx **wa-ć‟ə* 'tomorrow' (**wa-* deictic)

(12) **ć‟ə/a-* Ub *ć‟ə-pšə-k'*, Tap *č‟a-j-c* < **ć‟a-j-cə* 'sparkle'

(13) **ć‟a* Ub *(n)ć‟a-ž°a* 'fruit', CAbx **ć‟a* 'apple'

Comments to the items in no.:

(2) Cf. also Kab *f'ă-rə-wəč'ă* 'peg, pile' (*wəč'ă* 'to ram in', *-rə-* instrumental affix, cf. Urusov 115) and CAbx **ć‟ə-ħ°anə* 'stake, picket'. The first part of Ub *an-ć‟ə* can be connected with CAbx **anə* 'when', cf. also CAbx **an-k'a* 'earlier, in older times'.

(3) The second element in CCirc **ś‟a-məč'ə* can be compared with CAbx **məč'ə* 'wood (especially for fire)'.

(4) Usually CCirc **ś‟ə-c'a* is being compared with the element *-ć‟a* in CAbx **ajk°a-ć‟a* 'black' and with Ub *ʒ'a* 'black' (cf. e.g. ZS 142), which is difficult to accept. In CAbx **ajk°a-ć‟a* the element *-ć‟a* is only the intensity suffix (same as in **ja-ć‟a* 'green, blue'), as was justly noted by Christol 1986: 5. Another Ubykh word containing **ć‟a* 'black' might be *məγa-ć‟a* 'alder-tree', cf. for the first part *məγa-sə* 'hornbeam' (*sə* 'wood').

(5) Cf. also CCirc **x°a-ś‟ə* 'just right, fit' (**x°a-* benefactive prefix). The Circassian morpheme is likely to be derived from the adjective **ś‟ə/a* 'good' (cf. Urusov 241).

(6) The Ubykh item probably preserves the original meaning; the semantic shift 'bad, awful' > 'very' is quite typical, cf. Abx *a-ć°g'a* 'bad', *ć°g'a-la* 'very, badly', English *badly, awfully*, Dutch *erg*, Russian ужасно in the meaning 'very', etc.

(7) In Ubykh *ʒ°a-q'ə* the original **ć‟* became voiced. Dumézil and Esenç 1976: 19 derived *ʒ°a-* from *ʒ°a* 'to drink', which is not plausible semantically. Cf. also CAbx **ć‟əć‟ə* 'sour', 'sad, cheerless','unpleasant' (reduplication of **ć‟ə*).

(8) The second part in CCirc **ś‟a-jə* can be alternatively analysed either as **ja*

'bad' (cf. ES II: 102), or rather as **ja/ə* 'to smear, coat (the walls of the house)', cf. for the latter case CAbx **q'ə-šʼə* '(to) dirty', with **q'ə* 'shit' and **šʼə* 'to smear'. Shagirov's attempt to connect the first part with CCirc **śʷə* 'good' cannot be regarded as successful for semantic reasons. The element **śʷa-* in CCirc **śʷarqʰə* 'turbid, muddy' can be the same as in **śʷa-jə*, while *-qʰə*, as well as Ub *q'ə-* in *q'ə-ćʷə* can be connected with CAbx **q'ə* 'faeces'. The first part of CAbx **ħˤən-ćʷə* is not clear.

(12) *-j* in CAbx **ćʷəj-cə* renders the idea of diminutiveness (cf. Tap *c'əj-s* 'bird' vs. SAbx *c'ə-s*, etc.), while **-cə* denotes singularity (just as the final *-k'* in the Ubykh word). It is possible to speak about the connection of the items in (12) with those in (3).

(13) The second element in Ub *(n)ćʷa-ẑʷa* is probably *ẑʷa* 'branches'.

2.3. THE CWC BACK SIBILANT AFFRICATES

2.3.1. CWC **ǯ* > CCirc **ǯ* : Ub *ǯ* : CAbx **ǯ*

Examples:

(1) **baǯə* CCirc **baǯə* 'to fall', CAbx **kˤə-baǯə* 'to press hard on smb/sth', 'to lie on a woman against her will' (**kˤə* 'top')

(2) **ǯə* CCirc **q̄a-žə* (**q̄a-* 'hither'), Ub *ǯə* 'to vomit'

Comment:

If in (2) the affricate is older, it must have been spirantized already in Proto-Circassian, as the Kabardian reflex *ź* (in *q'ă-źə* 'to vomit') can reflect here only CCirc **ž*.

2.3.2. CWC **ǯʼ* > CCirc **ǯʼ* : Ub *ǯʼ* : CAbx **ǯʼ*

Examples:

(1) **ǯʼə* Ub *ǯʼə*, CAbx **ǯʼə-kʼa* 'salt', CCirc **čʰʼə-γˤə* 'salt' might also belong here, with **čʰʼ* instead of **ǯʼ* probably due to an (irregular) devoicing

(2) **ǯʼa* Tem *ǯʼă-nəqˤ* 'hearth, place before hearth' (with *nəqˤă* 'half' ?, cf. ES I: 161), *ǯʼă-gˤə*, ZenBes *ǯʼă-gˤ* (Paris 1974: 143) 'hearth' (*gˤə* 'surface'), Ub *ǯʼa* 'back (side), behind', cf. also CAbx **ǯʼə-qʷə* 'hump; humpbacked' (**qʷə* 'bent')

(3) **ǯʼə* CCirc **-ǯʼə* 'again', 'back' (suffix), Ub *jə-ǯʼə* 'to come back' (*jə-* prev. 'hither', suffix *-ǯʼə* 'again, back'; cf. MS 14, 100; Dumézil 1932: 217), *λa-qʼa-ǯʼə* 'to follow smb, to look for' (*λa-qʼa* 'trace')

(4) **ǯʼa* CCirc **ǯʼa-γˤa* 'odious, unpleasant', Tem also 'enemy', **ǯʼa-γˤə* 'to

get fed up with smb', cf. also Kab *jə-ž* 'evil design; envy', *jə-žă* 'to envy' (PC 35), Ub *ʒ́a* 'grieve, pain, suffering, difficulty', *ʒ́a bəja* 'to give trouble, pains' (*bəja* 'to see'), also probably *ʒ́a-γ°aγ°ə* 'enemy', CAbx **r-ʒ́a* 'to abuse, revile, defame' (**r-* causative), **ʒ́a-ba* 'to mourn, grieve' (**ba* 'to see'), **ʒ́a* 'labour, work', **ʒ́-abɦa* 'hard labour' (**abɦa* 'rotten'), SAbx *a-ʒ́a-məγ°a* 'unhappy, unfortunate' (*məγ°a* < CCirc **məγ°a* 'poor, unfortunate')

(5) **ʒ́a/ə* CCirc **śha-ʒ́ə* 'every(thing/one)' (**śha* 'head'), cf. CAbx **ʒ́a-wə-k'ə* 'somebody' (**wa* 'alike', *-k'ə* 'one'), **ʒ́a(-ra)* 'somewhere', cf. also suffix *-ʒ́a* in **ɦ°ə-ʒ́a* 'two (hum)' (**ɦ°ə* 'two'), as opposed to **ɦ°ə-ba* 'two (nonhum)'

(6) **ʒ́ə* CCirc **-ʒ́ə* suffix adding up to the comparative degree of adjectives the meaning of the domination of the quality, e.g. Kab *năx̌ λaśə-ž* 'even stronger', *năx̌ bədă-ž* 'id.', Ub *za-ʒ́ə* 'unique' (*za* 'one'), CAbx **-ʒ́ə* suffix intensifying the meaning of the word: SAbx *kaɦpə-ʒ́* 'prostitute' (*a-kaɦpə* 'prostitute' < Tu), Bz *a-x̱°də-ʒ́* 'with thick neck' (*a-x̱°da* 'neck'), *a-kdə-ʒ́* 'very heavy' (*a-kdə* 'log')

(7) **məʒ́ə* CCirc **məʒ́ə* in **śha-məʒ́ə* 'ear (of cereal)' (**śha* 'head'), cf. CAbx **məʒ́ə* in Bz *a-gəd-məʒ́* 'curtailed (of head's hair)' (*a-gədə* 'hornless'), *x̌ax̌-məʒ́* 'with leafless stuck up twigs (as tree)', 'bristle (hair)' (*a-x̌ax̌a* 'scant, thin', 'branchy')

(8) **pəʒ́ə* CCirc **pəʒ́ə* 'buckle, clasp', cf. also **q'aʒ́-pə(n)ʒ́ə* 'horse-brass' (Urusov 93-94), CAbx **pəʒ́ə* 'buckle, clasp', **la-pəʒ́ə* 'eye-lash' (**la* 'eye')

(9) **ʒ́ə* CCirc **ʒ́ə* 'distorted, crooked, inclined, bent' in **pxa-nʒ́ə* 'distorted, crooked, wrong', **bγ°ə-nʒ́ə* 'inclined, bent, crooked' (**bγ°ə* 'side, edge'), CAbx **aj-ʒ́ə* 'wrinkled', 'wrinkle', 'tuck (on dress)', 'to shrivel, shrink', **r-aj-ʒ́ə* 'to stoop, become bent', 'to pucker, wrinkle' (**r-* causative)

(10) **(b)ʒ́ə(-nə)* CCirc **bž́ənə*, CAbx **ʒ́əm-pšə* 'onion' (**apšə* 'red'), CCirc **bž́ənə-x°ə* (**x°ə* 'white'), CAbx **ʒ́ə-šə* (**šə* 'white') 'garlic'

(11) **(b)ʒ́a/ə* CCirc **Lə-bž́a* 'to fry (on oil, fat)', **bž́ə-bž́a/ə* 'to burn, smart', **jə/a-bž́a* 'to burn, itch', CAbx **ʒ́ə* 'to fry, grill'

(12) **bʒ́a/ə* CCirc **pč́a-jə* 'plane-tree', in Sh 'beech-tree' (*-jə* attributive suffix), CAbx **ʒ́ə* 'oak'

Comments to the items in no.:

(1) The final element in CAbx **ʒ́ə-k'a* is not clear.

(2) Kab *źăg°* 'hearth' shows discrepancy as it has *ź* instead of the expected *ž* (cf. the regular ZenBes example). The affricate here is considered to be original (cf. ES I: 199; Kumaxov 1981: 180). The comparison of the Circassian material with Ubykh, suggested by Shagirov (ES I: 161), is of course, rather tentative for semantic reasons.

(4) Vogt (HV 2522) regards Ub *ʒ́a* as a semantic derivative of *ʒ́a* 'black'. Such a development ('black' > 'suffering, grief, mourning') in principle seems plausible. If this assumption is correct (cf. the same suggestion in Charachidzé, Esenç 1992-93: 24), then the Circassian and Abkhaz material must supposedly be also derived from the basic meaning 'black' (cf. Rus чернить 'to defame', from the adjective черный 'black'; cf. also *ʒ́a* in SAbx *ʒ́angára* 'black (usually of mourning)' in AB II: 536, which can be analysed as *ʒ́a* 'black' and *a-ga-ra* 'to carry', if it is not a loan). Dumézil 1971: 158, connecting the Abkhaz material with Ub *ʒ́a* 'pain, difficulty', does not unite, however, the latter with Ub *ʒ́a* 'black'. The alternative is, consequently, that in Ubykh we deal in fact with two homophonous, unrelated morphemes.

(6) For Ub *za-ʒ́ə* cf. Dumézil's analysis in DA III: 253: 'sides reciprocally together', whence 'from all sides, completely', which, given the Circassian and Abkhaz material, does not seem to be altogether satisfactory.

(7) The morpheme homophonous with that given here, found in CAbx **q'arq'ə-məʒ́ə* 'Adam's apple' (**q'arq'ə* 'throat'), Bz *a-c'əc'-məʒ́*, Abzh *a-məc'-məʒ́* 'pomegranate' might represent a different root. In principle, this **məʒ́ə* can either be analysed as **mə*, akin to CCirc **mə* 'apple' and Ub *mə* 'wild apple', with unclear **ʒ́ə*, or be compared as a whole with the Daghestanian words for 'apple', cf. Avar-Andi **ʔimči*, Tsez **ʔēš*, Lak *hiwč*, Darg *hinc*, Lezgi **ħämč*, Xin *mɨč* (all forms cited from NS 237). The alternative comparison with these Daghestanian words of CAbx **bərəc°ə//bac°ə* 'medlar' (and of Nakh **ħamc* 'medlar') in NS 237 seems less probable.

(9) The first part of CCirc **pxa-nʒ́ə* is not clear, while the initial nasal in the second part is quite likely epenthetic. **aj-* in CAbx **aj-ʒ́ə* is either a reciprocal prefix, or the homophonic (fossilised) prefix met in other adjectives (cf. **ajʒa* 'raw, fresh', **ajša* 'bitter', **ajća* 'to distort', 'distorted', etc).

(10) Ub *ž°amλə* (< **ž°am-pλə* < **ž°an(ə)-pλə*, with *pλə* 'red') 'onion' and *ž°a-š°a* (< **ž°a-ś°a*, with *ś°a* 'white' turned to *š°a* due to assimilation with the initial *ž°*) 'garlic' in all probability also belong to the Circassian and Abkhaz material given here, but a phonetic difficulty, namely, irregular *ž°* in Ubykh, does not allow us to add Ubykh without serious reservations. Nikolayev and Starostin (NS 745-746) explain the irregular Ubykh labialised spirant by the early association of this

word with the verb 'to fry' (Ub *ǯʷa*).

Shagirov's suggestion that the Circassian name for 'onion' and 'garlic' are deverbal nouns, connected with CCirc **jə/a-bžʼa* 'to burn, itch', **bžə-bžʼa/ə* 'to burn, smart' (cf. ES I: 91), seems plausible both phonetically and semantically. He, at the same time, does not connect the verbs for frying in CCirc with those in the sister languages, considering the Circassian verb to be onomatopoeic, which does not seem convincing.

Abdokov (ZS 111) excludes Ubykh and Abkhaz forms while comparing the Circassian names for 'onion' with the supposed Daghestanian counterparts. Like Shagirov, he also derives the Circassian word from the verb: CCirc **bžʼə-bžʼə* 'to burn, itch'.

Nikolayev and Starostin (NS 745-746) link all three West Caucasian words, reconstructing PWC **b-ǯə(-nə)* 'onion'. They explain the irregular reflexes (cf. the Ubykh form with a labialised spirant) by the early association of this word with (unrelated) PWC **bǯə* 'to fry'. Unlike Shagirov (cf. ES I: 91), they regard the segment *-nə* not as an instrumental morpheme, but probably as an original oblique base marker. The initial **b(ə)-* is, according to them, a prefix. I agree with their assumption that in the name of onion we should reconstruct the PAbx form with a nasal resonant, identical to that in the respective Circassian word, which then was assimilated to a bilabial nasal, thus PAbx **ǯən(ə)-pšʼə* > CAbx **ǯəm-pšʼə*. This older form is still preserved in some Tapanta isolects (cf. Gum, Kara-Pagua *ǯəmpšʼə*), while in the rest of the Abkhaz isolects we meet only the later form *ǯəmšʼə*. In the name for 'garlic' this suffix **-nə* is, however, absent. The latter's old, i.e. non-assimilated form, is also to be found in the Tapanta isolects, cf. Gum, Ps *ǯəš* (also in AbR 211), while in the rest of the isolects the later form *ǯəš* prevails.

It is noteworthy that structurally similar designations of onion as 'red onion', and of 'garlic' as 'white onion' are found in other Eurasian languages, cf. Javanese *brambang* 'red onion', on the one hand, and Standard Malay *bawang putih*, Swedish *vit-lök*, Bulgarian *byal luk* 'garlic', all literally meaning 'white onion' (cf. Adelaar 1985: 124, 131).

(11) It is tempting to add to the items given here Ub *ǯʷa* 'to fry' as well, though the irregular labialisation in Ubykh makes such comparison phonetically not plausible.

(12) I agree with Nikolayev and Starostin (NS 857) that the comparison given here is phonetically better than the usual connection of the Abkhaz word for 'oak' with CCirc **čə-ĝə* 'tree', **čə-ĝ-aja* 'oak-tree' (cf. Charaia 23, 45; ES I: 196). It is interesting to suggest an etymological connection between CAbx **ǯə* 'oak-tree'

with CAbx *ʒ́a-ʒ́a 'rough, rigid, coarse', *ʒ́-ba 'strong (of drinks, tobacco)', 'rough, brave (as words, character)'. A similar correlation between the words for 'oak' with the adjectives meaning 'strong, hard, healthy' is observed in Indo-European languages (cf. GI 613).

2.3.3. CWC *ʒ° > CCirc *c̄ : Ub ʒ : CAbx *ʒ°

*ʒ°a CCirc *c̄a 'side' in: *c̄a-ĝa 'ribs', *c̄a-k'a 'edge' (*k'a 'tail'), *c̄a-jə 'mate, partner (esp. in tilling of land)', Ub ʒa- prev. 'beside', 'across', 'bypassing', CAbx *ʒ°a in *ʒ°a 'rib, side' (and prev. 'beside'), *ʒ°a-k'ə-śə 'rib', *ʒ°a-ć'ə-śə 'rib'

Comment:

CAbx *k'ə-śə is a compound suffix, found also in *ma-ć°a-k'ə-śə 'little finger', *šʷa-ć°a-k'ə-śə 'little toe'. It contains the diminutive suffix *-śə and *-k'ə-, which can be compared with the second part of CCirc *c̄a-k'a 'edge'. ć'ə-śə in *ʒ°a-ć'ə-śə 'rib' means 'small, little'.

Nikolayev and Starostin compare with Abkhaz and Ubykh not the first, but the second part of CCirc *c̄a-ĝa, analysing the first part as *c̄a 'tooth, sharp edge' (cf. NS 528).

2.3.4. ? CWC *ʒ°´ > CCirc *ž´ : Ub š° : CAbx *ʒ

*raʒ°´ənə CCirc *īəž´ənə, Ub *daš°anə*, CAbx *raʒənə 'silver'

Comment:

The reconstruction of CWC *ʒ°´, just as in the preceding case, is tentative because of the lack of other lexical correspondences for its support.

The reconstructed word has its obvious parallels in East Caucasian (cf. NS 514); it is further compared with Indo-European words for 'silver' (Arm *arcatc*, Latin *argentum*, OInd *rajatam*, Avesta *ərəzatəm*), derived from IE *Har(ə)g´- 'light, white' (cf. ZL 156-7; NS 514-5). Curiously, closest to CWC *raʒ°´ənə is OInd *árjunaḥ* 'white'.

2.3.5. CWC *č > CCirc *čʰ, *č̌ : Ub č : CAbx *č

Examples:

(1) *čə CCirc *čʰə, Ub čʼə, CAbx *čə 'horse'

(2) *maǩ(°)ča CCirc *maǩ(°)čʰa, Ub maǩ°ča (HV 1066)//mawǩča (MP 245), CAbx *maǩčə/a 'camel'

(3) *čə/a CCirc *-n(ə)-čʰa, Ub -čə privative suffix, CAbx *psə-čə 'weak' (*psə

'soul'), **q-čə* 'to become weak', 'to abate' (**qa* 'head'), **šʼa-čə* 'to have pins and needles in one's leg' (**šʼa* 'foot, leg')

(4) **ča/ə* CCirc **čə̆* 'to run', 'to flow (of water)', Ub *ča* 'to fall (of heavy objects)', CAbx **čča* 'to flow (of water)' (with expressive gemination)

(5) **(a)ča* CCirc **ačʰa-x˚ə* (**x˚ə* 'white'), **ačʰa-pλə* (**pλə* 'red') 'sorts of millet', cf. also Kab *ašă-məxă* 'shepherd's purse' (bot.), CAbx **ča/ə-ħ˚ə-ra* 'harvest', in Tap also 'grain harvest', 'bread'

(6) **(a)ča* CCirc **ača* 'billy-goat', CAbx **ča* 'female deer', **ča-c˚ə* 'male deer' (**c˚ə* 'bull')

(7) **ča/ə* Ub *ča* 'to break (in small pieces)' (used only with preverbs), CAbx **čə* 'to break' (used only with preverbs)

(8) **čaqʷa/ə* Ub *čāqʷə* 'basin', CAbx **čʼaqʷa* 'big wooden mug'

(9) **čə* Ub *čə-da* 'to twist, twirl, spin' (DA III: 259; *-da* verbal suffix), CAbx **r-čə* 'to fold, wrap' (**r-* causative prefix)

Comments to the items in no.:

(1) The palatal character of *čʼ* in the Ubykh name of horse must be secondary and can be explained by the influence of the Shapsygh form (*čʰʼə* 'horse').

(2) A number of authors (Trubetzkoy, Kuipers, Shagirov) regarded the Abkhazo-Adyghean words for 'camel' as loans from other languages, though they failed to provide the source of the alleged borrowing. Shagirov's suggestion of borrowing from Turkic languages, giving as an example Kirgiz *mokočo* 'boogey-man, monster' in the child language (ES I: 262), cannot be considered convincing. Shakryl 1971: 100 saw in the final parts of these words (*čʰa, ča, čə/a*) the word for 'horse'. Though the external borrowing does not seem to be proven, it is quite possible to assume borrowings within the West Caucasian group.

(3) The nasal element in CCirc **-n(ə)-ča* can be, of course, an increment, as it was suggested by Kumaxov (Morf 129-130), though its vocalised form in Abadzax (*-nəč*, used as a parallel form to *-nš(ă)*), can indicate that *-nə* can be an affix here. The second part of the Abkhaz word is supposedly connected with cognates in sister-languages. For the formation cf. especially Ub *psa-qʼa-čə* 'week, feeble' (*psa* 'soul'), almost exactly matching Abkhaz **psə-čə*.

(4) Semantically Ub *ča* does not match the items in sister-languages in a convincing

way. The Abkhaz verb, which seems to be a reduplication (< **ča-ča*), is used only with preverbs: SAbx *a-cʼə-čča-ra* 'to flow from beneath of sth', Tap *k˚ə-čča* 'wave',

SAbx *aj-la-čč-ra*, Tap *a-k°-čča-ra* 'to seethe (of water)'. For the semantics of Ubykh cf. especially SAbx *a-ʒə-l-baa-čča* 'waterfall' (*a-ʒə* 'water', *l-baa-* 'to go down'), *a-ʒ-x̌ə-čča-ra* 'waterfall' (*x̌ə* '(from) above'). Cf. also Ad *čă-r* 'quick, swift-footed', 'swift, rapid (of river)', *ča-p'ă* 'bed of the river' (*p'ă* 'place').
(5) The final *-ra* in CAbx **ča/ə-ĥ°ə-ra* is an abstract suffix, while the segment *-ĥ°ə-* remains unclear.
(8) The palatalisation of the affricate in the Abkhaz form must be secondary.

2.3.6. CWC **č´* > CCirc **čʰ´ (, *č̌´)* : Ub *č´* : CAbx **č´*

Examples:

(1) **č´a* CCirc **čʰ´a*, Ub *č´a* 'milk', CCirc **čʰ´ə* 'to milk', CAbx **č´a-ĥ°ərə* 'specially prepared cheese (by drying the milk)', **č´a/ə(-r-g°ə)* 'udder'

(2) **č´ə* CCirc **čʰ´ə-nə* 'pus, abscess, boil', cf. also CCirc **čʰ´a/ə-rə/a-bə* 'bubble', Ub *č´a-k°əca* 'swelling, tumor, sore', CAbx **č´ə* 'swelling, tumour', 'hernia', **č´ə-ma-za* 'sickness, illness' (**ma-za* 'having')

(3) **č´ə* CCirc **za-čʰ´ə* 'to be bored, tired', 'to miss, long for smb/sth' (**za-* reciprocal prefix), Kab *jă-šə* (< **ja-čʰ´ə*) 'to get tired', Ub *g´ə č´ə* 'to be bored', 'to miss smb/sth' (*g´ə* 'heart')

(4) **č´ə* CCirc **čʰ´ə-ħa/ə* 'to provoke smb' (**ħa* 'to carry, bring'), CAbx **č´ə-č´a* 'to have a habit of pestering, badgering, attacking, following smb', 'to find faults with smb', 'to give oneself up to', cf. also **aj-č´ə-č´a* 'to be hostile to each other' (**aj-* reciprocal prefix), **aj-č´ə-r-č´a* 'to set up against smb' (**r-* causative); can be the same item as in (3)

(5) **wə-č´ə/a* CCirc **q̄a-wəčʰ´ə* (**q̄a-* 'hither'), Ub *wəč´a-da* 'to wake up'

(6) **γ´a-č´ə//*č´a-γ´a* CCirc **γačʰ´ə* 'milk, milk products, food', Ub *č´aγ´a* 'anything which is eaten with bread', 'food (besides bread)', CAbx **č´aγ´a* 'slice of food; piece of food', 'hospitality'

(7) **č´ə-* CCirc **čʰ´ə-q'a*, CAbx **č´ə-ħa* 'to endure, withstand (a burden), be patient'

(8) **č´a/ə* Ub *č´ə-nt°a* 'kind of tree', 'hornbeam' (HV 453), 'beech' (DA III: 224), CAbx **č´a-mħa* 'maple'

(9) **č´a/ə* Ub *č´ə-ʒa* 'to grind, mill', CAbx **č´a-č´a* 'to thresh' (?)

(10) **č´əč´a* CCirc **x̌°ə-čʰ´əčʰ´a* 'to neigh', Ub *č´a* in *š°ač´a* 'to laugh', CAbx **č´əč´a* 'to laugh'

Comments to the items in no.:

(1) The second part of CAbx **čʼa-ĥ°ərə* is not quite clear (a derivation from **ĥ°a* '(to) dry' ?). The element *-r-* in **čʼə(-r-g°ə)* is a connective, *-g°ə* is 'heart', 'centre', or 'surface'.
(3) The prefix *jă-* in Kab *jă-šə* is, according to Shagirov (MS 102), a fossilised oblique object marker. The second part of CAbx **čʼə-čʼa* is not clear.
(5) The initial *wə-* in the Circassian and Ubykh items can be the verbal prefix, while *-da* in Ubykh form is a fossilised suffix (cf. MS 105). The possibility of the Ubykh word being borrowed from Circassian cannot be entirely excluded (cf. Notes 11: 45).
(6) The Circassian word differs from its cognates in the sister-languages by the order of the constituent parts. Shagirov (ES I: 129) analyses the second part of the Circassian word as **čʰʼə* 'to milk', considering the second part as unclear. Urusov 89 tries to connect the first part of this word with **γa* in **γa-ʒ°a* 'the harvest of cereals'; cf. also *γă-* in Ad *γă-txăšʼə* 'a kind of cereal, a kind of wheat' and *γə* in Sh *γəčʼə* 'a kind of millet' (ShD 96).

The Ubykh word, in its turn, is analysed as 'milk-(and)-meat' (cf. MP 288; Dumézil 1969: 104; Charachidzé 1990-91: 222). Finally, on Abkhaz soil the first part can be analysed as **čʼa* 'bread', while the second element can be **aγʼa* 'seed', '(corn) shoots' (?). Charachidzé (ibid.) considers the affinity between the Ubykh and Abkhaz words to be fortuitous, regarding them as mere homophones, not related to each other. I think that these words are undoubtedly connected, though the nature of this connection is not clear: genetical relationship or borrowing ? Though in Chirikba 1986a: 122-123 I suggested that the Abkhaz word can be a loan from Ubykh, because the latter had a satisfactory etymology, now I presume that the direction of borrowing could be, on the contrary, from Abkhaz to Ubykh. The association of the segment *čʼa* in Circassian and Ubykh with 'milk', on the one hand, or, alternatively, with 'bread' in Abkhaz could in fact be due to a later folk-etymology, which could cause the partial shift in the meaning in one or another language. The actual etymology of the CWC word thus remains unclear.
(7) The second part in the Circassian word can be **qʼa* 'to be, exist', while in Abkhaz *-ĥa* can be connected with CCirc **ĥa* 'to carry, bring' (cf. below, under CWC **H*).
(8) The second part of Ub *čʼə-ntʼa* is *tʼa* 'motley (colour)' (*-n-* is epenthetic), while *-mĥa* in CAbx **čʼa-mĥa* is assumed to be the old word for 'wood (as material)', related to CCirc **pxa* 'id.' (see under CWC **Hʼ*). Though Ub *čʼə-sə* 'a kind of tree', 'horse-chestnut' (HV 456; DA III: 224), could be a welcome companion to these words, it is more likely that it consists of *čʼə* 'horse' and *sə* 'tree', cf. Tu *at kestanesi* 'horse (*at*) chestnut', Rus конский каштан, English *horse-chestnut*, etc.

(9) The Ubykh item can be alternatively compared with CAbx *č'a 'bread', 'wheat'; for the second part cf. *za* in CAbx *g°əza 'fine (of dry substances)', 'soft, mild'.

(10) For the initial *x̌°ə- in Circassian cf. also CCirc *x̌°ə-cʰacʰa 'to wisper', *x̌°ə-ś'a 'to grumble'. The Ubykh item shows that in Circassian and Abkhaz we are dealing with reduplication. The first part of the Ubykh š°a- is probably connected with š°ə in CAbx *pə+š°ə-r-č'a 'smile', containing *pə-š°ə 'lip(s)' (*pə 'nose, front'), cf. also *kʲə-š°ə 'lip(s)'. The reconstruction of the Common Circassian word is based on the Kabardian data only (Kab x̌°ə-šəšă 'to neigh', cf. KR 424), which means that it can also be *x̌°ə-čʰəčʰa, as Kab š comes either from CCirc *čʰ, or from *čʰ'. But even in this case a variant CWC reconstruction is possible (*č'əč'a//*čəča), as the irregularity can be easily explained by the word's onomatopoetic nature. It is not clear, how CCirc *čxə is related to the forms in (11). Nikolayev and Starostin (NS 861) reconstruct PWC *λ°ə-čV 'to laugh', suggesting the shift *šəč'a > *čəč'a in Abkhaz and a metathesis in one of the subgroups. But the comparison in (11) proposes a more simple solution.

2.3.7. ? CWC *č° > CCirc *šʰ : Ub ? : CAbx *č°

Example:

*č°ə CCirc *šʰə-bLa 'thunder, lightning', 'god of thunder and lightning' (*bLa 'to burn'), CAbx *č°ə 'lightning', 'god of thunder and lightning'

Comment:

The reconstruction of CWC *č° is tentative because of the scarce material it is based upon.

Note that in Shapsygh 'lightning' is čʲəbLă, i.e. with an initial affricate. Though Shapsygh normally preserves old affricates, there are more chances that the initial čʲ- here, as in a number of other words as well, is a Shapsygh innovation (cf. Kumaxov 1981: 181).

2.3.8. CWC *č' > CCirc *č', *č'ˊ : Ub č' : CAbx *č'

Examples:

(1) *č'a Ub č'a-fa 'front', 'before' (*fa* 'nose'), preverb č'a 'before, in front of', č'a-λ 'before', č'a 'mouth', CAbx *č'a 'mouth', 'face', also preverb 'on the surface', 'in/out of the mouth', suffix 'in, at'

(2) *č(')a Ub č'a 'good', 'to be pleased, happy', CAbx *ča-jə 'good'

(3) *č'a CCirc *q‴ə-č'a/ə 'to cut, hew, trim' (*q‴ə- prev. 'mouth'), CAbx *č'a

'to hew, chop'; cf. also probably Ub *č'ə* 'to lie (as grass after the rain)' (?)

(4) **č'a* CCirc **č'a*, CAbx **č'a* 'new, young, fresh'

(5) **č'a/ə* Ub *č'ə* 'to press, squeeze, trample down, rumple' (DA III: 97), CAbx **r-č'ač'a* 'to squeeze' (*r-* causative)

(6) **k'ač'ə* CCirc **k'ač'ə*, CAbx **k'ač'ə* 'short'

(7) **məč'ə* CCirc **śʷa-məč'ə* 'coal', CAbx **məč'ə* 'wood (as material)'

(8) **ba(mə)č'a* CCirc **bamәč'a*, CAbx **bač'a* 'tick'

(9) **q(')ač'a/ə* CCirc **q̄ʲa(n)č'a* 'rook, jackdaw', CAbx **qʷač'ə-qʷač'ə* 'to croak, croaking' (of frogs)

Comments to the items in no.:

(1) The palatalised character of the affricate in Ub *č'a* 'mouth' is probably secondary, cf. also Ub *č'a-* preverb 'at the face, mouth, in front of, before'.

(2) The affricate in CAbx **ča-ja* has apparently lost glottalisation. The final part can be similar to that in **bzə-ja* 'good'. A probable Circassian cognate is **č'a* in Ad *kʷač'ă*, Kab *gʲaś'ă* 'power, strength'. Abdokov (FL 16) erroneously connects this morpheme with the second element in Kab *p'aś'ă* 'thin', as the latter goes back to CCirc **č''*, not **č'* (cf. Ad *pʷač'ă* 'thin'). The initial consonants of Adyghe and Kabardian words correspond irregularly. Rogava and Kerasheva 1966: 55 think about an assimilation in Adyghe, i.e. *kʷač'ă* from **k̄ʲač'ă*, but one can assume as well an assimilation from *gʲač'ă*, with **gʲə* 'heart'. Shagirov's idea that the Circassian words are borrowed from Turkic languages (cf. ES I: 110) is not plausible for phonetic reasons.

(4) The affricate in CCirc **č'a* underwent palatalisation.

(6) Cf. comments under CWC **k''*.

(7) Cf. comment under CWC **m*.

(8) The compound character of the words for 'tick' is quite probable. Ub *bamәč''* 'tick' (HV 78) is from Circassian.

2.3.9. CWC **č''* > CCirc **č''* : Ub *č''* : CAbx **č''*

Examples:

(1) **mač'ə* CCirc **mač'a*, Ub *mač''*, CAbx **mač'ə* 'small, little, few'

(2) **č'ə* CCirc **γa-č'a-jə* 'to incline, bend' (*γa-* causative, *-jə* fossilised suffix), cf. also *č'ə* in Ad *z-jă-γă-č'ə*, Kab *z-jă-γă-ś'ə* 'to lean against sth; to lie down' (cf. MS 118), **wə-p'λ'-a-(n)č'a/ə* 'to fold in four' (**wə-* verbal prefix, **p'λ'-a* 'four times'), Ub *č'ə* 'to bend', CAbx **k'a-č'ə* 'wrinkled', '(to be) crushed, crumpled' (**k'a-*

preverb), **q"ə-č'ə* 'to be crumpled' (**q"ə-* prev. 'mouth')

(3) **č'a/ə* CCirc **č'ə* in: **t'a-č'ə* 'to undress', **s°ə-(n)č'ə* 'to pluck (bird), tear up', **λa-č'ə* 'to rub off, clean', **ĝə-č'ə* 'to wash (laundry)', **x°ə-č'a/ə* 'to wash the head', **x̌°ə-(n)č'a* 'to rob, raid', Ub *č'a* in: *q"a-č'a* 'to rub, wipe, scratch', *ẑ°ə-č'a* 'to wash', *fa-č'a* 'to tear out (as hair)' (*fa-* prev. 'front'), CAbx **-č'ə* in **bγə-č'ə* 'to pinch, scratch'

(4) **(č'ə-)č'a* CCirc **č'ə* 'to break', **č'ə-č'ə-č'ə* 'sound of crunch, crackle', **č'ač'ə//*č'əč'a* 'to crush, crumple, break', Ub *č'əč'a* 'to break' (HV 519), 'to fall with crackling noise' (Notes 4-6: 34), CAbx **č'(č')a* 'to crack(le)'

(5) **č'əč'ə* Ub *č'əč''* 'wattle', 'stretcher in the form of wattled basket', CAbx **č'(ə)č'ə* 'to wind thread'

(6) **č'ə/a* CCirc **na-č'ə* 'empty', 'hungry' (**na* 'eye', 'opening'), Ub *wə-č'a* 'empty'

(7) **p'č'ə-p'č'ə* CCirc **p'č'ə-p'č'ə*, Ub *p'č'ə-p'č'ə-da* 'to glitter, be iridescent', CAbx *č'č'a* 'to shine'

(8) **č'ə* CCirc **č'ə-max°a* 'winter' (**max°a* 'day'), **č'ə-q'a* 'cold(ness); cold weather', **č'ə-(rə-)λx°ə* 'born in winter (as lamb, etc.)' (**rə-* instr. affix, **λ-x°ə* 'to give birth'), **p'ə-č'a* 'to freeze, feel cold', Ub *č'ə* 'cold', CAbx **č'ə-x̌ə* 'cold', 'cold and rainy weather' (**x̌ə* 'cold'), cf. also perhaps *č'əx̌a* in SAbx *a-g°-a-n-č'əx̌a* 'offence, injury, pretension'

(9) **č'ə* Ub *č'ə-* '(small) particle' in: *č'ə-š°=č'ə-š°ə-nə* 'in small particles' (*-š°ə* diminutive suffix, *-nə* gerundial suffix; cf. DA III: 222), *pqə-č'ə(-nə)* 'by little particles' (HV 1259), *č'a-st'a* 'roe' (*st'a* 'goat'), CAbx **č'ə* 'small particle'

(10) **(p)č'ə/a* CCirc **p'č'a/ə* 'to weed', Kab also 'to clean rough wood', Ub *q'ə-č'ə* 'to cut, make notches', *q'ə-rč'a* 'to cut short', CAbx **qə-r-č'a* 'to hem' (**qə-* preverb 'head', **r-* causative); cf. also **r-ač'a* 'to castrate' (**r-* causative), **č'a-* in CAbx **č'a-k"a* 'to mow', SAbx *a-č'a-k"a-ga* 'kind of scythe' (*-ga* instrumental suffix); here belong also CCirc **wə-pč'a-t^{h}a* 'to cut (e.g. meat)', 'to shred', **wə-(p)k'a-p'č'ə* 'to husk, peel, clean', **wə-p'č'a* 'to mow off, cut off' (**wə-* verbal prefix)

(11) **č'ak(')ə* CCirc **č'ank^{h}ə* 'sound of slap on the face', Ub *č'ak'-č'ak''* 'sound of clapping hands' (Notes 4-6: 34), CAbx **č'ak(')ə* 'noise of crackle' (Tap), 'button' (SAbx)

(12) **č'ərə-č'ərə* Ub *č'ər-č'ər* (Notes 13-15: 22), CAbx **č'ərə-č'ərə* 'to twitter,

chirp'

(13) **č'ə* CCirc **č'ə-x°ə* 'pale, bluish, birch-colour' (**x°ə* 'white'), CAbx **č'ə-rəx̌°ə* 'motley, speckled' (Tap *č'əx̌°* 'blue'), **č'ə-γ-ra* 'speckled, motley' (**γ-ra* 'id.'), **č'ə-š°(š°)ə* 'sooth', 'to daub', 'to dirt' (**š°(š°)ə* 'to paint', 'become dark')

(14) **məč'ə* CCirc **p'č'ə-jə* 'seed of plane-tree' (*-jə* attributive suffix), CAbx **məč'ə* 'maple(-tree)'

(15) **p'č'ə* CCirc **p'č'a/ə* 'to stick to' (with local prefixes), **γa-p'č'ə* 'to glue, stick on' (**γa-* causative prefix), Ub *p'č'ə* 'to glue' (DA III: 236)

Comments to the items in no.:

(4) CCirc **č'ə* 'to break' is restored on the basis of Sh *č'ə*, BesKab *č'ə* 'id.' (cf. Paris 1974a: 224), CCirc **č'ač'ə* - on the basis of Sh (NM) *wə-č'ăč'ə* (*wə-* verbal prefix), and its variant **č'əč'a* - on the basis of Kab *ză-xă-γă-ś'əś'ă* 'to break' (*ză-* reciprocal prefix, *xă-* prev. 'in the mass', *γă-* causative prefix).

(8) Kuipers (PC 41) reconstructs CCirc **č'əq'a*, but the palatalised character of the original affricate in Circassian is supported both by the other CCirc items given in (8) and containing the same element **č'ə*, as well as by the palatalised affricate in the sister-languages. Thus we see such irregularities as depalatalisation and deglottalisation in Adyghe (Bzh, Tem *čəʔă* vs. Sh *č'əʔă*), and deglottalisation in Ubykh.

(9) CAbx **č'ə* is contained in such compounds as SAbx *a-kʼamsa-čʼ* 'ventrical (of heart)' (AT 19), CAbx **č'ə-cə* 'pupil (of the eye)' (**cə* 'single particle'), **č'-k°ə-na* 'boy, youth, small, little', cf. also SAbx *a-č'əč'* 'baby, infant', Ahch *č'əč'-a-la* 'little by little', SAbx *a-č'əč'-masa* 'small fry' (a reduplication of **č'ə*).

(10) For the second part of CAbx **č'a-k°a* cf. **k°a* 'to rough-hew (of mill-stones)', 'to sharpen, whet (as scythe)', Ash *a-k°k°a-ga* 'kind of hammer'. As to the correspondence CCirc, Ub **p'č'-* : CAbx **č'-*, cf. also (7).

(11) The CCirc **č'ankʰə* is tentatively reconstructed from Tem *č'ʼančʼ* (cf. AdR 177), on the condition that the initial affricate does not come from **k'-*, and the second affricate comes from CCirc **kʰ-*, not **č-*. The resonant *-n-* must be an increment. All the items are onomatopoeic by origin, which explains also the irregularities in the second consonant (aspirated **-k(ʰ)-* in CCirc and CAbx vs. glottalised *-k'-* in Ubykh).

(12) The items are onomatopoeic by origin.

(13) For the second part of CAbx **č'ə-rəx̌°ə* cf. **rəx̌°ə* 'speckled, motley', **aw-rəx̌°ə//*aj-rəx̌°ə* 'speckled, stripy'. Tap *č'əx̌°*, in case it contains the final *-x°*, not *-x̌°*, must be regarded as a loan from Kabardian (cf. also its meaning, closer

to the latter than to Abkhaz). In the case of it being genuine (and the final fricative is -*x*ʷ), this can indicate that the initial **rə-* in **rəx*ʷ*ə* is a prefix. For **č'ə* cf. also Tap *a-γra=č'ə-γra* 'motley, speckled, multicoloured'.
(14) The Circassian form is due to the development **məč'ə* > **mč'ə* > **p'č'ə*.

2.3.10. CWC **č*ʷ > CCirc **č''* : Ub *č''* : CAbx **č*ʷ
Example:
**(a)č*ʷ*a* CCirc **p'q*ʷ*a-č'a* 'thin (of flat things)', Ub *ač'a* 'wide and flat' (HV 467; DA III: 217), CAbx **č*ʷ*a* 'thin'

Comment:
The first part of CCirc **p'q*ʷ*a-č'a* is either 'cover, lid, shell, sheath' (cf. MS 94) or 'place' (cf. NS 639). Ub *ć*ʷ in *ać*ʷ*a* 'flat' in DA III: 217 is obviously a misprint for *ač'a*. Abdokov (FL 80) and Nikolayev and Starostin (NS 639) alternatively connect the Circassian and Abkhaz items with the other Ubykh material: *p'c'a* 'thin', which I find less plausible. Shagirov adds to the Circassian material also the second element in CCirc **za-(n)č'a* 'straight' (MS 94), while Nikolayev and Starostin (NS 639) add CCirc **psə-(n)č'a* 'light and swift' (**psə* 'soul').

3. THE COMMON WEST CAUCASIAN SIBILANT FRICATIVES

3.1. THE CWC LABIODENTAL SIBILANT FRICATIVES

3.1.1. CWC **f* > CCirc **f* : Ub *f* : CAbx **f*
Examples:
(1) **fa/əfə* CCirc **fafa/ə* 'to flutter, swing', CAbx **fəfəl/rə* 'fluffy'
(2) **fə-* Sh *fă-mă*, Ub *fə-mə* 'to smell', CAbx **fə-ĥ*ʷ*ə* 'smell', 'to smell'
(3) **fa/ə* Ub *fə*, CAbx **fa* 'to eat'

Comments to the items in no.:
(1) The reconstruction of CCirc **fafə* is based only on Ad *č'ă-făfə-č'ə* 'to flutter' (with prev. *č'ă-* 'from beneath') (AdR 182). I failed to find its Kabardian counterpart, which means that Ad *f* here can come from CCirc **x*ʷ as well.
(2) According to Shagirov (ES II: 10), Sh *fă-* comes from *pă-* 'nose', cf. Tem, Kab *pă-mă* 'to smell'. For the second part cf. CCirc **ma*, Ub *mə-sa* 'smell'. Still, the items given in (2) can witness a rare instance of CWC **f*. CCirc **f* in this word could merge with **p*ʰ (due to association with **p*ʰ*a* 'nose') in all dialects except Shapsygh.

3.2. THE CWC FRONT SIBILANT FRICATIVES

In the series of dental fricatives there are no palatalised and labialised-palatalised correlates.

3.2.1. CWC *z > CCirc *z : Ub z : CAbx *z

Examples:

(1) *za CCirc *zə, Ub za, CAbx *za 'one'

(2) *dG°-a-za Circ *t'q"aza, Ub t'q"aza, CAbx *ĥ°aza 'twins'

(3) *za(-zə) CCirc *zazə, Ub zaza, CAbx *zə 'bile', 'gall-bladder'

(4) *zə/a CCirc *jə-zə, Ub γa-za, CAbx *a-z-na 'full'

(5) *bzə CCirc *bzə, Ub bzə 'to cut (in pieces)', CAbx *r-b(ə)zə 'to sharpen, whet very sharply, thinly', cf. also *bəzə-bəzə 'to itch'

(6) *za CCirc *za 'to turn, spin', Ub brā-za 'to (re)turn', CAbx *-za in *ħ°a-za 'to scrawl', 'to drag'

(7) *bza CCirc *-bza 'intensively, strongly, quite' (suffix with colour names), *bza-bza 'to intermix, interplay (of sounds)', cf. also *bzə-jə 'ray of light', Ub -bza-bza-q'a 'intensive, bright' (suffix with colour names), bza-bza 'to tremble', CAbx *bza in SAbx aj-lə-bz-aa-ra 'to shine, glitter' (aj-lə- prev. 'together from a mass', -aa- VRE), *bza-rə-bza-rə 'to shine, glitter, play (of colours)'

(8) *za CCirc *za-x°a-za 'to meet smb' (*za- reciprocal prefix, *x°a- version prefix, 'for'), CAbx *aj-ź́ə-za 'to assemble, come together' (*aj- reciprocal prefix, *ź́ə- version prefix, 'for')

(9) *nazə//nəza CCirc *nazə 'hem, border, edge', Kab *să-nəzə̆ 'selvage, fringe of fabrics' (KR 328), Ub nəza 'veil', CAbx *nəza in *ǯ°a-nəza 'spleen' (*ǯ°a 'rib', 'side'), *ma-nəza 'shield, cuirass' (*ma 'hand'), cf. also Tap ša-nəza 'selvage, fringe' (RAb 178)

(10) *zaza/ə CCirc *k'a-za/əzə 'to tremble (of voice, string, somebody's body)' (*k'a 'end, tail'), *zaza 'to tremble, quiver; to rattle', CAbx *zaza 'to reel, stagger', cf. also the form with -ə in Bz -zazə-maz-wa 'waddling'

(11) *ĝəzə CCirc *ĝə(r)zə 'to moan, groan', CAbx *γəzə 'to moan, sob', SAbx also 'to join (in singing)'

(12) *bzə CCirc *bzə-x°ə 'linden' (*x°ə 'white'), Ub bzə-s 'willow' (sə 'wood'), bzə-γ°ənə 'id.' (γ°ənə 'tree')

(13) *bza CCirc *c^{h}ə-bza 'summer sheep wool which is to be cut in autumn' (*c^{h}ə 'hair, wool'), CAbx *bza-laśa 'sheep-wool of the shearing' (*laśa 'wool'), etym. 'the live wool', CAbx *bza 'alive'

(14) *bzə CCirc *bzə-wə 'bird', *q̄a-bzə-jə 'feather', Ub bzāpa (< *bzə-a+pa) 'wing'

Comments to the items in no.:

(1) CAbx *za 'one' is preserved only in compounds, cf. Tap z-ak'ə 'one (nonhum)', z-aʒ°ə 'one (hum)', CAbx *ʒ°a-j-za 'eleven' (*ʒ°a 'ten', *jə 'and'), *za-nə 'once', *z-ja-gʲə 'all', *zə-na 'a unit', SAbx a-z-nap'ə-k' 'one (sole) hand', etc.

(2) CWC *dG°-a 'twice' consists of *dG°ə 'two' and *a, a multiplicative affix in numerals. Dumézil and Esenç 1977: 15 tentatively suggest a connection of the second part of the Ubykh word with za 'one'.

(3) The Circassian and Ubykh items are reduplicated. Though Shagirov suggests that the Ubykh word might be a borrowing from Adyghe (ES I: 205; MS 54), it can well represent a genuine item as well. The Bzyp form contains z, not ź (pace Marr 37; NS 1106).

(4) In all three languages the initial elements (CCirc *jə-, Ub γa-, CAbx a-) seem to go back to possessive prefixes (cf. ES I: 527). Mészáros (MP 314, 315) saw in Ub -za the numeral 'one'.

(6) The comparison of CAbx *ħ°a-za with the Circassian and Ubykh items is not certain.

(7) In Circassian cf. perhaps also *q̄a-bza 'clean, to clean' (*q̄a- 'hither'), *zə-jə-bzə 'to become clear of clouds (of sky)', *čə-bza 'to get settled (of water)' (*čə 'to run, flow'), in Abkhaz cf. probably *bzə-ja 'good'.

(8) Kuipers (PC 25) suggests the connection of CCirc *za with CCirc *za 'to turn'.

(10) Abx a-k'azəza-ra 'to rock a little (of tall people)' in AB I: 328 is probably a Circassian loan, either old or bookish (and thus unreliable). For CCirc *zaza cf. Tem zăzə 'to rattle' (AdR 137) and Sh mă-zazə 'he trembles, quivers' (ShD 102).

(12) If analysed without its cognate in Circassian, Ubykh bzə-s and bzə-γ°ənə could be regarded as derived from bzə 'water'. But in Circassian 'water' is *psə; cf. ES I: 96.

(14) It is not excluded that ʒə in CAbx *x̌ʒə 'feather' also belongs here. The initial fricative can be the same morpheme as *x̌ə in *nap°-x̌ə-śə 'fingernail' (*nap°ə 'hand', *-śə diminutive suffix). Thus CAbx *x̌ʒə 'feather' can be analysed as *x̌ə-ʒə. If this etymology is right, then the CWC word for feather should be reconstructed as *bʒə.

3.2.2. CWC *z° > CCirc *ž' : Ub ź : CAbx *ʒ°

Examples:

(1) **z°ə/a* CCirc **ž́ə*, Ub *źə* 'to comb', CAbx **ž°(ž°)a* 'to scutch, swingle (flax, wool, etc.)', 'to tear in pieces', 'to harrow'
(2) **z°ə* CCirc **ž́ə/a*, Ub *aź-q'a* 'right (side)'

Comment:
The correspondence between the Circassian dialects in (2) is irregular: Tem *ǯ́a-bγ°ə*, Bzh, Abdz *ž́a-bγ°ə*, Sh *źa-bγ°ə* (*bγ°ə* 'side'). The presence of *b* could cause affricatisation in Temirgoj, while Bzhadygh and Abadzakh retain the original spirant, which regularly corresponds to *ź* in Kab *jə-ź* 'righ (side)'; the initial *jə-* here is, according to Shagirov (MS 88), the possessive prefix of the 3d p.sg. (cf. Ubykh).

3.2.3. CWC **s* > CCirc **s* : Ub *s* : CAbx **s*

Examples:
(1) **sa* CCirc **sa*, Ub *sə-γ°a*, CAbx **sa(-ra)* 'I'
(2) **psa* CCirc **psa*, Ub *psa*, CAbx **psə* 'soul'
(3) **psə* CCirc **psə*, Ub *psə*, CAbx **aj-mə-psa* 'to sneeze'
(4) **psa* CCirc **psa-jə* 'black maple' (Tem: AdR 254; PC 25), 'spruce, fir' (Sh: ShD 116; Kab), Ub *psə*, CAbx **psa* 'spruce, fir, pine-tree'
(5) **sə* CCirc **sə* 'to arrive' (only with local preverbs), CAbx **sə* 'to pass, go (by, through, etc.), appear' (only with local preverbs)
(6) **sə* CCirc **sə*, Ub *sə*, CAbx **sə* 'wood'
(7) **sə* CCirc **sə*, Ub *sə* 'to sit' (only with local preverbs)
(8) **(p)sa* CCirc **sa* 'to sow', 'put, stick in', Ub *sə* 'to sow' (with preverbs), CAbx **psa* 'to sow', 'to pour, throw (of dry substances)'
(9) **psə/a* CCirc **γa-psə* 'to arrange, bring in order, build, tune, train' (**γa-* causative prefix), Ub *psə* (in causative) 'to prepare, arrange', cf. CAbx **psa* in *a-nap'ə aj-k°ə-r-psa-ra* 'to fold arms' (*a-nap'ə* 'arm, hand', *aj-k°ə-* prev. 'together on top', *-r-* causative), *a-č-aj-də-psa-la-ra* 'to press, lean oneself against sth' (*č* reflexive, *aj-də-* prev. 'together beside', *-la-* VRE), **pə-ra-psa* 'to tie up through' (**pə-ra-*prev. 'through the front')
(10) **psə/a* CCirc **psə* 'water', Ub *psa-pq'a* 'dew', CAbx **psa-ħ°a* 'wet', **psa* 'to wet, soak'
(11) **l/wasə* Ub *wasə*, CAbx **lasə* 'light', 'quick'
(12) **sə/a* CCirc **sə-tʰə*, **sə-də* 'what ?', Ub *sa* 'what ?', 'why ?'
(13) **-psə* CCirc **-psə* intensity suffix: Kab *śx°ant'ă-ps* 'very green', *ś'a-rə-ps*, Ad *č'ă-psə* 'completely new', Kab *dəγă-ps* 'sunny' (*dəγă* 'sun'), etc.,

Ub *-(p)sə-psə*, CAbx **-psə* intensity suffix: SAbx *ħ°ant'a-ps-ʒa* 'completely naked', *g'alda-ps-ʒa* 'very tall' (*-ʒa* is another emphatic suffix)

(14) **sə-sə* CCirc **səsə* 'to sway, shake, tremble', Ub *sa* 'to doze, slumber', CAbx **səsə* 'to sway, nod, be sleepy' (used with preverbs)

(15) **psə* CCirc **wə-psa/ə* 'to plane, shave' (**wə-* verbal prefix), Ub *psə* 'to sharpen'

Comments to the items in no.:

(3) The Common Abkhaz form is restored by Lomtatidze (cf. MS 108), cf. SAbx *ajmsa*, Tap *amsa* 'to sneeze'. The meaning of the preverb **aj-mə-* is 'together from'.

(4) Ub *psə* is registered only in MP 218: *psə-s* 'fir wood' (*sə* 'wood') and *psə-γ°ənə* 'fir, spruce' (*γ°ənə* 'tree'), while Dirr 101 mentions only *bzə-γ°ənə* 'cypress'. Esenç (HV 1286) suggests that Mészáros made a mistake for *bzə-s* 'willow' (*bzə* 'water', *sə* 'wood'). But Ubykh might well have both *psə-s* 'fir wood' and *bzə-s* 'willow' (it is difficult to suggest that Mészáros made at once two mistakes, wrongly recording both phonetics and semantics of the word).

(6) The original meaning of the given items is preserved only in Ubykh. In Circassian it is singled out from **q"ə-sə* 'food, feed' (**q"ə* 'mouth'), **sa-xə* 'bar (of the gate)', etc. (cf. MS 137), in CAbx from **č'a-sə* 'food' (**č'a* 'to eat'), cf. also Tap *-s* 'material', e.g. *qəlpa-s* 'material for hat' (*qəlpa* 'hat'), parallel to CCirc **p^{h}aq"a-pχa* (MS 137) 'material for hat' (**p^{h}aq"a* 'hat', **pχa* 'material' < 'wood'), **q"ə-pχa* (Urusov 112) 'food' (**q"ə* 'mouth', **pχa* 'material' < 'wood'). Cf. also *sə* in Tap *ʒ'-sə* 'oak-grove' (AbR 210), SAbx *a-ʒ'-a-s* 'a grove of young oaks' (AB II: 538; CAbx **ʒ'ə* 'oak').

(8) If the Circassian and Ubykh items are really derived from the meaning 'to sit' (cf. ES II: 72), then CAbx **psa* cannot be compared with them.

(10) See comments to this correspondence under CWC **p* in (11).

(12) For the analysis of the second part of the Circassian items cf. Morf 208, MS 49, NS 958.

(13) Unlike Shagirov (MS 67), I separate the CCirc intensity suffix **-bza* from the Circassian suffix analysed in (13). Synchronically, as Shagirov himself points out (ES II: 16; MS 67), Kabardian uses both suffixes, cf. *jăśħərq'a-bzə* and *jăśħərq'ă-ps* 'completely alike, similar', *ś'əx°ə-bz* and *ś'əx°ə-ps* 'bright-blue', *plәźə-bzə* and *plәźə-ps* 'entirely, completely red'. Note that the vowels in the suffixes are also different, which also proves that they are not etymologically connected.

3.2.4. CWC *s° > CCirc *s : Ub $š^{\circ}$: CAbx *$ś$

Examples:

(1) *$s^{\circ}ə$ CCirc *wa-$sə$ 'snow' (*wa 'sky, atmosphere'), Tem t-$jă$-sa 'snow covers sth' (t-$jă$- 'on'), CAbx *$śə$ 'snow'

(2) *$ps^{\circ}a$ CCirc *$psə$-$γ^{\circ}a$ 'thin (of cylindrical objects)', CAbx *$k'ə$-$pśə$ '(very) thin (of flat things, of layer)', 'sharp (of tip, end)'

(3) *$məs^{\circ}a$ CCirc *$məsa/ə$ 'guilty, culprit', Tem also 'foreign', Kab also 'dishonest';'uneducable', CAbx *$məśa$ 'guilty' (Tap), 'smb who is the object of mocking' (SAbx)

(4) *$as^{\circ}a$ CCirc *sa 'sabre' (Ad), 'knife' (Kab), *sa-$čx^{\circ}a$ 'sabre, sword' (*$čx^{\circ}a$ 'big, great'), Ub $aš^{\circ}a$ 'sickle', CAbx *$aśa$ 'sword', 'card (text.)' (SAbx), 'beater (of weaver's loom)' (Tap)

(5) *$ras^{\circ}a/ə$ CCirc *$c^{h}ə$ 'hair, wool', *-$c^{h}a$ 'hairy', Ub $daš^{\circ}ə$, CAbx *$laśa$ 'wool'

(6) *$s^{\circ}ə$ /a CCirc *$sə$ 'to swim' (used with local preverbs), CAbx *$ʒə$-$śa$ 'to swim' (*$ʒə$ 'water')

(7) *-$s^{\circ}a/ə$ CCirc *$t'q^{\circ}ə$-$rə$-$sə$ 'worn out, CAbx *$śa$ 'to lose hare' (?)

(8) *$pas^{\circ}a/ə$ CCirc *$p^{h}asə$ 'to be worthy of sth', CAbx *$(a)pśa$ 'to cost, being of value, deserve'

(9) *-$s^{\circ}ə$ Ub -$š^{\circ}$, CAbx *-$śə$ diminutive suffix

(10) *$s^{\circ}a$ Ub $š^{\circ}a$, CAbx *$śa$ 'to shave, cut (hair)'

(11) *$s^{\circ}a/ə$ Ub $š^{\circ}a$ 'year', CAbx *$śə$-$k^{\circ}ə$-$ša$ 'year', *$śə$-n-$t^{\circ}a$ 'this year' (-n- locative, -$t^{\circ}a$ attributive suffix)

Comments to the items in no.:

(3) The idea of the Circassian and Abkhaz words for 'guilty' being borrowed from Arabic *āṯim* 'sinful', 'sinner', 'criminal' > Tu *âsim* 'id.' (cf. ES I: 272) is improbable for phonetic reasons.

(4) If the initial *a- in the Ubykh and Abkhaz items is a historical prefix (according to Charachidzé 1990-91: 234, the fossilised directional affix), cf. also the items in (10). In principal, Ub $aš^{\circ}a$ 'scythe, sickle' can be alternatively compared with CAbx *$aš^{\circ}a$ 'to weed', cf. also CAbx *$q'aš^{\circ}a$ 'forage, fodder' (*q'-$aš^{\circ}a$?), though the comparison with *$aśa$ is also quite reliable both phonetically and semantically. Dumézil (Notes 5: 29) compares the part -$š^{\circ}a$ of Ub $aš^{\circ}a$ 'scythe, sickle' with the similar element in Ub $g'aš^{\circ}a$ 'axe', Abx $ajg^{\circ}əš^{\circ}$, Tap $g^{\circ}aš^{\circ}$ 'id.', but these two items should be kept apart. Ub sa 'sabre' must be a borrowing from Circassian (cf. ES II: 58).

(5) In Proto-Circassian word for 'hair, wool' Abdokov (ZS 83-4) supposes the contraction: *$dəsa$ > *tsa > *$c^{h}ə/a$, which can be accepted as a hypothesis until a

more convincing explanation is found. In Proto-Abkhaz a development *r- —> *l- must be assumed, as the expected form would have been *raśa, which corresponds perfectly to Ub *daš°a*. The related forms in East Caucasian also show fluctuation in the anlaut consonant, cf. Avar *ras* 'hair', God *ras*, Darg *dus*, Tab *dis*, Lezgi *jus* 'wool, fleece' (cf. ZS 83), Tsax *jis* 'goat skin' (KK II: 41).

(6) Ub *ʒaśa* 'to swim', which is sometimes considered to be related to the items in (6) (cf. ZS 165; NS 281), is in fact borrowed from Bzyp Abkhaz *a-ʒ-śa-ra* < *//a-ʒ-śa-ra* 'id.' (Bz *ʒ* is from *ʒ due to assimilation to *ś*; cf. Chirikba 1986a: 120).

(7) Dumézil and Esenç 1974: 44 analyse the Circassian word as *t'q°ə 'two', *-rə-* instrumental affix and *sa* 'to put, set'. If the latter is right, then the comparison with CAbx *śa must be abandoned.

(8) Cf. also Geo *pas-i* 'price' (which cannot be the source of the Abkhazian form for phonetic reasons; cf. also ZL 158). An alternative Circassian correspondence to the Abkhaz item might be *psə* in Ad *λə-psə*, Kab *λə-ps-ăj* 'very expensive' (for the first part cf. CCirc *λa-p'q°a* 'expensive, dear'). The explanation in Urusov 107 of the segment *psə* in these words as 'water' is semantically implausible.

(11) The reconstruction of the Common Abkhaz word for 'year' in the form *śə-k°ə-ša is supported both by the Tapanta form of this word (cf. Tap *sk°šə* vs. Abzh *a-šək°s*, Bz *a-śək°ś//a-šək°ś*) and CAbx *śə-n-t°a 'this year'. The second segment of CAbx *śə-k°ə-ša can be tentatively analysed as *k°ə 'top' and the final one – as *ša 'to divide, share'. Though Abdokov's attempt to compare the given Abkhaz word with CCirc *jəλasə 'year' (cf. FL 54) is not accepted by some authors (cf. NS 976), phonetically *-sə* corresponds well to the Ubykh and Abkhaz words in (11). The first segment in the Circassian word (*jə-*) is probably the possessive prefix ('its'), while the segment *λa* can be compared with similar segments in CCirc *λaxana 'epoch, period, time', Ad *λa-(n)dă-ră* 'since', Kab *a-λa-(n)dă-ră* 'until now' (Urusov 186). It is much less probable that CCirc *jəλasə 'year' was borrowed from some Turkic source, as e.g. Kumyk, Noghaj *jəl* 'year', Noghaj *jas* 'year', 'age' (pace ES I: 185).

3.3. THE CWC MIDDLE SIBILANT FRICATIVES

3.3.1. CWC *ź > CCirc *ź : Ub ź : CAbx *ź

Examples:

(1) *źa — CCirc *źaźa* 'slow, lingering, dawdling', CAbx *źaźa* 'dullish, clumsy, slow, sluggish'

(2) *źa — CCirc *źa* in Ad *źă-γă-wəzə*, Kab *źă-n wəz* 'tuberculosis; consumption' (*wəz(ə)* 'illness'), Ub *źa-γ°a* 'illness', CAbx *ź-ĥ°a* 'plague' (SAbx), 'sickness, illness' (Tap)

(3) *źaźa CCirc *źa-źəja, Ub źāźa 'kidney'
(4) *źyə CCirc *wə-źyə 'to husk', Ub źyəźyəźya 'the sound of turning of the mill-wheel' (Ubykh in Notes 4-6: 34)
(5) *bźa Ub bźā-ma 'hornet, big wasp', CAbx *bəźə-bəźə 'to say lies'
(6) *źə Ub a-ź-q'a 'fat, corpulent' (Dumézil 1959: 70; -q'a adjectival suffix), źə 'to become fat, put on flesh', CAbx *-źə suffix with the meaning 'awkwardly excessive', cf. *p'a-źə 'fat, stout, big', *g'ala-də-źə 'awkward, clumsy', *p'at'a-źə 'stout', etc. In CCirc cf. probably *-źə in *qʰ°ə-źə 'pear' (if it is not the suffix derived from *źə 'old')

Comments to the items in no.:
(1) Tap *zaza* 'slow' (< CAbx *źaźa) is genuine, not a borrowing from Kabardian (pace ES I: 198), while Ash *ẑ°aẑ°a* is really a borrowing, as Kab *ź* in loans is usually rendered by Ash and Tap *ẑ°*.
(2) For the second part of the Ubykh (*-γ°a*) and Abkhaz (*-ĥ°a*) words cf. CWC *γ°a 'yellow' (for Ubykh this connection was supposed by Dumézil 1969: 106). The same word for 'yellow' (*γ°ă*) is found in Kab *wəzə-γ°ă* 'sickness', lit. 'yellow sickness'. The element *-γa* in Ad *źă-γă* Kuipers (PC 28) explains as an abstract suffix ('-ness'), though one can suspect here delabialisation: *źă-γă* from *źă-γ°ă*, parallel to the form reflected in the Ubykh and Abkhaz items in *(2)*. The first part, i.e. *źa-, Kuipers (ibid.) connects with the verb *źə/a* 'to be baked roasted, scorched', which, given the cognates in sister-languages, does not seem plausible. CAbx *čʼəmaza 'sickness'
(and *čʼəmaza-ĥ°ə 'sick man', 'to become sick') and CCirc *wəzə 'illness, desease' have nothing to do either with the Ubykh item in *(2)*, or with each other, pace NS 203. CAbx *čʼəmaza can be analysed as *čʼə 'swelling, tumor' and *ma-za 'to have', while *-ĥ°ə is the agentive suffix. The etymology of CCirc *wəzə remains unclear.
(3) Ub *źaźəja* 'kidney' is an Adyghe loan (cf. ES I: 200). In Circassian Shagirov suggests the elision of the segment *-źa, thus < *źaźa-źəja, cf. Ub *źaźa* 'kidney' and
CCirc *-źə-ja diminutive suffix, as in *pʲča-źəja 'fish' (*pʲča 'fish') (ES I: 200).
(4) The items given here can be onomatopoeic by origin, cf. also CCirc *źyə-źyə 'to ring'.
(5) The items given here can be onomatopoeic by origin. The final *-ma* in Ubykh probably means 'big, large'.
(6) An alternative comparison with the Abkhaz item might be the Ubykh suffix *-źa*, indicating regularity and intensity of a state of an action, process, cf. *a-fə-źa*

'the one who eats (*fə*) much' (Charachidzé, Esenç 1990-91: 8), *k'a-źa* 'the one who goes (*k'a*) well', *k°ə-źa* 'rainy' (*k°ə* 'rain'), *qa-źa* 'runner, the one who runs well' (HV 832, 859, 1536).

3.3.2. CWC **ź°* > CCirc **ź°* : Ub *ź°* : CAbx **ź°*

Examples:

(1) **ź°a* CCirc **ź°a* 'to be boiled', Ub *ź°a*, CAbx **ź°ə* 'to boil'

(2) **ź°ə* CCirc **ź°ə-γa* 'mass, multitude' (**-γa* abstract suffix), **q"ə-ź°ə* 'thick (layer, fluid), fat' (**q"ə* probably 'mouth', cf. MS 142), cf. also Kab *vă* in *λă-śhă-vă* '(high) instep' (*λă* 'foot', *śhă* 'head'), CCirc **t'əg°ərə-ź°a* 'fat, stout (of man)', 'awkward, uneducated' (Urusov 129-130), Ub *ź°ə* 'crowd, herd', *ź°ə-λ* 'to be numerous', CAbx **ź°-p'a* 'fat', 'thick, dense (of flat things, liquids, paper, plants)', 'crowd, herd'

(3) **ź°ə* Kab *məźə* 'call-word for cows', Ub *məź°-γə* 'heifer', CAbx **ź°ə* 'cow'

(4) **ź°a* CCirc **ź°a-γ°a* 'star', Ub *ź°a* 'sky, air', CAbx **ź°-ħ°a(-n(d)ə)* 'sky'; here belongs also Ub prev. *ź°a-* 'from above downwards', CAbx prev. **ź°a-* 'on/from the top'

(5) **ź°a-ća* Kab *văsă-pšəħ* 'evening of the day before yesterday' (*pšəħ* 'evening'), *văs-max°ă* 'day before yesterday' (*max°ă* 'day'; *văsă* < CCirc **ź°a-să*), Ub *ź°a-psə* 'evening', CAbx **ź°a-ća* 'day before yesterday', **ź°a-qa* 'night, evening of the day before yesterday'

(6) **ź°a* CCirc **ź°a*, Ub *ź°a* 'to plough'

(7) **ź°a* CCirc **ź°ă* 'oar', Ub *ź°a* 'rudder', CAbx **ź°-ħ°a* 'shoulder', 'wing', 'oar'

(8) **ź°ə* CCirc **ź°ə* 'to thaw (out)', cf. also **wa-ź°-bana* 'rainy', 'prolonged rain' (**wa* 'sky, atmosphere'), and maybe also **ź°aź°ə* (used only with preverbs) 'to drip off', CAbx **ź°-ʒə* 'saliva' (**ʒə* 'water')

Comments to the items in no.:

(2) For the second part of CAbx **ź°-p'a* cf. also CAbx **š°-p'a* 'fat, thick', *p'a-źə* 'fat, stout, big'.

(3) The first part of Kab *məźə* and Ub *məź°-γə*, i.e. *mə-* I analyse as an onomatopoeic element, mimicking the sound of cow's mooing (cf. English *moo*, Rus мыч-ать), while the second part is connected with CAbx **ź°ə* 'cow'. If this is right, the word could get its onomatopoeic initial segment first in the baby talk, and then came into use as the normal word for cow. The delabialisation in Common Circassian can be explained by the word's phonetic simplification in

baby talk, usual in this sort of lexicon. The onomatopoeic origin of words for cows or oxen is known for different languages, cf. Kab *g°əwə* 'ox', according to Shagirov (MS 75), of onomatopoeic origin, Rus бык 'ox', also onomatopoeic (Tsyganenko 1979: 56), etc. Thus it seems likely that the Common Circassian and Ubykh words were derived from **mə(w)-ẑ°ə* 'moo-cow'. The element *-γə* in Ubykh, according to Dumézil 1969: 108, means 'dry' (i.e. 'not yet sexually active'), cf. also Ub *ć°ə-γə* 'bull-calf', *bəjə-γə* 'sheep which did not yean yet' (Dumézil, ibid.). Cf. SAbx *a-γaa-c'(əs)* 'heifer'.

(4) As Dumézil 1971: 152 justly pointed out, Tap *ẑ°ĥ°a-k°* 'rainy weather' (AbR 217) does not contain the final *-nd*. He compares both parts of CAbx **ẑ°-ĥ°a* with the Circassian name for 'star', suggesting that the second part is connected with CCirc **γ°ă-* in **γ°a-g°ə* 'road'.

(5) For the etymology of the Kabardian item and its connection with Abkhaz, cf. ES I: 106.

3.3.3. CWC **ś* > CCirc **ś* : Ub *ś* : CAbx **ś*

Examples:

(1) **śə/a* CCirc **wə-śa* 'to stuff, fill, beat' (**wə-* verbal prefix), **śə-bə* 'to fill (as sack)', **wə-śa-bə* 'to become soft', 'to crumble, make small, grind', 'pulverization', **wə-La-śa* 'to pound, crush', Ub *śa-śə* 'to beat, hit, give a thrashing, pound, crush', CAbx **śə* 'to hit, beat, strike'

(2) *śə* CCirc **śə-də* (Bzh, Sh) 'what ?', Ub *śa-γ'a* 'when ?' (*γ'a* 'time'), *-ś* interrogative suffix, CAbx **śə-* interrogative and relative prefix

(3) **pśə* CCirc **pśə* 'to get tired', Kab also 'to get out of breath', Ub *pśa-x̌°ə* 'to breathe', CAbx **pśə* 'to die', **r-pśə* 'to put/blow out (as fire, light)', 'to kill', 'to exhaust, starve' (**r-* causative)

(4) **śə* CCirc **śa/ə* 'to weave (cloth, thread), braid (belt, lasso)', CAbx **śə* 'to weave', Tap also 'to felt'

(5) **śə* CCirc **śə-na*, CAbx **śə-śə* 'lamb' (**-śə* diminutive suffix)

(6) **k°ə/aśa/ə* CCirc **k̄°əśa* 'cradle', CAbx **k°aśə-k°aśə* 'to mince, go at a jog-trot'

(7) **śa* CCirc **śa* in **na-śa* 'brow-ridges' (**na* 'eye'), cf. also Kab *nă-ś'a-śă* 'place under the eyes' (*nă* 'eye', *ś'ă* 'under; bottom'), cf. CAbx **na-p‴-śa/ə-r-g°ə-c'a* 'palm' (**na-p‴ə* 'hand', *-r-* connective, **g°ə* 'heart, centre, middle', **c'a* 'bottom'), **šʼa-p‴-śa/ə-r-g°ə-c'a* 'foot, sole' (**šʼa-p‴ə* 'foot')

(8) **pśa/ə* Ub **pśa* 'to swell, be blown', *pśa-b̲ə* 'bubble', CAbx **pśə-la* 'fat' (*-la* 'containing, being in')

(9) **pśasa* CCirc **pśaśa* 'girl', Ub *śasa* 'bride'

(10) **məśa/ə* Ub *məśa* 'to call', 'to read', CAbx **məśə* 'to swear'

(11) **-śa* Ub *-śa* gerundial suffix (e.g. *a-j-k'a-śa* (the one) who is coming', HV 1593), CAbx **-śa* adverbial/transformative suffix, 'as' (e.g. CAbx **qać'a-śa* 'as a man', **laba-śa* 'as a log')

(12) **śa-śa* CCirc **śa-śa* 'to crumble, fall apart, become broken', CAbx **śa-śa* 'little, small', **r-śa-śa* 'to make small' (**r-* causative)

Comments to the items in no.:

(3) Nikolayev and Starostin (NS 961), who proposed the connection between the given items, have mistakenly added here also CAbx **ĥa-psa* 'to get tired' (**ĥa-* 'hither'), which has in Bzyp *s*, not *ś*, and thus should be treated separately; it must be connected with **psə* 'soul', **psə-pə* 'respiration'.

(4) Shakryl 1971: 67-68 derived the Circassian and Abkhaz verbs given here from **śə* 'to beat'.

(5) The element *-nə* in CCirc **śə-na* can be allegedly analysed as an old diminutive suffix, akin to CAbx **-na* 'id.'. Thus semantically and partly materially CCirc and CAbx names for 'lamb' form parallels. The plural form of the Abkhaz word is **ś-ara*.

(7) An alternative comparison for CAbx item can be CCirc **pśa* 'neck'.

(9) The original form of the Circassian word is supposed in NS 969 to be **pśasa*, the second *ś* due to assimilation. It is possible that the initial **p-* in Circassian is either epenthetic, or a historical prefix. Nikolayev and Starostin propose East Caucasian correspondences to CCirc **pśaśa*, Ub *śasa*, where in fact quite similar forms are to be found (cf. NS 322-323, 969). Such comparison, though quite plausible both semantically and phonetically, must be regarded, however, with some caution. The problem is, that at least the Ubykh form can in principle represent a historical verbal form, **śa-sa* meaning '(the one who) sits inside', i.e. 'inside the house/family' (*śa-* prev. 'in(side)', *-sa* 'to sit'). This resembles structurally CAbx **t-aća* 'bride', which can contain **ta* 'place, inside, home' and **aća* 'bride'. This etymology reflects the marriage situation usual in the Caucasus, when it is the bride who comes to live in her husband's house. The opposite situation, when the bridegroom comes to live in his wife's house, is reflected in such formations as Hitt *antiyanza* (from *anda* 'inside' and *iyant-* 'entering'), Tu *içgüveylik* (*iç* 'in(side)', *güvey* 'son-in-law', *-lik* abstract suffix), Geo *ča-siʒe-ba* (*ča-* 'in(side)', *siʒ(e)-* 'son-in-law', *-eba* abstract suffix) 'son-in-law who comes to live in the house/family of his wife' (cf. GI 775).

We are faced thus with a dilemma: should we prefer for the Ubykh and Circassian items in (9) the internal or the external etymology ?

3.3.4. CWC *ś° > CCirc *ś° : Ub ś° : CAbx *ś°

Examples:

(1) *ś°a CCirc *ś°a, Ub ś°ə-γ°a, CAbx *ś°a(-ra) 'you' (pl.)

(2) *ś°əjə CCirc *ś°əjə, Ub ś°əjə, CAbx *ś°əjə-ś°əjə 'to whistle'; cf. also CAbx *ś°ə-ś°ə, *ś°ərə-ś°ərə 'id.'

(3) *ś°ə CCirc *ś°ə 'to rot', 'to get wet', CAbx *ś°ə 'to swell (as abscess, boil)', 'to ripen (as fruit)'; cf. also CCirc *na-ś°ə, Ub bLa-ś°a, CAbx *la-ś°ə 'blind' (CCirc *na, Ub bLa, CAbx *la 'eye')

(4) *ś°aś°a CCirc *wə-ś°aś°a 'to rock, sway' (wə- verbal prefix), CAbx *r-ś°əś°a 'to shake, rock' (*rə- causative)

(5) *ś°a- CCirc *ś°a-wə, Ub ś°a-nə 'honey'

(6) *ś°ə- CCirc *ś°ə-zə, Ub ś°ə-mc'a 'woman, wife'

(7) *ś°ə CCirc *wə-ś°a 'to cover' (*wə- verbal prefix), Ub ś°ə 'to thrust, shove, push, drive', CAbx *r-ś°ə 'to cover, put on' (*r- causative) < 'to throw, hurl'

(8) *ś°a CCirc *(p')k'a-ś°a 'ceiling' (Sh), 'loft, attic' (Tem, Kab), Ub ś°ə-w// ś°a-w 'ceiling'

(9) *ś°ə CCirc *ś°ə-č'ə 'to rob', 'to pluck (a bird)', CAbx *ś°ə- prev. 'clothes on/off (the body)'

(10) *ś°a CCirc *ś°ə (RAd 876), CAbx *ś°a 'to suck' (BD 389); it is possible that CCirc *ś°a 'to drink' also belongs here

(11) *ś°tə CCirc *ś°tə/a in *c'a-ś°ta 'smooth, slippery' (Urusov 135), *c'a-ś°tə, *x°ə-ś°tə 'to slip out, leap out', *ś°tə 'to hurl' (used with preverbs), CAbx *ś°tə 'to slip, fall out', 'to turn over, to turn inside out' (used with preverbs)

(12) *ś°a Ub ś°a 'to evaluate', 'to esteem', CAbx *ś°a 'to pay'

(13) *ś°ə Ub ś°ə 'to come (of dawn, daybreak)', 'dawn, daybreak', ś°ə-ʒ́ 'daybreak, dawn' (ʒ́ə 'black'), wa-ś°ə-ta 'light beam', 'to shine, light up, illuminate' (wa 'sky'), CAbx *ś°ə-jk°a 'evening glow', 'black glow', 'clouds' (*ajk°a 'black'), *ś°-apšə́ 'daybreak, dawn, glow' (*apšə́ 'red'), *ś°a-q°a 'ray, beam' (for *q°a cf. Ub a-mʒa-q°a 'moonlight', with mʒa 'moon'), cf. also Abzh a-š°a-l-q'a-ra 'sun rays which pierce the clouds after storm' (a-l-q'a-ra 'to jump out')

(14) *ś°ə CCirc *wa-ś°ə 'hail' (meteor.; *wa 'sky, weather'), Ub ś°ə-b̲ə 'heap of snow' (for the second part cf. Ub b̲a 'to collect, pile up', or b̲ə 'big, fat'), CAbx *ś°ə 'to get cool, numb, stiff (of cold)', 'to coagulate (as blood)', 'to stand stock-still (bewildered or frightened)'

(15) *ś°ax°ə CCirc *ś°ax°ə 'plain, steppe, smooth side of knucklebone used in

bone game' (Ad), 'bald' (Kab), Ub *ś°ax* 'flat, even, smooth'

(16) **-ś°a* CCirc **ś°a* in **waradə-ś°a* 'melody' (**waradə* 'song'), probably also in **wənа-ś°a* 'order, instruction, decree' (**wənа* 'house'), Ub *waś°a* 'malignant gossip, anathema', CAbx **aś°a* 'song'

Comments to the items in no.:

(2) Given the Abkhaz cognates, it is not plausible to suppose that the Ubykh verb 'to whistle' was borrowed from Circassian (pace ZS 64).

(5) The second part of the Circassian and Ubykh items is not clear. Cf. Dumézil 1975a: 148.

(6) The second part of the Circassian and Ubykh items is not clear. Abdokov (ZS 89) derives the final *-zə* in Circassian from **bzə* 'female', which does not seem plausible.

(8) For the first part of CCirc **(p')k'a-ś°a* cf. Kab *p'k'ă* 'loft, attic' (Sh *k'a-ś°ă* 'ceiling', Tem *č'a-ś°ă* 'attic'), *p'k'ă-λăj* 'ladder, stairs' (CCirc **λa-ja* 'to move in jumps'), cf. PC 52, 53.

(9) For the second part of CCirc **ś°ə-č'ə* cf. CCirc **t'a-č'ə* 'to undress', **λa-č'ə* 'to rub off, clean', **ĝə-č'ə* 'to wash (laundry)', **x̌°ə-(n)č'a* 'to rob, raid', etc.

(11) Ub *ś°tərə* 'to backheel', which could be related to the items given here, is however regarded by Dumézil (DA III: 242) as a loan from Adyghe, cf. Ad *ś°tə-ră-jă* 'to kick' (ZL 64).

(15) The original **x°* in Ub *ś°ax* < *ś°axə* obviously underwent usual delabialisation (< **ś°ax°ə*). I am not quite sure that we are not dealing here with an Ubykh loan from CCirc **ś°ax°ə*, which in principle can be analysed as **ś°a* 'skin, surface', and for *x°a* cf. **za-x°a* 'straight, even' (**za-* reciprocal suffix), cf. also CCirc **g'a-ś°a* 'smooth', **ś°a-q̄°ə* 'bald', Bzh *xa-ś°a* 'steppe' (PC 32), probably with **xa* 'beneath' and **ś°a* 'skin, surface', Sh *g°ə-ś°a* 'glade' (ShD 95). But neither Dumézil (as far as I am aware of), nor Shagirov (in ES, or ZL) regard this Ubykh word as a loan.

(16) Though Ub *waś°a* can be compared with the supposed Abkhaz cognate as a whole, its first part (*wa-*) can in principle represent as well Ub *wa* 'sky' or 'god'. It is not clear whether CCirc **ś°a* in (15) can still be compared with the items in the sister-languages, if it is derived semantically from CCirc **ś°a* 'skin, hide, colour, appearance', as it was analysed by Kuipers (cf. PC 31).

3.4. THE CWC BACK SIBILANT FRICATIVES

3.4.1. CWC **ž* > CCirc **ž* : Ub *ž* : CAbx **ž*

Examples:

(1) **ža* CCirc **ža* 'sleigh, sledge', Ub *ža* 'block, log, billet', CAbx **aža*

'ash-tree'

(2) **ža* CCirc **ja-ža* 'to wait, expect', **q'a-ža* 'to hold back, restrain', Ub *ža* 'to endure, bear, stand'

(3) **bžə* CCirc **bžə-ʒa* 'flea', CAbx **b(ə)žə* 'beetle'

(4) **ža-* CCirc **ža-q°ə* 'to belch', CAbx **žaħ°a* 'to ruminate, chew the cud (as cows)'

Comments to the items in no.:

(2) CAbx **q'aža* 'to hold back, restrain' is a Circassian loan.

(3) The segment *ʒa* in CCirc **bžə-ʒa* is connected with CAbx **ʒə* 'flea'.

(4) The comparison is tentative, as the first part of CCirc **ža-q°ə* can be **ža* 'mouth', while the second part remains unclear (I have only the Temirgoj form, which does not allow us to determine whether *q°* reflects CCirc **q^h°* or **q̄°*). Cf. also Kab *źă-γ°ăšxă* 'to ruminate, to chew the cud' (*źă* 'mouth', *γ°ă-šxă* 'to ruminate'). The Abkhaz form also poses problems, as it can in principle be analysed as an onomatopoeic element **ža* with the auxiliary verb **ħ°a* 'to say'. But, on the other hand, it may as well be that both Circassian and Abkhaz forms can be compared as a whole. Ub *žaq°* 'to belch' (HV 2366) must be from Circassian.

3.4.2. *Irregular correspondence ? :* CCirc **ž* : Ub *ž´*

Examples:

(1) CCirc **bžə-ħa* 'autumn', cf. also Sh *bžəħă* 'winter', Ub *bžʼa* 'winter'

(2) CCirc **g°ə-bžə*, Ub *(gʼə) bžʼə* 'to become angry' (*g°ə/gʼə* 'heart')

Comment:

The affricate in the Shapsygh form in (1) is probably secondary. It is possible that in both cases the Ubykh item represents a loan from Shapsygh Adyghe (cf. the similarity in the designation of the time of the season between Shapsygh and Ubykh), but the absence of *-ħă* in the alleged Ubykh loan can speak against such a conclusion.

3.4.3. CWC **ž´* > CCirc **ž´* : Ub *ž´* : CAbx **ž´*

Examples:

(1) **bžʼə* CCirc **bžʼə-γa* 'grease-stain on clothing' (**-γa* abstract suffix), Ub *ć°a-bž´* 'mistake, sin', 'mutilation, distortion' (HV 325), 'physical accident, mutilation' (Dumézil 1969: 107; *ć°a* 'skin'), CAbx **bžʼə-žə* 'to corrupt, spoil, deprave', **bžʼə-sə* 'spoiled, corrupted', cf. also

qa-bžʲə* 'bald' (qa* 'head')

(2) **bžʲə* CCirc **čʰʲadə-bžʲə* 'bellows', Ub *bžʲə* 'to melt, fuse'

(3) **žʲa/ə* CCirc **ja-žʲa* 'to go, leave for, set out for' (**ja-* indirect object marker), CAbx **gʲa-žʲə* 'to turn, return, go by rounds' (**gʲa* 'round')

(4) **žʲə* CCirc **žʲə* 'early', CAbx **šʲa/ə-žʲə* 'early morning' (**šʲa/ə* < **ša* 'morning')

(5) **žʲa/ə* CCirc **ja-žʲa* 'ashes', CAbx **žʲə-jə* 'smith', **žʲə-jə-ra* 'smithy', **žʲ-aħʷa* 'hammer' (**aħʷa* 'sabre'), **žʲə-qʼʲə* 'slag, dross' (when producing metal) (**qʼʲə* 'faeces')

(6) **bžʲə/a* CCirc **bžʲə* 'yoke', CAbx **bžʲa* 'to tame, domesticate', 'to educate, instruct, lecture', 'to subdue, curb'

Comments to the items in no.:

(1) Dumézil 1969: 107 connects the second part of the Ubykh word with the verb *bžʲə* 'to fuse, melt'.

(2) The first part of the Circassian word is compared in NS 332 with similar East Caucasian material. But how is it related to *šədə* in Ub *šədə-pśa* 'bellows' (with *pśa* 'hot') ? If analysed independently from Circassian, the segment *šə* can be connected with the first part of Ub *šə-ž* 'hearth, chimney', while the segment *də-pśa* can be analysed either as 'causing to inflate, puff out' (*də-* causative prefix, *pśa* 'to inflate, puff out'), or 'which inflates, puffs out' (*d(ə)-* relative prefix). As for the second part of the Circassian word, Urusov 119 gives two alternative explanations for the second part: it is either **bžʲə* 'yoke', or a voiced variant of the root **pšʲə* 'to winnow', but neither of these explanations seems plausible.

(5) According to Shagirov (ES I: 169), the element *ja-* in the Circassian word is inseparable from **jatʼa* 'dirt, earth, clay', while the second part is analysed as **žʲə* 'air, wind', though such an explanation does not seem quite plausible. The first part might be **ja* 'bad', i.e. 'bad metal' (for **ja* in preposition cf. also **ja-bĝa* 'fierce, nasty', **ja-bzə* 'dung, manure'). The element **jə* in CAbx **žʲə-jə* 'smith', together with the same element in CAbx **x̌ʲə-jə* 'goldsmith' (**x̌ʲə* 'gold'), is connected with Ub *ja* 'to beat, hit'.

(6) The semantic correlation between the notions 'yoke' and 'subjugation' is well-attested in Indo-European languages (cf. GI 722).

3.4.4. CWC **ž̊* > CCirc **ž* : Ub *ž̊* : CAbx **ž̊*

Examples:

(1) **ž̊a* Ub *ž̊a* 'willow', 'twigs', CAbx **ž̊a* 'to tear' (used with preverbs) (?)

(2) **ž̊a* Ub *ž̊a*, CAbx **ž̊a* 'ten'

Comments to the items in no.:
(1) The comparison is rather tentative, as it would be valid only on the assumption that the Ubykh item is derived semantically from the verb 'to break, split', preserved in Abkhaz.
(2) Some authors connect the Ubykh and Abkhaz words for 'ten' with CCirc **p'c'a* 'ten' (cf. Dumézil 1933: 53; FL 66), but I agree with Shagirov (MS 52) that such a comparison is phonetically too risky.

3.4.5. CWC **ǯʷ´* > CCirc **ź* : Ub *ǯʷ* : CAbx **ǯʷ*
Examples:
(1) **ǯʷə* CCirc **źə*, Ub *ǯʷə*, CAbx **aǯʷə* 'old'

3.4.6. CWC **š* > CCirc **š^{h}*, **š̌* : Ub *š* : CAbx **š*
Examples:
(1) **ša* CCirc **ma-š̌a* 'hole, hollow', Ub *ša* 'to dig', *ša-wə* 'pick', *t'ʷə-šā-γ'ə* 'well, dam, trench' (DA III: 246), CAbx **t'ə-ša* 'deep hole, pit'
(2) **ša* CCirc **š̌aš̌a* 'to crumble', Ad *šăša-f* 'dust (of rotten wood, of hay)', cf. also Kab *pxa-šă* 'snags taken by the overflow' (*pxa* 'wood'), CAbx **š(a)-qʷa* 'rotten (egg)', 'to become rotten (of egg)', Tap *ša-ɦa* 'wormy, mouldering', cf. also CAbx **qʼa-ša* 'crumble'
(3) **pšə* CCirc **(b)γʼə-(p)š̌ə* 'millet-straw' (cf. **γʼə* 'to dry out'; 'dry'), CAbx **pšə* 'millet'
(4) **ša* CCirc **š̌a* 'to ripen, become soft (as cheese)', CAbx **ša-tʷə* 'full ripening of fruit' (*-tʷə* transformative suffix)
(5) **ša/ə* CCirc **š^{h}a-k'ə* 'cloth, textile', cf. CAbx **šə* '(white) linen'
(6) **ša* Ub *ndʼa-ša*, CAbx **ša* 'cord, rope'
(7) **ša/ə-sə* Ub *ša-sə* (*sə* 'wood'), CAbx **šə-sə* 'box-tree'
(8) **ša/ə* Ub *šə* 'to wash', *gˊə-ša* 'to pour, spill (liquid)' (*gˊə* 'surface'), CAbx **čʼə-šə* 'to wash head' (**čʼə* < **čʼa* 'mouth', 'face'), **kʼə-r-ša* 'to pour over the top' (**kʼə-* prev. 'on top', **r-* causative), **kʼ-a-r-ša/ə* 'heavy shower', Tap *tə-r-ša-ra* 'gargling' (*tə-* 'from inside', *r-* causative), lit. 'to make (water) pour from inside'
(9) **-cəšə* Ub *ca(n)cəš* (Dumézil 1975a: 146), CAbx **ɦʼən-cəš* 'lizard'
(10) **ša* CCirc **š̌a* 'raw internal fat', CAbx **šəša* 'fat' (n.)
(11) **šx̌ʷa* CCirc **šx̌ʷa* 'grey, grey-blue', **šx̌ʷa-(n)t'a* 'blue, green', Ub *šx̌ʷa* 'grass'

Comments to the items in no.:

(1) Shagirov (ES I: 263) analyses the initial element in CCirc *ma-šə̌a as a fossilised suffix. CAbx *maša '(burial) hole' is, according to Shagirov (MS 119), from Circassian. Ub *t'ʷə-šāγ°a (-ša+aγ°a), which contains aγ°a 'hollow', exactly corresponds to CAbx *t'ə-ša.

(4) Ub *š́-q'a* 'ripe' cannot be related to the items given here (pace NS 1034), as it represents the perfective form of the verb *šə́* 'to do, become' (cf. similarly CAbx *q'a-la 'to become', 'to ripen', CCirc *x̌ʷə/a 'to become', 'to ripen').

(6) The comparison, proposed by Shakryl 1971: 71, is valid only if the second element of the Ubykh word is not *ša* 'head', as was claimed by Dumézil 1969: 110. But Dumézil 1975a: 144 is less certain about such an analysis, questioning whether Ub *-ša* can alternatively be compared with the Abkhaz word for 'rope'. The second element of CAbx compound *ša-qa 'cord, rope' can in principle also contain *qa 'head', but in this case in South Abkhaz we would have had *-xə*, not *-xa*. It is better to analyse this segment as the verb *qa 'to pull', cf. also Tap *r-qa-ra* 'to tie up tightly'. It is possible that the items in (5) and (6) are etymologically connected.

(7) Normally the South Abkhaz word for 'box-tree' is *a-šəc*, i.e. with the final *-c*, but the original *-s* is preserved in Ash *a-šəs-tʷa* 'id.' (AD 222; *-tʷa* attributive suffix) and in Abzh *a-šəs-laba* 'stick (*laba*) made of box-tree'.

(9) For the analysis of items cf. comment (10) under CWC *c.

(10) The Abkhaz form is reduplicated. Abdokov (FL 76; ZS 85) adds here also Ub *ś°əq'a* 'plant fat', which is difficult to justify phonetically. Cf. also MS 80.

(11) According to Colarusso 1981: 491, who proposed the correspondence, the Ubykh word originally meant 'green'. For the second part in CCirc *šx̌ʷa-(n)t'a cf. under CWC *t' in 1.2.8. (6).

3.4.7. CWC *š́ > CCirc *šʰ́, *šə̌́ : Ub *š́* : CAbx *š́*

Examples:

(1) *š́a/ə* CCirc *šʰ́ə- locative prefix, cf. Ub *š́a* in *š́-a+x̌a* 'until'

(2) *š́əš́ə* CCirc *šə̌́šə̌́ə, Ub *š́əš́ə* 'to neigh' (if Ubykh is not from Circassian !)

(3) *š́ə* CCirc *šə̌́ə-š́ə* 'to be from, belong to, be a part of' (*šʰ́ə- locative prefix), Ub *š́ə* 'to be, become'

(4) *-š́(a)* Ub *-š́*, CAbx *-š́a* suffix of abstract nouns

(5) *-š́(a)* Ub *-š́a-j* suffix of emphatic imperative (*-j* 'and'), CAbx *-jə-š́ə* 'id.', expresses also a mild request (*-jə* 'and')

(6) *š́əš́ə* Ub *š́əš́ə*, CAbx *š́əš́ə* 'to caress, stroke'

(7) *pš́ə* CCirc *pšə̌́ə* 'to measure (dry substances)', Ub *pš́ə* 'to measure'

(8) *pš́ə* CCirc *pšə̌́ə* 'feudal prince', also 'father-in-law', CAbx *apš́ə* 'big,

strong, great, powerful'

(9) **šʼa* Ad *-šʼ(ə)* ergative suffix in *a-šʼ* '(s)he, it', Ub *šʼa* in *ma-šʼa* (HV 1063)//*mə-šʼa* (Dumézil 1959: 16) 'everybody, whoever', *mə-šʼa-da* 'something', CAbx **šʼa-wə-kʼə* 'somebody' (**wə* 'alike, similar', **-kʼə* 'one')

Comments to the items in no.:

(1) The second element in Ub *šʼ-a+x̌ʼa* is comparable with Common Abkhaz directional/locative affix **-a+x̌ʼə*.

(3) Shagirov (MS 120) believes that both elements of the Circassian item can represent etymologically one and the same morpheme.

(8) CCirc **pš̌ə* 'to swell up' can be related to the items given here.

3.4.8. CWC **š˚* > CCirc **šʰ*, **š̌* : Ub *š˚* : CAbx **š˚*

Examples:

(1) **š˚a* CCirc **ja-š̌a* 'to be after sth, hunt, fish' (**ja-* objective prefix), **š̌a-kʷa* 'hunter', 'to hunt' (*-kʷa* agentive suffix < 'to go'), Ub *š˚a-kʼa* 'hunter' (*-kʼa* agentive suffix < 'to go'), *š˚a-nd˚a* 'wild animal, prey' (*-n-* probably an increment, *-d˚a* attributive suffix), CAbx **š˚a-ra-ća* 'hunting', 'to hunt' (**-ra* abstract suffix, **ća* 'to go'), **š˚a-ra-x̌ə* 'wild animal, prey' (SAbx), 'deer' (Tap)

(2) **š˚a* CCirc **šʰa-pxa* 'measure, size, example' (**px̌a* 'material for'), Ub *š˚a* 'price', 'to value, esteem, appreciate, honour', CAbx **š˚a* 'to measure (size, space)'

(3) **š˚ə* CCirc **šʰə-g˚ə* 'mountain top, top part' (Ad), 'plateau, surface' (Kab) (**g˚ə* 'surface'), CAbx *š˚ə-bə* 'hoar-frost'

(4) **məš˚ə* Ub *məš˚ə* 'grapes', CAbx **lə-məš˚ə* 'clematis, Clematis vitalba' (bot.)

(5) **š˚ə/a* Ub *š˚a* in *š˚a-čʼa* 'to laugh', CAbx **š˚ə* in **pə+š˚ə-r-čʼəčʼa* 'to smile'

Comments to the items in no.:

(1) **-ra-x̌ə* in CAbx **š˚a-ra-x̌ə* is the suffix forming deverbal nouns, cf. CAbx **kʼa-š˚a-ra-x̌ə* 'left, abandoned child' (Abx), '(very) cheap' (Tap), from **kʼa-š˚a-ra* 'to throw'.

(2) Kuipers (PC 42) compares the Circassian item with **šʰa-tʰa* 'to try out, check'. He also notes the formal semantic similarity of the root **šʰa* with CCirc **š̌ə* 'to measure (space)'. If these two are not etymologically connected, the latter root can serve as an alternative cognate for the Ubykh and Abkhaz items (cf. Shakryl 1968: 56; FL 77; MS 119), though **šʰa* seems more preferable because

of its vocalism.

Dumézil 1971: 154 compares the Abkhaz root given in (2) with Ub *-šʷa* 'place specially designated for sth or some action to take place (e.g. for a ford, for pasture, etc.)', while in Notes 12-14: 19 he supposes a semantic development *šʷa* 'to be appreciated, valued' > 'price' > locative suffix 'the place designed for a type of things or action'.

(3) Shakryl 1971: 254 compares the Circassian word with Abx *a-šʷəgʷ* 'protuberance', which I failed to find except in *a-x̌-šʷə́gʷ* 'gold bar' (*a-x̌ə* 'gold'). This could be an exact counterpart to the Circassian one, though it should be checked, whether in the Bzyp dialect this supposed *a-šʷəgʷ* has *šʷ-* or *śʷ-*, as in the latter case the correspondence cannot be correct (because of the lack of correspondence CCirc **šʰ* or **š̌* : CAbx **śʷ*). The second part of the Abkhaz word seems to be the same morpheme as *bə* in **qə-bə* 'roof' (**qə* < **qa* 'head').

(5) The Abkhaz word contains **pə+šʷə* 'lip(s)', causative affix *-r-* and the verb **čə́čʼa* 'to laugh', akin to Ub *čʼa* given here. **pə+šʷə* contains **pə* 'nose, front' and *šʷə*, found also in **kʼə-šʷə* 'lip(s)' and probably derived from **ašʷə* 'door' < 'opening' (?).

3.4.9. CWC **šʷʼ* > CCirc **ś*, **šʰʼ* : Ub *šʷ* : CAbx **šʷ*

Examples:

(1) **šʷʼa* CCirc **śa*, Ub *šʷa*, CAbx **šʷə* 'hundred'

(2) **məšʷʼa* CCirc **məśa*, Ub *məšʷa*, CAbx **məšʷə* 'bear'

(3) **šʷʼəjə* CCirc **wə-śəjə/a* 'to admonish, exhort', Kab *wə-śəja-kʷă* 'teacher, instructor' (*wə-* verbal prefix, *-kʷă* agentive suffix), CAbx **šʷəjə* 'to damn, curse'

(4) **šʷʼə* CCirc **śə-γʷa* '(to wear) mourning' (**-γʷa* 'time'), cf. also Kab *śə-ħ-ă+kʷă* 'messenger of bad news', 'news of a misfortune (as death, etc.)' (*ħə* 'to carry', *-a+kʷă* agentive suffix), Ub *šʷəšʷ* 'to darken, blacken', 'to paint in black' (cf. also *šʷə-wa* 'night'), CAbx **šʷə* 'mourning', **šʷə//šʷəšʷə* 'to paint', **šʷəšʷə* (used with preverbs) 'to become dark (in the evening)', 'dark (of colour)'

(5) **šʷʼə* CCirc **śə-ħa* 'deer', CAbx **šʷərə* > Tap *šʷər* 'animal, beast', 'wild'

(6) **gʷʼəšʷʼə* CCirc **waśʰə*, Ub *gʷəšʷa*, CAbx **(aj)gʷəšʷə* 'axe'

Comments to the items in no.:

(3) Ub *La-śəja* 'to complain, tell smb bad things' is probably a loan from Circ *wə-śəja*.

(4) The comparison of the Circassian material with CAbx **šʷə* 'mourning' belongs

to Abdokov (ZS 182), who adds also CAbx **šʷəjə* 'to damn, curse', given in (3), which is quite probable, supposing its compounded character (**šʷə* 'mourning', plus an unclear *-jə*), though relations of these forms with the Circassian verb in (3) are dubious. The semantic development in the comparisons under (4) is supposed to be as following: 'to paint in black colour' > 'black clothes as a sign of mourning' (cf. SAbx *a-šʷə-matʷa* 'the mourning clothes') > 'mourning'.

Shagirov (MS 119) compares CAbx **šʷə* 'to paint' with CCirc **-šă* in **śʷa-šă* 'outfit, costume', 'to be fitting', Kab also 'to adorn, equip' (with causative prefix) (**śʷa* 'skin, hide, appearance'), **q'a-šă* 'tool, weapon' (**q'a* 'hand, arm'), which, according to him, originally meant 'to paint, decorate'. Though this alternative comparison seems possible, I find the comparisons given in (4) more plausible.

(5) The comparison is tentative as the actual composition of the supposed compounds is not clear. Nikolayev and Starostin (NS 1046-7) add to this correspondence also *śʷa* in CAbx **śʷa-ra-xă* 'beast; deer', Ub *λa-śʷa* 'deer-hunting' (*λa* 'deer'), which however belongs to another West Caucasian root, **šʷa* 'to hunt', cf. under CWC **šʷ*. For the analysis of **śʷa-ra-xă*, see comment (1) to 3.4.8. As for the Ubykh word, it parallels such Abkhaz compounds as, for example, *ačʼa-šʷa-ra* 'quail-hunting' (*ačʼa* 'quail'), *a-ħʷəħʷ-śʷa-ra* 'dove-hunting', etc.

In principle, the Tapanta word can be connected with the Daghestanian names for 'fox', cf. Avar *šer*, Andi *sor*, Axv *šari*, Cham *sā*, Tin *sari*, Inxo *zor*, Tsez *ziru*, Gin *zeru*, Bezh *sora*, Hun *sə*, Lak *sulčʼa*, Archi *sōl*, Tab *sul*, Agul *sūl*, Tsax *sɬ̣wa*, Kryz *sakul*, Bud *sokul*, Xin *pšla* (KK II: 78).

Nikolayev and Starostin (NS 325) connect with these Daghestanian words other West Caucasian material: CCirc **śə* in **baǯʼa-śə* 'jackal' (**baǯʼa* 'fox'), *-šʷ* in Ub *ḫagʼa-šʷ*, *šʷə* in Abx *a-šʷə-bga* 'a kind of fox'. Such a comparison, attractive as it is, meets, nevertheless, at least two objections. First, despite the rejection by these authors of Shagirov's (ES I: 72) analysis of the Ubykh as *ḫagʼa* 'fox' plus diminutive suffix *-šʷ*, this still remains the most natural explanation, given the parallel CAbx **baga-śa* and **baga-x̌ʷəčʼə* 'kind of fox, jackal' (cf. under CWC **b* above), having the same structure ("fox-little"). Second, the Bzyp form, cited in NS, is not quite correct, as it must be *(a-)aśʷə-bga*, i.e. with middle *śʷ*, which changes the alleged correspondence; the word means simply 'the Abaza fox', or 'the North Caucasian fox' (*aśʷə-wa* 'Tapanta Abaza', *aśʷə* 'North Caucasian plain'). What is left is the Circassian **śə*, which I, this time agreeing with Nikolayev and Starostin, wouldn't regard as an Ubykh loan. One of the possible solutions can be to connect it with the Tapanta word in (5).

(6) Comparison is tentative, as it is unclear what proto-phoneme is reflected by the correspondence CCirc **šʰʼ*: Ub, CAbx **šʷ*. There is no doubt that at least the

Ubykh and Abkhaz words are related. As for CCirc *waśʰə, it also looks very much as a cognate. But there are some problems. First, the correspondence in the initial consonants is irregular (though the loss of the velar with preservation of its labialisation is possible, cf. Kab *gʷarcă* 'dung, manure', Malka Kab *wacă*, Abx *a-wac*). Second, the correspondence between the spirants is also irregular. Third, there is a possibility that the Circassian word is borrowed from Ossetic, cf. Oss(Dig) *wæs* 'axe', which can be connected with Sanskrit *vāśi* 'axe', though borrowing of the Ossetic word from Kabardian is also not excluded (cf. ES II: 94).

4. THE COMMON WEST CAUCASIAN OBSTRUENT LATERALS

In contrast to the contemporary West Caucasian idioms, possessing at most three lateral obstruents (of which the Abkhaz group preserves none), Common West Caucasian seems to have had quite a complicated system of obstruent laterals involved in various oppositions. The presence of glottalised lateral fricatives in Circassian and Ubykh indicates the necessity of reconstructing glottalised lateral affricates, as glottalised correlates did not exist in the fricative series. As the Abkhaz material suggests, already in Common West Caucasian some of the plain laterals (*ɬ', *L) have merged with the palatalised series.

4.1. THE CWC LATERAL AFFRICATES

4.1.1. CWC *Ɬ > CCirc *tɬ : Ub *L* : CAbx *l

Examples:

(1) *Ɬa CCirc *tɬa-kʷəma*, Ub *La-kʷəma*, CAbx *lə-mɬa* 'ear'

(2) *ƛaL'a/ə CCirc *tɬaLa*, Ub *LaLə* 'to stifle, smother'

(3) *γʷə/aƛa CCirc *γʷətɬa*, Ub *γʷaLa* 'to urinate'

Comments to the items in no.:

(1) The etymology of the second elements of the words for 'ear', compared first by Deeters 1931: 290, are not clear. Without the segment *-kʷəma* the Circassian word for 'ear' is found in *tɬa-kʰʷa 'with short, flapping ears (of horse)', Kab *wə-tɬa-bz* 'to mark animals by cutting a piece off the ear' (*wə-* verbal prefix, *bzə* 'to cut'), *tɬa-xʷə 'dark-coloured cattle or sheep whith white ears' (*xʷə 'white'), *tɬa-γʷə 'ear-ring' (*γʷə 'metal'). Some authors see in the segment *-ɬa* in Abkhaz the verb *ɬa 'to hear' (cf. ZS 77; NS 756).

(2) As the Abkhaz counterpart to the Circassian and Ubykh items is not known, the alternative CWC reconstruction *Ɬala/ə is not excluded.

(3) The segment *γ°a-* in the Ubykh word can be connected with the verb **γ°a* 'to pour (as liquid)', cf. also *γ°a* in CAbx **γ°aha* 'to belch'.

4.1.2. CWC **ƛ* > CCirc **š́*, **šʰ́* : Ub *ś* : CAbx **x́*

For this set of correspondences Nikolayev and Starostin (NS 182) reconstruct **λ̄*, i.e. a tense lateral spirant. I opt for an affricate here, as I don't reconstruct tense consonants, and because the affricate corresponds nicely to the affricate in Proto-Avar-Andi word for 'three' (**ƛob-*, cf. NS 768), as well as to the respective PNC form, reconstructed in NS 768.

Examples:

(1) **ƛə* CCirc **šə́*, Ub *śə/a*, CAbx **x́ə* 'three'
(2) **ƛa* CCirc **šə́a*, Ub *śa* 'to sell'
(3) **t°ə-ƛə* CCirc **t̄ə-šə́* (**t̄ə/a* 'father'), Ub *t°ə-ś* (*t°ə* 'father') 'relatives of wife'
(4) **pƛə* CCirc **pš́-tʰə/a* 'to boil (of milk)', 'to ferment', Bzh also 'to get puffed up', Kab *pśtə-r* 'hot', Ub *pśə* 'warm'
(5) **cəƛə* CCirc **čə́ašə́*, Ub *śəśə*, CAbx **c(')əx́ə* 'night'
(6) **k'ə-ƛə* CCirc **k'ə-šʰə́*, Ub *k'ə-śə* 'smithy'

Comments to the items in no.:

(2) Abdokov (FL: 76) adds here also CAbx **ś°a* 'to pay', which I compare with Ub *ś°a* 'to evaluate, appreciate'.

(3) The second element in Circassian **t̄ə-šə́* is explained by Shagirov (ES I: 157-8) as the locative suffix 'place of', cf. also CCirc **q'a-šə́* 'cattle-enclosure', **k̄°-a-šə́* 'shelter for cart' (**k̄°ə* 'cart').

(4) Kuipers (PC 92) and Shagirov (ES II: 34) explain the Circassian verb as a derivative from **pšʰə́* 'to swell up', and Abdokov sees in the final *-tʰə* a fossilised suffix. Given the Ubykh evidence and the Kabardian *pśtə-r*, it is not necessary to derive **pšt́ʰə* from the verb 'to swell', which is not good semantically either.

(5) It is quite likely that Abkhaz retains the original initial affricate (though the source of its glottalisation, which must be secondary, is not clear), while in both Circassian and Ubykh it was changed due to assimilation by the second consonant (PCirc **caššə* > CCirc **čə́ašə́*, PUb **cəśə* > Ub *śəśə*). If this reconstruction is correct, then the first part can be compared with *ca* in Ub *wa-ca* 'this night', CAbx **la-šə́ca* 'darkness, dusk' (**la* 'eye'). But CCirc **nəčə́a-p̄a* 'this night' can seriously complicate the proposed etymology, as **nə* is likely to be analysed as a deictic pronoun, and *čə́a* can be connected with the similar segment in CCirc **čə́ašə́*.

(6) The first part of both Circassian and Ubykh words is CWC *k'ə 'to forge', while the second segment (*-ƛə) is the locative affix (CCirc *-šʰə, Ub -śə).

4.1.3. CWC *ƛ' > CCirc *čʰ' : Ub š' : CAbx *x̌

Examples:

(1) *ƛ'a CCirc *čʰ'a, Ub š'a, CAbx *x̌ə 'arrow, bullet'

(2) *ma/əƛ'ə CCirc *mačʰə 'millet (on the field)', CAbx *məx̌ə 'corn-/maize-field', 'arable land'

(3) *Haƛ'ə CCirc *ħa(n)čʰə 'scoop', Ub x̌aš' 'spade, shove', 'oar'

Comments to the items in no.:

(2) If the Circassian word is connected with the phonetically close Daghestanian words for 'millet' (cf. NS 309), then it cannot be connected with CAbx *məx̌ə, as there is no lateral in any of the supposedly related East Caucasian forms. In this case the Abkhaz word can be alternatively analysed as *mə 'negation' and *x̌ə 'to mow, rip, cut', i.e. 'the field with not yet cut harvest'.

(3) Though CCirc *ħa(n)čʰə is preserved only in Kabardian, the presence of a palatalised affricate in Common Circassian is confirmed by the Tapanta loan pxa-ħač' 'scoop (for flour, etc.)' (CCirc *pxa 'wood(en)'). In old loans Tapanta normally preserves rather well the Common Kabardian phonetics (with its distinction of plain and palatalised sibilants), cf. for the contrast Tap ħača 'oats' < CKab *γača 'a kind of millet' < CCirc *γačʰa. CCirc *ħa(n)čʰə (and its Ubykh cognate) can be old compounds, cf. CCirc *ħa(n)cʰa 'wooden spade'.

4.1.4. CWC *ƛ° > CCirc *č̌, *čʰ : Ub c° : CAbx *c°

(1) *ƛ°a CCirc *č̌ə-ja, Ub c°a, CAbx *c°a 'to sleep'

(2) *ƛ°a CCirc *čʰa-x°ə 'wax' (*x°ə 'white'), *čʰa-kʰ°a 'wax waste', Ub c°a-mγ'a 'honeycomb', CAbx *c°a 'wax'

Comment:

Nikolayev and Starostin (NS 409) analyse the element -ja in CCirc *č̌ə-ja in (1) as an obsolete verb akin to Abx *ja 'to lie'.

4.1.5. *Irregular correspondence:* CCirc *x : Ub f : CAbx *č°

Example:

*ƛ°ə CCirc *xə, Ub fə, CAbx *č°ə 'six'

Comment:

As in some other numerals (cf. 'eight'), the CWC word for 'six' shows irregular reflexes in the descendant languages. CCirc *x must have lost its labialisation or, alternatively, it reflects the CWC variant with a non-labialised consonant (cf. ZS 156). The Ubykh word coincides with that of South Abkhaz (*f-ba*, cf. Tap *c-ba*), which is a later South Abkhaz development, and here an influence of the Abkhaz form can be supposed. The necessity of the reconstruction of a lateral affricate is indicated by related East Caucasian material, cf. Nakh **jalx̌*, Avar-Andi **ʔinɬ̄i-*, Tsez *ʔēɬ̄-*, Lezgi **riɬi-* 'six' (all protoforms are from NS 219). That is why the labialised lateral affricate is tentatively reconstructed here for a CWC protoform.

4.1.6. CWC ? **ɬ°´* > CCirc **č̌´* : Ub *ǯ´* : CAbx **ʒ°*

Example:

**ɬ°əla* CCirc **č̌əLa*, Ub *ǯəja*, CAbx **ʒ°la* 'seed, stone (of fruit)', 'population of village', 'clan'

Comment:

The reconstruction of CWC **ɬ°´* is tentative as it is based on the unique correspondence. Ubykh supposedly underwent a development (**l* >) **L* > *j*.

4.1.7. CWC **ɬ'´* > CCirc **λ'* : Ub *ɬ'* : CAbx **š´*

Examples:

(1) **ɬ'ə* CCirc **λ'ə* 'to kill', 'to die', CAbx **šə* 'to kill'

(2) **p'ɬ'ə* CCirc **p'λ'ə*, Ub *p'ɬ'ə*, CAbx **pšə* 'four'

(3) **p'ɬ'ə* CCirc **p'λ'a* 'upper back, shoulder', 'the top, front part of sth', Kab also 'blouse, (woman's) jacket', Ub *p'ɬ'ə-fa* 'breast, bosom' (*fa* 'nose, front'), CAbx **pšə* 'side', 'waist', 'skirt of cherkesska (Caucasian man's upper clothes) on the waist'

(4) **p'ɬ'a* CCirc **γa-p'λ'a* 'to (com)press, iron' (**γa-* causative prefix), **q'a-p'λ'a* 'embrace', 'armful' (**q'a* 'hand, arm'), CAbx **pša* 'to become soft, soften (of cow's udder)', **r-pša* 'to make soft, mass to make soft (of cow's udder)' (**r-* causative prefix)

Comment:

Shagirov (ES II: 48), connecting the Circassian and Ubykh words in (3), analyses them as derived from CCirc **p'λ'ə*, Ub *p'ɬ'ə* 'four', which I don't find semantically convincing.

4.2. THE CWC LATERAL FRICATIVES

4.2.1. CWC *L´ > CCirc *L : Ub L : CAbx *ž´

Examples:

(1) **bLˊə* CCirc **bLə*, Ub *bLə*, CAbx **bžˊə* 'seven'

(2) **Lˊə* CCirc **Lə* 'meat, flesh, body', Ub *La* 'entrails, intestines', CAbx **žˊə* 'meat, flesh'

(3) **bLˊa* CCirc **bLa-* prev. 'past, by, in passing', Ub *bLa* 'in, between', CAbx **bžˊa* 'between'

(4) **Lˊa* CCirc **γa-q˚ə-La* 'to fool' (Ad), 'to tempt, seduce' (Kab) (**γa-* causative, **q˚ə* 'mouth'), **q˚ə-La* 'fool', Ub *La*, CAbx **žˊa* 'to fool'

(5) **Lˊa* CCirc **La* 'to dye, paint, varnish', CCirc **c'a-La* 'to smear, soil', Ub *La* 'to dye, paint'

(6) **(a)Lˊa* Ub *La*, CAbx **ažˊa* 'hare'

(7) **Lˊa* CCirc **La-γ˚ə* 'person of the same age' (comitative suffix **-γ˚ə*), **č'a-La* 'youth, young man, boy' (**č'a* 'young, fresh'), Ub *La* 'to pass (of time)', *La-c'a* 'to live (of time), years old'

(8) **q˚aLˊa* CCirc **q̄˚aLa* 'raven, crow', Ub *qaLa* 'jackdaw'

(9) **Lˊa(-wə)-Lˊa(-wə)* CCirc **La-wə=La-wə* 'lullaby', cf. CAbx **žžˊa* 'to console, comfort' (< **žˊa-žˊa*)

Comments to the items in no.:

(2) It is phonetically improbable that Ub *γˊa* 'meat, flesh, body' belongs to the items presented here, despite Lafon 1966: 24 and Abdokov (ZS 82); cf. also MS 55. I agree with Nikolayev and Starostin (NS 945) in assigning here the Ubykh word for 'intestines', which matches well phonetically, though not quite exactly semantically. Abdokov (ZS 74) compares the Ubykh word for 'intestines' with Ad *bLa-rə-ps*, Kab *La-rə-ps* 'chain', Ad *šx˚ă-bLă-nčˊˊ* '(bridle) rein' (*šx˚ă* 'bridle'; in RAd 602: *šx˚ămLačˊă*); cf. also *La* in CCirc **bžaLa* 'liana', **q^{h}˚əLa* 'stalks and leaves (of melons, potatoes, beets, etc.); this comparison can be regarded as an alternative, though less plausible, to the solution given in (2). In Ubykh cf. also *La-nd˚a* 'animal considered as property', 'cattle' (Dumézil 1959: 67) with the increment *-n-* and attributive suffix *-d˚a*, present also in *š˚a-n-d˚a* 'wild animal, prey' (**š˚a* 'hunt').

(4) Shagirov (MS 106) regards Ub *La* as a Circassian borrowing, comparing at the same time CCirc **La* with Ub *-Lə* in *gə-Lə* 'to be glad, rejoice' (*gə* 'heart'), which I don't find very plausible because of the unclear semantics of Ub *-Lə*. I think Vogt 889 is quite right in etymologically uniting Ub *La* 'to fool' and *La* 'to paint', which Shagirov (MS 106-7) finds to be risky. It is quite probable that the

items in (4) are semantically derived from CWC *La* 'to paint, cover with paint', i.e. 'to cover, conceal the truth'.

(7) Shagirov (ES I: 241) connects *La* in CCirc **La-γ°ə* with *Lə* 'meat, flesh, body' (cf. also Kuipers 1960: 91, 109), which, given the Ubykh cognate, is not plausible. Ub *Laγ°a* 'person of the same age' is from Circassian (ES I: 241). In Circassian cf. also *La* in **čʰəLa* 'middle (of summer, winter)'.

4.2.2. CWC **λ* > CCirc **λ* : Ub *λ* : CAbx **š*

Example:

**pλə/a* CCirc **pλə/a*, Ub *pλa*, CAbx **pšə* 'to look'

Comment:

This correspondence is regarded by Balkarov 1970: 231 as an indication of the presence of an opposition "plain vs. palatalised" in Proto-West Caucasian obstruent laterals. Both Shagirov (MS 32-33) and Abdokov (FL 78) regard the non-palatalised spirant in CAbx **pšə* as secondary. But the comparison of this morpheme with CAbx **apšə* 'red' (< CWC **pλ́ə*) and **pšə* 'four' (< CWC **pλ́'ə*) shows that the loss of palatalisation cannot be explained by positional conditions.

4.2.3. CWC **λ́* > CCirc **λ* : Ub *λ* : CAbx **š́*

Examples:

(1) **λ́a* CCirc **λə*, Ub *λa*, CAbx **š́a* 'blood'

(2) **λ́a* CCirc **λa*, Ub *λa-p'a*, CAbx **š́a-pʷə* 'foot, leg'

(3) **λ́aś°ə* CCirc **λapśə*, CAbx **š́aś°ə* 'god of the smiths'

(4) **λ́ə* CCirc **λə*, Ub *λə* 'to lie' (used only with preverbs), CAbx **š́-t'a* 'to be lying'

(5) **-λ́a* CCirc **-λa* in **č'ə-λa* '(dry) land' (**č'ə* 'land, earth'), Ub *-λa* in *məγ́a-λa* 'path' (*məγ́a* 'road'), *jəc°a-λa* '(dry) land' (*jəc°a* 'land, earth'), Tap *-š́* in *məħ°a-š́* 'path' (*məħ°a* 'road')

(6) **λ́a-p'qʷa* CCirc **λa-p'qʷa*, Ub **λaq'a* 'dear, expensive, precious'; cf. also the first part of CAbx **š́a-x̌ʷə* 'good' (**x̌ʷə* 'price'), which is probably **š́a* 'paying in kind', and *λə* in Ad *λə-psə*, Kab *λə-psă-j* (Urusov 107) 'very expensive'

(7) **λ́ə* CCirc **λa/ə*, CAbx **š́ə* 'to hang' (used only with local prefixes)

(8) **λ́a(-λ́a)* CCirc **λaλa* 'to fall apart, spill, scatter, crumble, crack', **za-γa-λa* 'to pucker, wrinkle, cockle' (**za-* reciprocal prefix, **γa-* causative), CAbx **š́a* 'to crack, split, chunk', **š́š́a* 'id. (into many pieces)' < **š́a-š́a*

(9) *λ́a/ə CCirc *λə-tʰa 'to count, consider' (*tʰa 'to give' ?), CAbx *šʼa 'to think, consider, regard, evaluate'

(10) *λ́ə(-λ́ə) CCirc *λə 'to whet, sharpen', CAbx *šʼə-šʼə 'to grind, knead' (redupl.)

(11) *λ́a/ə CCirc *λa/ə 'to run, pass (as hand over hair, etc.), caress', 'to smear' (used only with local prefixes), e.g. Kab *dă-λă* 'to rub lightly', 'to stroke' (*dă-* prev. 'into, inside'), *śə-cʼă-λə* 'to smear on sth', CAbx *šʼə 'to smear, plaster, touch, rub' (used with local prefixes)

(12) *-λ́a Ub ǯʼə-λa, CAbx *aj-ašʼa 'brother' (Ub ǯʼə- comitative prefix, CAbx *aj-* reciprocal prefixes)

(13) *-λ́a CCirc *pʰa-λa 'as if, standing for, similar, same', Ub -λa, CAbx *-šʼa suffix 'manner of (action or behaviour)'

(14) *pλ́ə CCirc *pλə-ǯʼə, Ub *pλə*, CAbx *apšʼə 'red'

(15) *λ́ə Ub *λə* 'deer', CAbx *šʼabəsta 'chamois'

Comments to the items in no.:

(3) The comparison was proposed in Turchaninov 1949: 48, 49. Though Abdokov (FL 37, 58) regards *-p-* in Circassian as an increment, it is possible to suggest here a metathesis of the labial component (*śʷ > *pś), just as it can be supposed in the case of Kab *tħă-mśʼə-γʷ* 'liver' (cf. FL 68; ZS 83) vs. Ad *śʷə* 'id.'. Cf. also a similar shift *źʷ > *bź/z* in Kab *wə-bź/zə-txă* 'to spit' vs. Ad *wə-źʷə-ntxă* and regular BesKab *wə-və-txă* 'id.' (FL 32); the variant with *-z-* is probably due to the influence of *bzǎ* 'tongue'.

(4) Kumaxov (Morf 84) suggests the connection of the verb 'to lie' with *λa 'foot, leg'.

(5) For possible etymological connections of the suffix *-λa see ES I: 245.

(6) For possible etymology of *λapʼqʷa see ES I: 245-6.

(7) It is possible, as suggested in PC 43, to connect the given items with those in (4).

(9) Is there a connection between (6) and (9) ? Cf. also CAbx *šʼa-ra 'thing', 'paying in kind'.

(8) Both Circassian and Abkhaz items show reduplication.

(10) These items can be etymologically connected with those in (11). Some authors (cf. ES I: 255; MS 107; NS 201) compare the Circassian item in (10) with CAbx *šʼə-šʼə 'to caress (by hand)' (see under CWC *šʼ), but this must be another root, akin to Ubykh *šʼəšʼə* 'id.' (cf. under CWC *šʼ), provided, of course, the Ubykh item is not borrowed from Abkhaz.

(12) The Ubykh and Abkhaz words for 'brother' are analysed by many authors as

'common blood', cf. (1) (see Uslar 120, 122; Charaia 50, 52; Dirr 82; MP 290; Dumézil 1971: 144; but cf. Marr's opinion in Charaia 52).
(13) Urusov 146 explains the first part of CCirc **pʰa-λa* as **pʰa* 'nose, front', while its second part is connected by him with the Circassian item in (9).
(15) There are three possibilities of analysing the Abkhaz word for 'chamois'. The first is: **šʹ-abə-sta*, with **šʹə* = Ub *λə* 'deer', **abə* 'male goat' and **sta* = Ub *stʼa* 'goat' (with the same discrepancy *t* : *tʼ*, as in the word for 'ram'). Another possibility is to reconstruct PAbx **λamə-sta*, with the first part descending from PNC **l̄iHmV* 'roe, mountain goat, deer' (according to the reconstruction in NS 761, cf. PNakh **lVwV* 'roe', PAvar-Andi **l̄ama* 'mountain goat', PLez **l̄ˤij* 'roe, chamois' = Ub *λə* 'deer') and the second part corresponding to Ub *stʼa* 'goat'. The phonetic evolution in this case could be as follows: **λamə-sta* > **šʹabəsta*, cf. also a Bzyp variant *a-šʹapsta* (with the complete assimilation of the bilabial to *-s-*). The evolution *-mVs-* > *-ps-* is quite typical for Abkhaz, cf. for example SAbx *a-psəlman* < *a-msəlman* < Tu *müslüman* 'Moslem'. Ub *λə* in this case must have lost the final *-mə*. The third possibility is to analyse the Abkhaz word as **λ-abəsta*, with the first part akin to Ub *λə*, and the second to Ub *stʼa* and PNakh **ʔābst* 'goat (about one year old)' (Chech *awst*, Ing *ɔsta*; cf NS 245), with the first syllable lost in Ubykh. If this third etymology is correct, then the Chechen item must be separated from Darg **ʕečа* 'goat', CCirc **ačа* 'billy-goat' (compared in NS 245); the Abkhaz cognate to these latter is probably CAbx **ča* 'deer'.

4.2.4. CWC **λ˚* > CCirc **x˚*, **x* : Ub *š˚* : CAbx **š*

Examples:

(1) **λ˚ə* CCirc **x˚ə*, Ub *š˚ə*, CAbx **šə-šə* 'to plait, wattle (twigs, fence)'
(2) **λ˚a* CCirc **x˚a-ba* 'warm', Ub *š˚a-da* 'to boil', CAbx **šə* 'to boil, warm up'
(3) **λ˚ə* CCirc **xə*, Ub *š˚a*, CAbx **mašəna* 'sea'
(4) **λ˚a-kʷʼa* CCirc **xa-kʷa*, Ub *š˚a-kʼa* 'stallion'
(5) **λ˚a/ə* CCirc **wə-x˚a* 'to build, create' (Kab), cf. also **λ-x˚a/ə* 'to give birth' (**λ-* < **λə* 'to lie, be lying' or 'blood', cf. ES I: 254), Ub *š˚ə-wa* 'business, profession', CAbx **ša* 'to divide, share', 'to create', **q-ša* 'to give birth' (SAbx), 'to originate, descend from' (Tap) (**q-* < **qa* 'head')
(6) **λ˚a* CCirc **wə-x˚a* 'to bend' (**wə-* verbal prefix), Ub *š˚a* 'to lower, put down', in causative: 'to bend' (HV 1674; DA III: 242), CAbx **ša* 'to bend, wind' (SAbx *a-r-ša-ra* 'to wind, twist' (*r-* causative prefix), *a-šʹa-mxə-š-la-ra* 'to kneel' (lit. 'to bend knee'), Tap *šʹa-mqa-ša*

'(standing) on bent knees' (*šʹa-mqa* 'knee')

(7) **λ°a/ə* Ub *-šʷ°a* 'place of', CAbx **šʷ°ə* in **-š-q'a* 'to the place of' (**-q'a* directional suffix)

Comments to the items in no.:

(1) Cf. also Kab *wə-x°a-nə* 'to plait, braid'.

(2) *-da* in Ubykh is a fossilised verbal suffix.

(3) Structurally the Abkhaz word for 'sea' differs substantially from the cognates in sister-languages: it contains an unclear initial *ma-* and a final element *-na*. The latter can be tentatively explained as the Common Abkhaz diminutive suffix, **-na*. Nikolayev and Starostin (NS 677) alternatively regard it as the locative suffix, but in this case it should have been **-nə*, not **-na*. In Circassian the root consonant underwent delabialisation (< **x°ə*); cf. the same in (4).

(4) In Circassian delabialisation **x°a* > **x* has taken place; cf. (3). The second part of **λ°a-kʷ°a* is **kʷ°a* 'to go' (cf. ES II: 103).

(5) The second part of Ub *šʷ°ə-wa* can be a cognate to CAbx **wə* 'to do, make, work'. CCirc **λ-x°a/ə* 'to give birth' can be added here only if its second element is not CCirc **x°a* 'to fall'.

4.2.5. CWC **λ°ʹ* > CCirc **x°* : Ub *śʷ°* : CAbx **š*

Examples:

(1) **məλ°ʹa* CCirc **max°a*, Ub *məśʷ°a*, CAbx **məšə* < **məša* 'day', 'happy'

(2) **λ°ʹə* CCirc **x°ə-žʹə*, Ub *śʷ°a*, CAbx **šə* 'white'

(3) **λ°ʹə* CCirc **x°ə* 'corn, maize, millet' (Ad: in compounds), Ub *śʷ°ə-ḫa* 'bread', *śʷ°ə-pə* 'meal, flour', CAbx **šə* 'millet'

(4) **λ°ʹə* CCirc **x°ə*, Ub *śʷ°ə* 'to drive, chase'

(5) **λ°ʹa/ə* Ub *śʷ°ə*, CAbx *aj-ša* 'bitter'

(6) **λ°ʹa* CCirc **za-x°a* 'straight, even' (**za-* reciprocal prefix), CAbx **ja-ša* 'right, even, straight', 'right, true' (**ja-* reciprocal prefix ?); cf. also SAbx *-šša* 'even, straight' (< **ša-ša*, redupl.) found in compounds

Comment:

Some authors suggest that the second syllable in the items in (1) can be connected 'with the morpheme presented in (2), cf. e.g. Charaia 46, which is, however, rejected by Nikolayev and Starostin (NS 822). These authors reconstruct PWC **maλwV* 'day', i.e. with the sequence *λw*, rather than with the labialised *λ°*, which I don't find convincing. Furthermore, it is difficult to postulate two different morphemes, **məλ°ʹa* 'day', and **məλ°ʹa* 'happy', pace NS 1041. The second

meaning, 'happy', which has not only the Circassian word, but also Abkhaz and Ubykh, might have evolved from a lost idiomatic expression containing the word 'day'.

The final *-a* in Abkhaz is preserved in such forms as SAbx *jasə-mša* 'every day', as well as in the names of the days of the week: *a-j°aša* 'Tuesday' (**ĥ°-a-ša < *ĥ°-a-məša*, lit. 'the second day'), *a-x̌aša* 'Wednesday' (**x̌-a-ša < *x̌-a-məša*, lit. 'the third day'), etc.

5. THE COMMON WEST CAUCASIAN VELAR FRICATIVES

Velar spirants were only partially preserved in the West Caucasian languages, ranging from three in Circassian (and reduced to two in Bzhadygh) to two in Ubykh and none in the Abkhaz group, where they merged with phonetically close phonotypes. It is possible that some Bzyp and Ahchypsy idiolects still preserve the distinction between velar and uvular voiceless fricatives, but this question needs special investigation. No traces of a labialised voiced velar in Common West Caucasian have been found yet.

5.1. CWC **ĝ* > CCirc **ĝ* : Ub *γ, χ* : CAbx **γ*

(1) **ĝəzə* CCirc **ĝə(r)zə*, Ub *γəzə*, CAbx **γəzə* 'to moan, groan'

(2) **ĝə* CCirc **ĝə-ja* 'dove-grey, spotted', Ub *χa-q'a* 'blue, green', CAbx **γ-ra < *γə-ra* 'spotted'

(3) **bĝa* CCirc **bĝa*, CAbx **bγa* 'to curse'

(4) **bĝa/ə* CCirc **bĝə* 'waist', CAbx **bγa* '(small of the) back', 'waist', 'backbone'

(5) **bĝa/ə* CCirc **bĝə* 'height, mountain, steep bank', CAbx **bγa* 'mountain' (obs.)

Comment:
Shagirov (ES I: 78) suggested an etymological connection between (4) and (5), which is not accepted in NS 291.

5.2. CWC **ĝ´* > CCirc **ĝ* : Ub *ź* : CAbx **γ´*

Examples:

(1) **ĝ´a* CCirc **ĝa* 'scrotum, testicle', Ub *-źa* 'male', CAbx **aγ´a* 'seed', 'male animal or bird left for reproduction'

(2) **ĝ´ə* CCirc **ĝə-ja/ə* 'to reproach, chide', CAbx **γ´ə* 'to scold, rail, abuse, quarrel, raise voice on smb'

(3) **bĝ´a-ra//*bĝ´ə-rə* CCirc **bĝə-rə-* prev. 'throughout', e.g. Kab *zə̆-bĝə-rə-zə* 'to

throw, scatter about' (*zə̆-* reciprocal prefix, *ʒə* 'to throw', *-rə-* 'through'), CAbx **qara=bγ'a-ra* 'in disunity, disorder, scattered, dispersed', 'to scatter, throw about'

(4) **bĝ'a* CCirc **bĝa-na* 'sheaf, tie around sheaf', **q'a-bĝa* 'wattle-made drying rack for corn', Ub *bźa* 'to tie up, attach', *bźa-t°a* 'connection', *bźa-w* 'connection', 'ribbon'

Comments to the items in no.:

(1) Nikolayev and Starostin might be right in considering Ub *ĝa* 'testicle' as a loan from Circassian, suggesting Ub *-źa* as a counterpart to the Circassian and Abkhaz items. They see the same morpheme also in Ub *t°a-źa* 'billy-goat' (*t°a* 'goat', cf. CAbx **abə-γ'* 'id.'), *t'ə-źa* 'ram' (*t'ə* 'ram', cf. CAbx **tə-γ'ə* 'id.'), and in *ba-źa* 'penis'. Their interpretation of the correspondence CCirc **ĝ* : Ub *ź* : CAbx **γ'* is, however, different from mine (cf. NS 749).

(2) Cf. the Circassian segment **ĝə*, used in other compounds: Ad *ĝə-rə=ĝə-t* 'hot-tempered' (AdR 41).

(3) The first part of the Abkhaz compound is probably **qara* 'far(-away)'. Ub *qarabγara* (the same meaning as in Abkhaz) is likely to be an Abkhaz loan (Chirikba 1986a: 116). It is possible that the same root is contained in CCirc **bĝə-na* 'to leave, desert'.

5.3. CWC **x* > CCirc **x* : Ub *š', x* (in cluster *š'x*) : CAbx **x̆*

Examples:

(1) **xə* CCirc **xə/a*, Ub *š'ə*, CAbx **x̆ə* 'to reap, mow', CCirc also 'to hew, chop, drill', Abx also 'to cut, mince, chop, hew, pound, saw', cf. also CCirc **pʰə-xə* 'to saw' (**pʰə-* prev. 'front'), **px̆a-xə* 'saw' (**px̆a* 'wood'), Ub *sə-š'ə* 'saw' (*sə* 'wood')

(2) **xə* CCirc **xə*, CAbx **x̆ə* 'to take out, off, away' (in both languages used only with local prefixes)

(3) **xə/a* CCirc **xə* 'to inflict, deliver', e.g. **wəīən ja-xə* 'to deliver a blow' (**wəīən* 'blow', **ja-* objective suffix), CAbx **x̆a* 'to strike, hit'

(4) **xa/ə* CCirc **wə-xə* 'to finish, be used up' (**wə-* verbal prefix), cf. also Ad *fă-xə* 'to perish, be killed', Kab *wə-źə-xə* 'to die away' (as fire) (*źə* 'old')

(5) **pxə* CCirc **pxə* 'to tie up, bind', **pxə-rə* 'sheaf, bunch', CAbx **rə-px̆ə* 'to string, thread' (**rə-* causative)

(6) **pxə* CCirc **pxə* 'to card (wool)', 'to scratch', Ub *pš'ə* 'to card (wool)', CAbx **px̆-tə* 'scabby, mangy', 'to itch, scab'

(7) **t/šʼxa/ə* CCirc **wə-ʒ̊ə-(n)txa* (**wə-* verbal prefix, for *(n)txa* cf. **wə-txa/ə* 'to splash, splatter'), Ub *ćʷa-šʼxə* 'to spit'
(8) **xa/ə* CCirc **xa-tʰə*, Ub *šʼə* 'who ?'

Comments to the items in no.:
(4) Cf. (alternatively ?) also **xa* in CCirc **qʰa-xa* 'feeble', **čə-xa* 'frail, weak, without stamina', **ma-xa* 'to faint, be tired, worn out', 'weak, brittle', **gʷə-xa* 'weakling' (**gʷə* 'heart'), **maza-xa* 'moonless (night)' (**maza* 'moon'), etc. Urusov 244 links this root with **-xa* 'beneath', 'bottom, lower part'. Ub *fa-xə* 'to be lost; to perish, die' (DA III: 227) is borrowed from Adyghe.

5.4. There are two examples of irregular correspondence CCirc **x* : Ub *x̌*, whose irregular character might render them invalid:
(1) CCirc **xa* 'bottom, lower part', **ja-xə* 'to go down' (**ja-* objective prefix), Ub *a-x̌a-γa* 'beneath, (in) the lower part' (*a-* deictic prefix, *-γa* locative suffix).
(2) CCirc **saxə* 'bar, gate', Ub *səx̌ə//səxə* 'wooden bolt, latch', 'pole, perch'.

Comments:
Ub *səx̌ə* in (2) is analysed by Shagirov (cf. ES II: 60) as 'wood' (*sə*) plus the possessive suffix *-x̌(ə)*, i.e. 'the wooden (thing)'. Though CCirc **saxə* can in principle be borrowed from Ubykh, the difference in the second consonant can indicate that we deal here with an independent Circassian formation with **xə* 'beneath'. The first part (*sə*) then must be regarded as related to Ub *sə* 'wood'. The Ubykh form *səxə*, likewise CAbx **sakʼə* 'special perch to close gates' must be considered as borrowed from Circassian (cf. ES, ibid.).

5.5. CWC **xʼ* > CCirc **x* : Ub *šʼ* : CAbx **x̌ʼ*
Examples:
(1) **pxʼa* CCirc **pxa*, Ub *pšʼa*, CAbx **px̌ʼa-//x̌ʼa-* 'back part'
(2) **-pxə/a* CCirc **-(p)xə*, Ub *-pšʼa* suffix 'inclined to'
(3) **xʼa* CCirc **-xa* suffix meaning 'completely', CAbx **-x̌ʼa* suffix of Perfect
(4) **xʼa* Ub *šʼa*, CAbx **x̌ʼa* 'to milk'
(5) **xʼa* Ub *šʼa-da*, CAbx **x̌ʼa* 'to give birth' (in Abkhaz only about animals)
(6) **xʼa* CCirc **č-xa/ə* 'to eat', CAbx **x̌ʼa* 'food, provisions'

Comments to the items in no.:
(1) There are no reasons to suspect borrowing in Ubykh, pace MS 59. In Abkhaz the item is preserved as a preverb meaning 'backwards', e.g. **px̌ʼa-ćʼa* 'to return'

(*ćа 'to go'), cf. Ub *pšʼa-kʼʼa* 'at the back' (*kʼʼa* 'to go').
(2) Shagirov (ES I: 116-7) finds it possible to connect CCirc **-(p)xə* with the verb **pxa/ə* 'to bind, tie up'. There is no need, however, to regard the Ubykh suffix as borrowed from Circassian (pace ES I: 117). The loss of the initial **p-* in Kabardian (*-xə*) might be due to the association with **xə* 'to go down'.
(3) Cf. Kab *kʷa-γă-ś* 'he has gone', *kʷa-γă-xă-ś* 'he has (completely) gone' (Shakryl 1971: 238), Sh *śʼă* 'to know', *śʼă-xă* 'to know perfectly, entirely' (Paris 1974a: 103, fn.6).
(6) Shagirov (ES II: 139) and Nikolayev and Starostin (NS 517) connect CCirc **č-xa/ə* with Ub *fa*, CAbx **fa* 'to eat'. But, as CCirc **x* (or **x°*) does not correspond to Ubykh or Abkhaz **f*, the comparison given in (6) seems to be preferable.

5.6. CWC **x°* > CCirc **x°* : Ub *x(°)* : CAbx **x̌°*
Examples:
(1) **x°a* CCirc **x°a* 'sinew', Ub *x(°)a* 'vein', CAbx **x̌°a(-r)-šə* 'backbone', cf. also **x̌°a* in CAbx **šʼa-x̌°a* 'metatarsus' (SAbx), Bz also 'marrow of small cattle, metatarsus' (**šʼa* 'foot')
(2) **x°a* CCirc **x°a* in Kab *wə-x°a-n-śʼə* (*wə-* verbal prefix, *-n-* epenthetic, *śʼə* < **čʼʼə* 'to clean', rather than < **śʼə* 'to do, make', as suggested in NS 630), Ub *xa*, CAbx **x̌°ə* 'to sift, bolt'
(3) **x°a* CCirc **x°ə-psə* 'larva, grub', Ub *xa*, CAbx **x̌°a* 'worm', cf. also CAbx **x̌°a-psa* 'worm-eaten, wormy'
(4) **x°ə* CCirc **šʼa-x°ə* 'to buy' (**šʼa* 'to sell'), cf. also **ħa-x°ə* 'object borrowed', CAbx **x̌°ə* 'price', **x̌°ə-ħa* 'to buy'
(5) **tx°ə* CCirc **tx°ə*, Ub *šχə*, CAbx **x̌°ə* 'five'
(6) **tx°a/ə* CCirc **wə-tx°a/ə* 'to thrust, stab, prick' (Sh), Ub *šχa*, CAbx **x̌°ə* 'to wound'
(7) **ś°ax°ə* CCirc **ś°ax°ə* 'plain, steppe, smooth side of knucklebone used in bone game' (Ad), 'bald' (Kab), Ub *ś°ax* 'flat, even, smooth'
(8) **x°a* Ub *λa-xa* 'mountain (with forest)', 'forest' (with *λa* 'foot' ?, cf. NS 425), CAbx **x̌°a* 'hill, mountain'
(9) **čχ°ə* CCirc **čχa/ə* 'to rain' (used with prefixes), **wa-čχə* 'rain' (**wa* 'sky, weather'), Ub *tʼ°a-šχ* 'hail', CAbx **čx̌°ə* 'to urinate'

Comments to the items in no.:
(1) The Ubykh word is given in the literature as *xa*, with the variant *x°a*, which is obviously an older form (cf. Dumézil 1937: 13; Dirr 116; Klimov 1967: 304; NS

1065).
(4) Nikolayev and Starostin (NS 842), proposing the comparison, add here also Ub *fa* 'to pay', which is difficult to accept because of the irregular character of the correspondence (which is admitted by the authors themselves). CAbx **x̌ʷə-ħa* can be analysed as **x̌ʷə* 'price', **ħa* 'to borrow'.
(5) The original form of the Ubykh numeral 'five', i.e. *šx̌ʷə*, is in fact represented in the list of Ubykh words made in the XVIIth century by the Turkish traveller Evliya Çelebi: *[e]şə(x)u* 'five' (cf. Gippert 1992: 23).
(7) Ub *śʷax* can as well be borrowed from Circassian, cf. the comments under CWC **śʷ*, no. (15).
(9) The first part of Ub *tʷa-šx̌* can be compared with CAbx **tʷa* 'to pour (as liquid)'. The evidence for the original affricate in Circassian is preserved in Svan *(w)učxa* 'rain', borrowed from Circassian (cf. ES II: 93). The spirant *š´* instead of the affricate in Ubykh is explained by Nikolayev and Starostin (NS 341) by prohibition of the clusters 'affricate plus fricative'. I agree with the latter authors that Shagirov's criticism of Klimov's (1967: 304) etymology, who compared the Circassian and Abkhaz words, is not justified, cf. in Russian a somewhat similar semantic development мочить 'to make wet' > мочиться 'to urinate', моча 'urine'. The velar spirants in Circassian and Ubykh words underwent delabialisation.

5.7. CWC **xʷ´* > CCirc **xʷ* : Ub *x* : CAbx **x̌*

Examples:

(1) **xʷa* CCirc **xʷa* 'to fit, find place in, around' (only with local prefixes), **q̄ə-da-xʷa* 'to left over' (**q̄ə-* 'hither', *da-* prev. 'flat space'), suffix **-xʷa* 'leftovers', Ub *xa* 'to be, be somewhere, exist' (pl.) (corresponding to the singulative verb *tʷ*), *-xa* suffix 'leftovers', CAbx **x̌a* 'to stay, remain' (used with preverbs), **-x̌a* suffix 'leftovers'

(2) **xʷa* Ub *-xa* 'time for doing sth', CAbx **ax̌a* 'time', suffix **-x̌a* 'time for doing sth'

Comment:

The reconstruction in (1) seems tentative, as the Circassian segment can be derived from the verb **xʷa* 'to fall', while Ub *-xa* 'leftovers' is considered by Shagirov as borrowed from Circassian (cf. MS 150).

6. THE COMMON WEST CAUCASIAN UVULAR FRICATIVES

6.1. CWC **γ* > CCirc **γ* : Ub *γ*, *χ* : CAbx **γ*

Examples:

(1) **g°ə-γa* CCirc **g°əγa* '(to) hope', Kab also 'opinion', Ub *g°āγa* '(to) hope'

(2) **γarə* CCirc **γarə* 'prisoner', Ub *γər* 'prisoner', 'slave', CAbx **γarə* 'poor'

(3) **γərə* CCirc **γərə-γərə* onomatopoeia for the sound of crash, roar, shooting, Ub *γər* 'to growl, snarl showing teeth' (Notes 13-15: 12), CAbx **γərə- γərə* 'to grumble, growl', 'grumbler'

(4) **t̄əγa* CCirc **t̄əγa*, Ub *(n)dəγa* 'sun'

(5) **ʒ́yə* CCirc **wə-ʒ́yə* 'to peel, pearl (barley), to husk', Ub *ʒ́yəʒ́yəʒ́ya* 'the sound of turning of the mill-wheel' (Notes 4-6: 34)

(6) **γa-γa* CCirc **q̄a-γaγa* 'to flower, bloom' (**q̄a-* 'hither'), Ad *qa-γaγă*, Kab *wəʒ γăγa* 'flower' (*wəʒ* 'grass'), Ub *č'a-χa* 'to yawn' (*č'a* 'mouth'), i.e. 'to widen the mouth', CAbx **γaγa* 'spread, branchy, spacious', Tap also 'fat, plump (of man)', 'width, thickness'

(7) **γəba* Ub *γəba*, CAbx **γba* 'ship'

(8) **maγəγə* Ub *maγəγ məʒə* 'kind of prickly plant' (*məʒə* 'thorn'), CAbx **mγəγə* 'prickly' (of a person)'

(9) **məγə* Ub *La-mγa-ća* 'kind of bad grass' (*La* 'hare'), CAbx **məγə* 'prickle'

(10) **məγə* Ub *məγə* 'to be irritated, angry', CAbx **ć°ə-mγə* 'to hate' (**ć°ə-* objective version)

(11) **dəγa-* Sh (ShD 98) *dəγəčă* 'laurel', Ub *dγač'a* 'kind of evergreen tree', 'juniper', CAbx **dəγaʒ́'a* 'ilex, holly'

(12) **γə-* CCirc **γə-*, Ub *γə-* causative prefix

(13) **γa/ə* Ub *q'ə-χə* 'to cut, make notches', Tap *a-ħ°ə-r-γγa* 'to cut in many pieces' (*a-ħ°ə-* 'in two', *r-* causative)

(14) **γə* CCirc **γə* 'to be worn, suspended, attached' (in **šʰə-γə* 'to be worn (of clothes)', with the local prefix **šʰə-*, **q'ə-γə* 'to be held', with **q'a* 'hand'), Ub *q'a-γə* 'to have' (*q'a* 'hand'), **γə* 'to be suspended, attached, hanged' (used with local prefixes)

(15) **γə/a* CCirc **na-žγə* 'eye-socket', 'temple' (**na* 'eye'), CAbx **k'a-ʒ́a-γa* 'slope, hill-side', **ʒ́a-γə* 'cheek'

Comments to the items in no.:

(1) CAbx **g°əγa* 'hope' is probably a Circassian loan (cf. ES I: 115; MS 98). The first part in **g°ə-γa* is **g°ə* 'heart'.

(2) Shagirov's attempts to demonstrate the borrowed character of the given West Caucasian words cannot be considered successful (cf. ES I: 126).

(3) CCirc **γərə-γərə* is reconstructed on the basis of Kab *γər-γərγ* 'id.' (KR 53); the verb *γərə* 'to growl, snarl' was also used in Adyghe spoken by Tevfik Esenç

(cf. Notes 13-15: 12). The verb is obviously onomatopoeic.
(8) The comparison is rather tentative as the Ubykh word can be just an incorrect rendering by Mészáros (MP 246) of *māməγ´* 'thistle', as was suggested by Dumézil (cf. DA III: 233). In Abkhaz cf. also CAbx **dər-γəγə* 'lean, skinny (of man)', 'a sort of bushy plant parts of which are used in medicine' (for **dər-* cf. also CAbx **dər-ʒə* 'horse sorrel').
(9) For the second part of Ub *mγa-ća* cf. *məγāća* 'beans' (HV 1130). The segment *məγə* is found also in such Ubykh names for plants as *məγā-sə* 'hornbeam' (*sə* 'wood'), *məγa-ć°a* 'alder-tree'.
(11) The correspondence of the final segments of the given items is irregular. The discrepancy between Ubykh and Abkhaz is not serious, as we have either devoicing in Ubykh, or voicing in Abkhaz. Sh *-că*, however, can correspond neither to *-ʒ´a*, nor to *-č´a*. Beside the Ubykh form given here, Vogt gives also *dγaməʒə* (HV 552a), which T. Esenç regards either a variant or a misspelling for *daγ´ərəməʒə* 'thorny bush'. Cf. also Ub *dγaś°a* (MP 280), *dγaś°ə* (Dirr V: 17) 'laurel' and *dγārabə* 'ivy' (HV 554). Dumézil (DA III: 226) suggests to eliminate both *dγaməʒə* and *dγaś°a/ə* as unreliable, which I wouldn't do (at least in the second case). All these forms suggest the compounded character of the items in (11), which make use of different final elements: *-că* in Circassian, *-č´a* in Ubykh and *-ʒ´a* in Abkhaz.
(13) The pharyngealisation in Ubykh form in (6) and (13) is probably expressive, similar in function to reduplication.
(14) If CAbx **aña* 'leather strap' also belongs here (with the probable original meaning 'the thing which is suspended' ?), then the CWC protoform must be **ʃə*.

6.2. CWC **γ´* > CCirc **γ* : Ub *γ´* : CAbx **γ´*
Examples:
(1) **γ´ač´ə//*č´aγ´a* CCirc **γ´ač´ə* 'milk, milk products, food', Ub *č´aγ´a* 'anything which is eaten with bread', 'food (besides bread)', CAbx **č´aγ´a* 'slice of bread; piece of food'
(2) **bγ´a* CCirc **bγa* 'breast', Ub *bγ´a* 'upper part' (both used also as preverbs), probably also CAbx **bγ´a-* in **bγ´a-t´a* 'to shovel (as hen), scratch' (**t´a* 'to ladle out, scoop out')
(3) **baγ´ə* Ub *bγ´ə* 'to open (as leaf, hand)', CAbx **ba/əγ´ə* 'leaf'
(4) **bγ´a* CCirc **ja-bγa* 'to take offence at, carry a grudge about' (**ja-* objective prefix), probably also *ž´ə-bγa* '(strong) wind' (*ž´ə* 'wind'), CAbx **bγ´ə-ña* 'swiftly, momentarily', SAbx *aj-bγ´-aa* 'brave' (*aj-* reciprocal prefix, *-aa* VRE)

(5) **aγ'a* Ub *d-āγ'a* 'fresh, young, new, brave' (DA III: 226), CAbx **aγ'a-ĥ°ə* 'brave' (**-ĥ°ə* agent suffix)

(6) **aγ'a* Ub *m-āγ'a//m-aγ'a* 'twisted, oblique, indirect' (*m-* negation), CAbx **arəγ'a* 'right (side)', **aj-γ'a* 'good, excellent' (**aj-* reciprocal prefix), cf. also Ub *bLa-māγ'a* (*bLa* 'eye'), CAbx **m-arγ'a* 'squint-eyed' (*m-* negation)

Comments to the items in no.:

(1) Cf. comments in 2.3.7. above.

(5) Dumézil (DA III: 226) analyses Ub *d-āγ'a* as the relative prefix *də-*, directional particle *a* 'to(wards)' and *γ'a* 'time', i.e. 'one's time'. Unlike Dumézil, I interpret the word as **də-a-aγ'a*, relative plus directional prefix and the root *aγ'a*, cognate to Abkhaz in (5).

6.3. CWC **γ°* > CCirc **γ°* : Ub *γ°*, *χ°* : CAbx **γ°*

Examples:

(1) **γ°ə* CCirc **γ°ə* 'stake, pole, plank' in CCirc **pčʼa-γ°ə* 'pole' (**pčʼə* 'pike, lance, spear'), Sh *pxă-γ°ə* 'board, plank' (PC 67) (*pxă* 'wood'), CCirc **pʰa-γ°ə* 'the upper-front part of a plough' (**pʰa* 'nose, front'), Ad *kʼ°ə-pa-γ°ə* 'pole, beam' (*kʼ°ə* 'cart', *pă* 'front'), Ub *γ°ə* 'post, pole, pillar', CAbx **γ°ə* 'board, plank'

(2) **γ°a-Ła* CCirc **γ°ətĥa*, Ub *γ°aLa* 'to urinate'; cf. for the first part also SAbx *a-γ°aĥa-ra* 'to belch', Tap *γ°aγ°a* 'to hiccup' (?)

(3) **γ°a* CCirc **γ°a-* in Ad *γ°a-(n)tʼkʷă* 'drop (of water, etc.)' (**tʼkʷa* 'to drip'), Ub *γ°a* 'to pour (of liquids)', SAbx *a-čə-r-γ°a* 'to vomit (of horse)' (*a-čə* 'horse', *-r-* causative)

(4) **γ°a* Ub *žγ°a*, CAbx **γ°a-γ°a* 'to press, squeeze' (a reduplication)

(5) **γ°aγ°a* CCirc **γ°aγ°a* in Ad *jă-pă-γ°ăγ°ă-xə* 'to become sad' (*jă-* objective prefix, *pă* 'nose', *xə* down'), Ub *χ°aχ°a* 'to huddle oneself up, shrivel', CAbx **γ°əγ°ə* 'to sit attentively listening (of small people, children)', 'lonesome person'

(6) **γ°a* CCirc **γ°a-tʰa/ə*, Ub *γ°a-wə* 'to find' (?)

Comments to the items in no.:

(1) Shagirov (ES I: 137-8) compares with Abkhaz and Ubykh items also CCirc **γ°ə-mə* 'thick (of cylindrical objects)', analysing it as **'thick (*mə*) pole'.

(2) It may well be that the Circassian and Ubykh words are comparable wholly, while the Abkhaz only by the first part, as there is no such correspondence as

CCirc **tħ* : Ub *L* : CAbx *ħ*, while the correspondence CCirc **tħ* : Ub *L* : CAbx **l* is attested in at least three cases (see correspondences under CWC **Ł*). **γ°a* in (2) can be connected with the items in (3). Less probable is the comparison of the second syllables of CCirc **γ°ətħa*, SAbx *a-γ°aħa-ra*.
(4) The initial **ź* in Ubykh is unclear.
(6) The second segment in CCirc **γ°a-tʰa/ə* can be **tʰa* 'to give', while the second segment in Ub *γ°a-wə* can be connected with CAbx **awə* 'to get'. As the Abkhaz correspondence to this comparison is not known, the CWC reconstruction can as well be **ʕ°a*.

6.4. CWC **γ°ˊ* > CCirc **γ°* : Ub *γˊ* : CAbx **ź°*
Example:
**bγ°ə* CCirc **bγ°ə*, Ub *bγˊə*, CAbx **ź°ə* 'nine'

Comment:
Shagirov's suggestion that the Ubykh word for 'nine' is borrowed from Circassian with the subsequent delabilisation of the spirant, as well as his comparison of Ub *ź°ə* 'ten' with CAbx **ź°ə* 'nine' (cf. MS 52), cannot be accepted. Abkhaz has obviously lost the initial *b-*. Because PWC **ĝ°* and **ĝ°ˊ* coincided with CWC **γ°* and **γ°ˊ*, it is possible to alternatively reconstruct **bĝ°ə* (cf. NS 208).

6.5. CWC **x̌* > CCirc **x̌* : Ub *x̌*, *x̲̌* : CAbx **x̌*
Examples:
(1) **x̌a* CCirc **x̌a/ə* 'to knit, weave', *x̌ə* 'net, fishing net, web', Ub *x̌a* 'to knit', CAbx **x̌a/ə-x̌a* 'to spin thread' (**x̌a* 'thread')
(2) **x̌ərə* CCirc **x̌ərə*, Ub *x̌ər* (Notes 13-15: 22), CAbx **x̌ərə-x̌ərə* '(to) snore' (onomat.)
(3) **x̌a* CCirc **γa-x̌a* (**γa-* causative), CAbx **x̌a* 'to work, do, accomplish'
(4) **x̌a* Ub *x̲̌a* 'to scrape, comb, scratch', *x̲̌a-x̲̌a* iterative form of *x̲̌a*, CAbx **x̌a-x̌a* 'to scratch itself (as dog)'; cf. also probably CCirc **x̌aχa* 'line' (Tem)
(5) **x̌ə/a* Kab *x̌ă-ră-x̌ă* '(to be) empty-headed, giddy', 'fussy, fidgety' (*-ră-* connective), cf. also probably CCirc **x̌ə-źa* 'to hurry' (Ad), 'to be bold, decisive', Ub *x̲̌a* in *bzə-x̲̌a* 'pouring rain, heavy shower' (*bzə* 'water'), *ć(ə)-x̲̌a* 'diarrhoea' (*ćə* 'to defecate'), CAbx **x̌x̌ə* 'to run up to, hasten to' (used only with preverbs)
(6) **px̌a* CCirc **px̌ə*, Ub *px̌a* 'to strew, scatter, sow by strewing'
(7) **tx̌a* CCirc **x̌a* 'scant' in **c̄a-x̌a* 'with wide-spaced teeth' (**c̄a* 'tooth'),

za-pʰa-x̌a* 'thin, sparse' (za-* reciprocal prefix, **pʰa* 'nose, front'), cf. also **c'ər-x̌ə* 'thin, transparent (fabric)', Ub *tx̌a* 'thin, sparse, scant, shallow', CAbx **x̌a-x̌a* 'scant, thin' (a reduplication)

(8) **px̌a* CCirc **px̌ə* in **čа-px̌ə* 'to dry up, dry out', CAbx **px̌a* 'warm', 'to warm up', 'to shine (of sun, moon)'

Comments to the items in no.:

(1) CAbx **x̌a* 'thread' is preserved in the following compounds: Bz *a-x̌a-pa* (**pa* 'to weave, knit'), Abzh *a-x̌a-c'a* (*c'a* 'to put') 'loop made of twisted thread', CAbx **x̌a-cə* (**cə* 'single') 'piece of thread'. Unlike Abdokov (FL 73), who proposed this comparison, Shagirov and Nikolayev with Starostin prefer to compare Circassian and Ubykh with another Abkhaz root, **ħa* 'to weave', which I find less plausible (cf. ES II: 109; MS 115; NS 645-6).

(3) In Circassian it is possible to derive **Laž'a* 'defect', 'fault, guilt', 'misfortune', 'grief, sorrow' from the homonymic **Laž'a* 'to wear out, be used up' (cf. ES I: 240). The same semantic development is supposed to have taken place in Abkhaz, cf. *a-x̌á-ra* 'defect', 'guilt, fault' vs. *a-x̌a-rá* 'to wear out, be used up' (ES, ibid.). CCirc **Laž'a* 'defect', 'fault, guilt' is further derived from **Laž'a* '(to) work' (cf. Abaev I: 95). If all this is right, then we can derive CAbx *a-x̌á-ra* in both senses from **x̌a* 'to work'.

(5) The analysis of Ub *x̱a* as 'to run' can be supported by the analysis of CCirc **nəba-čа 'diarrhoea', with *nəba* 'belly' and **čа* 'to run', cf. Ub *ć(ə)-x̱a* 'diarrhoea' (*ćə* 'to defecate'). An alternative Circassian counterpart in (5) could be CCirc **tx̌ə-tx̌ə* 'to hurry'.

(8) For the first part of CCirc **čа-px̌ə* cf. probably CCirc **čə* 'to congeal, harden'. I separate these Circassian and Abkhaz items from CCirc **pš'-tʰa/ə* 'to boil' and Ub *pśə* 'warm' (pace NS 1030) and, following Abdokov (ZS 145), connect them with different East Caucasian material than NS, namely, with PNakh **-ʕābx̌-V(n)* 'hot' (cf. especially Bats *-apx̌ē* 'id.', *dopx̌* 'sweat' : CAbx **px̌a* 'warm', **px̌-zə* < **px̌a-zə* 'sweat', with **zə* 'water'), PAvar-Andi **-ix̌Vn-* 'to warm', 'to kindle', 'to become heated', PTsez **-i̱x̌V-* 'warm', PDarg **-ux̌(Vn)-* 'to burn', PLez **ʔex̌Vn-* 'to catch fire' (all protoforms are from NS 563). Cf. also PK **-px̌-* 'warm', probably a North Caucasian (PNakh or PAbx) loan.

6.6. CWC **x̌'* > CCirc **x̌* : Ub *x̌'* : CAbx **x̌'*

Examples:

(1) **a+x̌a/ə* Ub *ax̌'a* 'place of' in: *č'āx̌'a* 'stable' (*čə* 'horse'), *dəmāx̌'a* 'hen-coop' (*dəma* 'hen'), *g°əmāx̌'a* 'cow-shed' (*g°əma* 'cow'), *Laq'āx̌'a* 'calf-herd'

(*Laq'ə* 'calf'), CAbx **a+x̌ə* directional postposition 'towards, to', **nax̌ə* 'there' (**na* 'there'), **lax̌ə* 'down there' (**la* 'down'), **qax̌ə* 'up there' (**qa* 'head', 'top'); also used as a locative prefix: *s-ax̌'-ca-wa* 'to where I go'

(2) **x̌'a/ə* Ub *x̌'a-* prefix 'towards, by, at, for', the grammatical version prefix, CAbx **a+x̌ə* adverbial prefix of reason

(3) **x̌'a/ə* Ub *-x̌'a* in *č'ə-x̌'a* 'today', *š°a-x̌'a* 'this year' (*š°a* 'year'), *š'ax̌'a//šāx̌'a* 'until, up till, by', CAbx **-x̌'a* in **ja-x̌'a* 'today', Sa, Ash *wa-x̌'-t°a* 'id.' (**ja-*, **wa-* deictic prefixes, **-t°a* attributive suffix), cf. also Ub *fāx̌'a*, CAbx **pə-x̌'a* 'earlier, some time ago' (*fa*, **pə* 'nose', 'front')

(4) **tx̌ə* CCirc **tx̌a/ə* 'to scratch, to peel ears of corn', 'to tear out', Ub *tx̌ə* 'to tear'

Comment:
The items in (1) and (2) are probably etymologically identical. Dumezil 1975: 140-1 compared the Ubykh version prefix directly with the Abkhaz postposition 'towards', cf. *sa-ra s-ax̌'* 'towards me'. Nikolayev and Starostin (NS 1064) compared this Ubykh prefix with the CCirc benefactive prefix **x°a-*, which I find less convincing phonetically.

6.7. CWC **x̌°* > CCirc **x̌°* : Ub *x̌°* : CAbx **x̌°*

Examples:

(1) **x̌°a* CCirc **x̌°a-žə* 'to (ex)change' (suffix **-žə* 'again, back'), **za-x̌°a-k'ə* 'id.' (**za-* reciprocal prefix), Kab *ză-bLă-x̌°ə* 'to change places' (*bLa* 'passing by'), Ub *x̌°a-da* 'to buy' (*-da* verbal suffix), *-x̌°a* 'number, quantity' (in compounds), CAbx **x̌°a* 'to take', 'to buy' (used only with directional prefixes)

(2) **x̌°a* CCirc **q'a-(p)x̌°a-mba* 'finger' (**q'a* 'hand'), **λa-(p)x̌°a-mba* 'toe' (**λa* 'foot'), CAbx **ma-x̌°a* 'arm' (**ma* 'hand'), **šʼa-x̌°a* 'shin-bone', 'foot, feet', 'shin' (**šʼa* 'foot')

(3) **x̌°a* CCirc **jə-γa-x̌°a* 'to pour in' (**jə-* 'inside', **γa-* causative), Ub *x̌°a* 'to make to pass sth', 'to tack, baste thread' (DA III: 220), CAbx **x̌°a* 'to tack, baste, sew by big stitches', 'to quilt'

(4) **x̌°ə/a* CCirc **x̌°ə-pāqə* 'weaving loom', 'form or frame for modelling (clothes)' (**pāqə* 'frame, framework'), CAbx **x̌°a* 'pivot of the shuttle'

(5) **x̌°a/ə* CCirc **bə-x̌°ə* 'wide (clothes, opening)' (**bə* 'hollow'), **na-x̌°ə* 'wide (of mesh)' (Ad), 'big-eyed' (Kab) (**na* 'eye'), Ub *x̌°a* in *Lak°əma-x̌°a* 'hare', lit. 'long-eared', *məžʼa-x̌°a* 'big fire (*məžʼa*)', *bza-rə-x̌°a* 'big

pond' (*bza* 'water'), CAbx **x̌ʷx̌ʷa* (< **x̌ʷa-x̌ʷa*) 'long, tall, slender, prolonged'

(6) **tx̌ʷə* CCirc **tx̌ʷə*, Ub *tx̌ʷə*, CAbx *x̌ʷə-ša* 'butter'

(7) **t/šx̌ʷa/əba/ə* CCirc **tx̌ʷər(əm)ba*, Ub *šx̌ʷabə* 'foam'

(8) **šx̌ʷa* CCirc **γa-šx̌ʷa/ə* 'to temper, harden' (**γa-* causative prefix), Ub *šx̌ʷa* 'strong'

(9) **šx̌ʷa* CCirc **šx̌ʷa* 'grey, grey-blue', **šx̌ʷa-(n)t'a* 'blue, green', Ub *šx̌ʷa* 'grass'

(10) **šx̌ʷə* Ub *ḫa-šx̌ʷə* 'wild grape' (*ḫa* 'wild', cf. Charachidzé, Esenç 1990-1991a: 28), CAbx **šx̌ʷə-ć'ʷə* 'husked corn-cob' (**ć'ʷə* 'sharp stick')

Comments to the items in no.:

(1) According to Dumézil and Esenç 1972: 56, Ub *x̌ʷa-da* is derived from *x̌ʷa* 'to ask', which I don't find very convincing (in view of the correspondences in the sister-languages). Not only Ub *x̌ʷažə*, but Tap *ḥʷaǯ-ra* 'to (ex)change' as well (pace NS 1075, who regard the Tapanta word as genuine) are borrowed from Circassian (cf. ZL 42).

(2) If the Circassian and Abkhaz items are connected, the initial *p-* in the Circassian form can be due to association with CCirc **px̌ʷa* 'to grasp, snatch'. The nasal *m-* in *-mba* is obviously epenthetic, while the rest can be compared to CAbx **bə* in **ma-ć'ʷ-qə-ba/ə* 'finger'. The original meaning of CWC **x̌ʷa* is preserved in CAbx **x̌ʷa/ə* 'handle', probably a deverbal noun of **x̌ʷa* 'to take' in (1).

(6) Unlike Abdokov (FL 68), who, as I suppose, justly analyses the second segment in CAbx *x̌ʷə-ša* as **ša* 'fat', Shagirov (ES II: 78) sees in it CAbx **šə* 'white' (in ES *ša*). Shagirov (ibid.) assumes that the Ubykh word for 'butter' might be a Circassian borrowing, which is quite unlikely. Contrary to NS 948, it is not possible to separate the Abkhaz name for 'butter' from the Circassian and Ubykh cognates in (6).

(7) *m* in the Kabardian form for 'foam' is considered to be an increment (ES II: 78). Ub *tx̌ʷərba* 'id.' is an Adyghe loan (ES, ibid.). *-r-* in the Circassian form is either a connective, or also an increment. At the beginning of the initial cluster there is an irregular correspondence CCirc **t-* : Ub *š*. As the Abkhaz counterpart is not known, the CWC reconstruction can as well be **t/šHʷa/əba/ə*.

(8) The alternative comparison of the Ubykh item with CCirc **čxʷa* 'large, great' (cf. Dumézil 1932: 95; FL 75; NS 386) seems much less convincing because of the irregular correspondences CCirc **č* : Ub *š*, and CCirc **xʷ* : Ub *x̌ʷ*. The Kabardian counterpart to Adyghe (Tem) *γa-šx̌ʷă* (cf. PC 76), absent in PC, but

given in Urusov 183 (Kab *ś'ă-γă-śx̌°ă* 'to temper, harden', with prev. *ś'ă-* 'under'), with regular correspondence Kab *śx̌°* : Ad *šx̌°*, indicates that the cluster-initial sibilant in Common Circassian was a spirant, not an affricate, unlike the case of Kab *šx°ă* vs. Tem *šx°ă* 'big, great' < **čx°a*, cf. BesKab *čx°ă* 'id.' (Ocherki 101).
(10) For the second part of Ub *ḫa-šx̌°ə* cf. probably also Ub *La-šx̌°ə* 'hazel-nut' (*La* 'nut'). The original meaning of CWC **šx̌°ə* can tentatively be described as 'bunch, cluster (of grapes, nuts, etc.)'.

6.8. CWC **x̌°´* > CCirc **x̌°* : Ub *x(°)* : CAbx **x̌´*
Examples:
**šx̌°´a* CCirc **šx̌°a-mč^{h}ə*, Ub *šχ́ə*, CAbx **aχ́a* 'chestnut'

Comment:
The palatalisation of *š´-* in Ubykh can reflect the palatalised character of **-x̌°´*. Dumézil 1932: 125, who proposed this comparison, regarded the Abkhaz word as the example of the loss of the first element in the cluster with a guttural. The meaning of the second element in Circassian is unclear. In XVIIth century Evliya Çelebi recorded the Ubykh item as *[e]şxu* (cf. Gippert 1992: 24), i.e. with labialised *x°*, which obviously renders the older Ubykh form.

7. THE COMMON WEST CAUCASIAN PHARYNGEAL FRICATIVES

Unlike Circassian and Ubykh, the Abkhaz dialects preserve the old distinction between the uvular and pharyngeal fricatives, though here, especially in South Abkhaz, they were phonetically weakened (from emphatic to emphaticised) and have lost the palatalised and labialised-palatalised correlates. In South Abkhaz the Common Abkhaz voiced labilalised correlate has lost its pharyngeal focus, being transformed into a labialised palatal resonant (*j°*).

7.1. CWC **ʕ* > CCirc **γ* : Ub *γ, χ* : CAbx **ḥ*
Examples:
(1) **-ʕa* CCirc **-γa*, CAbx **-ḥa* suffix of abstract nouns (in Abkhaz also plural suffix of the class of humans)
(2) **(a)ʕa* CCirc **za-γa* 'rest' (Kab), **za-γə* 'to become rest, calm' (**za-* reciprocal prefix), cf. also CCirc **jaraγa* 'hardly', Kab also *jă-raγ=psă-raγ* (*psă* 'soul') 'id.', CAbx **aḥa-š´a* 'to be lazy, idle', CAbx **aḥa/ə(r)-la=psə-la* 'hardly' (**psə* 'soul', **-la* instr. suffix)
(3) **(a)ʕa* Ub *g°a-γa* 'fenced part of land, yard', CAbx **aḥa-(n)da* 'fence',

'edge', cf. also CAbx **ħ°a-ħa(-da)* 'border'

(4) **-ʕə/a* CCirc **-γə* in **q̄°a-γə* 'corner, space behind sth' (Kab), **śħa-γə* 'over' (**śħa* 'head') (Ad), **p'q'°a-śħa-γə* 'head of the bed' (**p'q'°a* 'place', **śħa* 'head'), **č'a-γə* 'bottom', 'under' (**č'a* 'beneath, bottom'), Ub *-γa* local suffix in: *ana-γa* 'thereby', *La-γa* 'here' (*a-na-*, *La-* deictic pronouns), CAbx **-ħa* local suffix in **a-na-ħa* 'there', **a-ra-ħa* 'here', **a-ba-ra-ħa* 'here', etc. (**a-na-*, **a-ra-*, **a-ba-ra-* are deictic pronouns)

(5) **ʕa* Ub *γa-ja* 'borrowing, loan for a short time' (DA III: 255), CAbx **r-ħa* 'to borrow' (**r-* causative), cf. **w-ħa* 'loan', 'collective work at somebody's house or field' (the meaning of *-ja* in Ubykh is unclear)

(6) **ʕa* Ub *χə* 'to be born', cf. also *andγa a-χə-n* 'the sun (*andγa*) is rising', CAbx **ħa* 'to come, arrive'

(7) **ʕa/ə* CCirc **γə* 'to weep, bewail', Ub *χə/a* (HV 2474; DA III: 257: only *χa*) 'to bellow, roar', CAbx **q'a-ħa* 'to cry, shout, bellow, roar', **q°a-ħ(ħ)a* 'to howl, bellow, yell, shout'

(8) **abʕa* CCirc **bγa* 'barren, dry (of cows)', also **na-bγa* 'near-sighted' (**na* 'eye'), Ub *abχa* 'thin, skinny, weak' (DA III: 217), CAbx **abħa* 'thin, skinny'

(9) **abʕa* Ub *č°ābγa* (< *č°a-abγa*) 'hut', CAbx **abħa* 'fortress', 'stone palace', 'stone fence'

(10) **(a)ʕa* CCirc **γa-na* 'what is mowed off with one sweep of the scythe', CAbx **r-aħa* 'to cut down, hew out', 'to bring down, fell' (**r-* causative)

Comments to the items in no.:

(2) The actual composition of CCirc **jaraγa* compared with Abkhaz by Abdokov (FS 53), is not clear.

(3) The first part of Ub *g°a-γa* is related to **g°a* in CAbx **g°a-ra* 'fence', 'yard', **g°a-š°ə* 'gates' (**aš°ə* 'door'), etc. CAbx **aħa* can be connected with homonymic **aħa* 'foundation, basis'.

(4) Kuipers (PC 73) reconstructs CCirc **q̄°a-γa*, but the material indicates that the final *-ə* must be assumed.

(6) The semantic correlation between the Ubykh and Abkhaz items is quite usual, cf. for example CAbx **jə* 'to be born', a likely semantic derivation from **jə* 'to come' (used with local prefixes).

(9) The first part of Ub *č°ā-bγa* is probably *č°əja* 'house'. In NS 311 the Abkhaz word is alternatively compared with Kab *băq* < CCirc **baqʰə* 'cow-shed' (cf. also

Bzh *băq^{h}ə* 'id.' in PC 12). This comparison, however, does not seem very reliable because the Circassian counterpart probably belongs to a group of cultural terms found also in Tap *baq'* 'cow-shed', Geo *bak'-i* 'fence', 'fenced place for cattle', Laz, Meg *bak'i* 'cow-shed', Arm *bak* 'yard', 'sheep-fold' (Kuipers 1960: 83; ES I: 73). Nikolayev and Starostin (NS 311) argue that the Tapanta form, which is a Kabardian loan, preserves the original Kabardian form (i.e. with final *-q'* < **q̄*; but cf. the cited above Bzhadygh form with *q^{h}* !), comparing the latter with CAbx **abaña*. They suppose that the Armenian form could be borrowed from Georgian, while the latter's *bak'-i* cannot be connected with the West Caucasian forms for phonetic reasons. Abdokov (ZS 44) connects Kab *băq* 'cow-shed' with Ad *băqə* 'to feel stifling, stuffy', comparing them further with such East Caucasian forms as Darg (Kub) *deq*, (Ur) *dirq*, Xin *juqa*, Tab *aq*, *ąq* 'cow-shed'.

7.2. CWC **ʃ́* > CCirc **γ* : Ub *γ́* : CAbx **ĥ*

Examples:

ʃ́a* CCirc **γa* 'year, season', 'summer', **γa-txa* 'spring', Ub *γ́a* 'time', CAbx **ĥa* 'time', **ĥa-pə-nə* 'spring' (pə* 'nose, front', **-nə* 'time of')

Comment:

Alternative comparisons are proposed by Shagirov (MS 84), according to whom the Ubykh item is connected with another Circassian root, **γ°a* 'time'. If Shagirov is right, then two different roots must be reconstructed: **ʃ́a* (on the basis of CCirc **γa* and CAbx **ĥa*) and **ʃ°a* (on the basis of CCirc **γ°a* and Ub *γ́a*). Contrary to NS 482, it is not possible to connect the first segment of Ub *wa-fa-da* 'spring' with *γ°a* in CCirc **jə-γ°a* 'time, term, season' and **ĥa* in CAbx **ĥa-pə-nə* 'spring'. I connect Ub *wa-* in the name of 'spring' with CCirc **wa* 'weather, air, sky'. The same morpheme means 'god' in Ubykh (cf. the correspondence under CWC **w*). The compound *wa-fa-*, thus, means literally 'the first (*fa*) weather', i.e. 'the first good weather'; the same idea is expressed in CAbx **ĥa-pə-nə* 'spring' (lit. 'the first time', or 'the time before summer'), German *frühling*, Dutch *voorjaar* (lit. 'the early (part of the) year') 'spring'. The morpheme *-txa* in CCirc **γa-txa* is tentatively explained as **txə* 'backbone' (cf. ES I: 123).

7.3. CWC **ʃ°* > CCirc **γ°* : Ub *γ°* : CAbx **ĥ°*

Examples:

(1) **(a)ʃ°a* CCirc **γ°a* 'burrow, den, hole', Ub *aγ°a* (DA III: 217), CAbx **aĥ°a* 'den, hole, lair'; in CAbx also 'nest'; the initial **a-* in Common Abkhaz is restored on the basis of such compounds as **g°aĥ°a*

'precipice, hollow, deep', containing **g°ə* 'surface', thus **g°ə-aɦ°a*, exactly corresponding to Ub *g°ā'y°a* 'den, hole', from *g°ə* 'surface' and *ay°a* 'den, hollow'

(2) **ʕ°a* CCirc **q"ə-γ°a* 'smoke', Ub *γ°a* 'smoke', CAbx **lə-ɦ°a* 'smoke', **lə-ɦ°a-kə* 'sooth'

(3) **ʕ°a* CCirc **γ°a* 'reddish, brown, yellow, sorrel (of horse)', **γ°a-ǯ°ə*, Ub *γ°a* 'yellow'

(4) **ʕ°a* CCirc **γ°a* in **ʒ°a-γ°a* 'star', Ub *γ°a* 'to climb, go up' (HV 515), *-γ°a* suffix indicating an action being made upwards, in climbing (Dumézil, Esenç 1972: 59), i.e. *sə-γa-pλa-γ°a-n* 'I am looking up' (*sə-* 'I', *γa-* preverb, *pλa* 'to look', *-n* present dynamic), CAbx **ɦ°a-* prev. 'up, upwards', **ɦ°a-da* 'upwards', **ʒ°-ɦ°a-n(d)ə* 'sky'

(5) **ʕ°a* CCirc **γ°a* 'to pity' (< 'to wish'), Ub *γ°a* 'to think, believe', 'to desire', CAbx **g°ə-ɦ°a* 'suspicion, doubt', 'foreboding, anxiety' (**g°ə* 'heart'); cf. also probably Tap *g°ə-n-ɦ°ə* 'to understand' (**g°ə* 'heart', *-n-* locative)

(6) **t(')ə-ʕ°ərə-ʕ°ərə* CCirc **t̄əγ°ərəγ°ə*, Ub *təγ°ərəγ°* (HV 1876), *t'əγ°rəγ°* // *t'ərγ°rəγ°* (Charachidzé 1990-91: 221), CAbx **t'ə-ɦ°a/ərə-ɦ°a/ərə* 'eagle-owl'

(7) **ź°a/ə-ʕ°a* Ub *ź°aγ°a* 'sickness', CAbx **ź°ɦ°a* 'sickness', 'plague'

(8) **ʕ°a/ənə* Ub *γ°ənə* 'tree', CAbx **ć"ə-ɦ°anə* 'stake, picket' (**ć"ə* 'sharpened stick')

(9) **ʕ°ənt'a*//**ʕ°ərda* Ub *γ°ərda* 'to bring to disorder, confusion', 'to destroy, demolish', CAbx **ɦ°a/ənt'ə* 'disorder, chaos', 'to revolt', 'to grow turbid (as water)', 'to become bad (as weather)'

(10) **ʕ°ə-d°ə* CCirc **γ°ə-də/a* 'gadfly', Ub *γ°ə(n)-d°ə* '(small) bird', CAbx **ɦ°ə* 'moth'

(11) **-mʕ°a* CCirc **ža-γ°ə* 'chin' (Ad), 'base of lower jaw' (Kab) (**ža* 'mouth'), Ub *ʒa-mγa* 'chin' (*ʒa* 'side'), CAbx **ʒa-mɦ°a* 'cheek'

(12) **(m-)ʕ°a* CCirc **jə-γ°a* 'time' (**jə-* 3d p. possessive), **-γ°a* suffix of abstract nouns, CAbx **-mɦ°a* suffix 'time for doing sth', 'possibility of doing sth'

Comments to the items in no.:

(2) The first part of CCirc **q"ə-γ°a* is analysed by Shagirov (MS 141-2) as the preverb **q"ə-* 'edge, edge of the opening', while for the second part he suggests a connection with the West Caucasian adjective 'yellow', see in (3). The first element in the Abkhaz word can be the locative preverb **lə-* with centrifugal

semantics (out of sth). The root of the Circassian word is found also in such compounds as **γ°a-zə* 'steam, light fog, haze', **(p)k'a-γ°a* 'soot', etc.

(3) The second element of CCirc **γ°a-žə* is not clear (cf. also **x°ə-žə* 'white'). CAbx **ħ°ažə* is regarded as a loan from Circassian (cf. MS 86). To the same root belong the first segments in CCirc **γ°a-p̄č́a* 'brownish, yellowish', Ub *γ°ə-pč́a* 'to rust', while the second part remains unclear. CAbx **ħ°abžʲa*, according to Shagirov, is from Circassian (ES I: 131), to be more precise, from Proto-Kabardian **γ°abžʲa*. It is not unlikely that the Ubykh word is a borrowing as well, in this case from Adyghe *γ°apč́a*.

(4) Comparing the Circassian word for 'star' with the Abkhaz word for 'sky', Dumézil 1971: 152 analyses both as 'the upper (*γ°a, ħ°a*) sky (*ẑ°a, ẑ°-*)', citing as structural parallel Geo *ze-ca* 'sky', lit. 'the upper sky', as opposed to the earth beneath.

(5) The Circassian parallel was suggested by R. Smeets (pers.com.).

(6) The first part of CWC **t(')ə-ʃ°ərə-ʃ°ərə* is 'owl', cf. CAbx **t'ə*, CCirc **ʒən-t̄ə-wə* 'owl'. The rest is, as already explained by Shagirov (ES I: 154; MS 73), onomatopoeic. It is not clear whether the Ubykh word is genuine. Shagirov regards it as a loan from Adyghe (MS 74), while Charachidzé and Esenç 1990-91a: 42-43, correcting the first consonant in Ubykh into *t'*, consider the Ubykh word to be borrowed from Abkhaz. A third possibility could be that the genuine Ubykh form was influenced by its Adyghe or Abkhaz counterpart.

(8) Given this comparison, Dumézil's (1975a: 147) connection of the Ubykh word for 'tree' with *γ°ə* 'pillar, pole' seems unlikely. For another probable compound with **ʃ°ənə* cf. CAbx **ħ°ən-cəšə* 'lizard' (see under CWC **c*, comment to (10)).

(10) Dirr 77 derived the Ubykh word for 'bird' from *γ°ənə* 'tree', which was probably justly rejected in NS 481. The possibility of splitting up the Circassian and Ubykh items is suggested by the Abkhaz form. If such an analysis is correct (and if Abkhaz didn't just lose the last syllable), the second part can probably be connected with the segment *-də* in CCirc **č°əndə* 'rook'.

(11) CCirc **ža-γ°ə* can be compared with the forms in sister-languages only by the second part. The Ubykh uvular here underwent delabialisation. The actual composition of the Ubykh form is not clear. If CAbx **ʒamə-ʒamə* 'with big cheeks' is connected with **ʒamħ°a*, then we must analyse it as **ʒamə-ħ°a*. **ʒamə* itself must be a compound, cf. CAbx **ʒaγə* 'cheek'. Cf. also Tap *č'a-ʒaʒa* 'jaw' (*č'a* 'mouth'). This leaves us to analyse the Abkhaz word for 'cheek' as **ʒa-m-ħ°a*.

(12) The examples for the Abkhaz suffix are: LAbx *a-č'a-mj°a* 'a sip (of water, etc.)', *a-t‿°a-mj°a-x°* 'the time to have a sit' (*t‿°a* 'to sit', *-x°* 'share, a part of'), Tap *ba-mħ°a* 'possibility of meeting' (*ba* 'to see'), *č́a-mħ°a* 'possibility of eating' (*č́a* 'to

eat'), etc.

7.3.1. *Irregular correspondences:*

7.3.1.1. CCirc **w* : CAbx **ĥ°*

Examples:

(1) **ʕ°ana* CCirc **wəna*, CAbx **ĥ°əna* 'house'

(2) **ʕ°a/ə* CCirc **wa* 'to beat, hit, strike', CAbx **ĥ°ə* 'to beat up, whip'

(3) **ʕ°arə* CCirc **warə* 'wave, stream', 'turbulent waters', CAbx **ĥ°arə* 'stream, torrent (caused by rain)'

(4) **ʕ°ə* CCirc **-wə*, CAbx **-ĥ°ə* agentive suffix

Comment:

For the comparison of the suffixes in (4) see ES I: 136, II: 139. The examples for Circassian suffix are: **γ°a-wə* 'town crier' (**γ°a* 'to bleat'), **ź́ə-wə* 'master', **č́ʰə-wə* 'horseman' (**č́ʰə* 'horse'); in Abkhaz this suffix is still very productive.

7.3.1.2. CCirc **γ°* : Ub **w* : CAbx **ĥ°*

Example:

ʕ°a/ə* CCirc **γ°ə* 'metal' in **γ°ə-p̄č̆a* 'sickle', **γ°ə-č'ə* 'iron', **γ°ə-(r/n)g'a* 'mirror', **γ°ə-k'a* 'blacksmith', **t́ha-γ°ə* '(ear)ring', **γ°apλə* 'copper-red', **γ°apλa* 'red copper', Ub *wə-ś°a* 'copper' (*ś°a* 'white'), *wə-ć°a* 'iron', *wə-k'ə* 'smith', CAbx **(b)ĥ°a* 'copper', **ləmĥa-rə-ĥ°ə* 'earring' (ləmĥa* 'ear', *-rə-* connective)

Comment:

In the Ubykh word an irregular shift **ʕ°- > *w-* took place. Abdokov (FL 48) supposes that CWC **ʕ°a/ə* 'metal' is derived from the adjective **ʕ°a* 'yellow', though in Ubykh 'yellow' is *γ°a*. The initial *b-* in the Abkhaz form is regarded by Lomtatidze 1961: 116 as a fossilised class prefix. Shagirov's suggestion that the Ubykh word for 'iron' and 'smith' are borrowed from Circassian (cf. ES I: 140; ZL 59, 174) is not plausible. It is noteworthy that both the Circassian and Abkhaz words for 'copper' contain the vowel *a*, as opposed to *ə* in the names for 'iron' and 'earring', basically meaning 'the ear's iron/metal'. Christol 1986: 11 suggests that in Circassian *a* appeared due to association with the adjective **γ°a* 'yellow'. Another explanation can be that the compound **γ°apλa* in Circassian preserves the initial **a-* in the adjective 'red': **apλə*, which in this case corresponds to the initial vowel in CAbx **apš́ə* 'red'. But this does not explain the final *-a* in CAbx **(b)ĥ°a* 'copper'.

7.3.1.3. CCirc *j : Ub *γ° : CAbx *$\hbar$

Example:

*$j\partial\S^{\circ}\partial$ CCirc *$j\partial$, Ub *$\gamma^{\circ}a$, CAbx *$a\hbar\partial$ 'eight'

Comment:

Lomtatidze 1955: 826-7 suggested that Circ j here comes from *$\hbar$ > *γ through the intermediate step *r, but this is hardly plausible. Shagirov (MS 52) supposes that CCirc *$j\partial$ and the initial CAbx *a- can be residues of possessive prefixes of a root that was lost in Circassian. Shagirov gives a similar example: 'three' in Lezgi lost its root, but preserved the suffix, cf. Lez *pu*- vs. Tab *ši-bu*-, Agul *xi-bu*- (MS 52). I agree with Shagirov that Circassian may have lost the final part of the old numeral, preserving only its initial segment, though the interpretation of this segment can be different: there is no trace of a possessive prefix in any other of the West Caucasian numerals.

The reconstruction of CWC *$j\partial\S^{\circ}\partial$ 'eight' can be corroborated by very close forms in the East Caucasian words for 'four' (all forms are cited from NS 488-9): Chech, Ing *=i?*, Bats *=ʃiw?* (according to NS 488 < PNakh *=*ħiw?*), Avar *unq̄'o*, Chad Avar *uʃ-gu*, Andi *=oGo-gu*, Axv *=oq'o-da*, Cham *o?u-da*, Tin *=o?o-ja*, Kar *=o?o-da*, Botl *=uγu-da*, Bagv *=ō-ra*, God *=u?u-da*, Tsez *uj-no*, Gin *uq'i-no*, Xvar *ūq'e-n*, Darg *awal* (Ak), *aγ°al* (Chir), Tab *juq'u-b*, Agul *jaq'u-d*, Rut *juq'u-d*, Udi *biβ̄* (according to NS 489 < *wiq^{w} < *$jewq'$; cf. also Archi *buq'i* < *weq^{w}+ *-j* 'fourty', NS, ibid.), Xin *unγ*.

The CWC word for 'four', *$p'\lambda'\partial$, in its turn, corresponds to the East Caucasian numeral 'eight', cf. Chech, Ing *barh*, Bats *barλ* (< PNakh *$bar\lambda$), Avar *miλ̄'-go*, Andi *bejλ̄'i-gu*, Axv *biλ̄'i-da-be*, Cham *beλ̄'i-da*, Tsez *biɬ-no*, Inx *baɬ*, Archi *meɬe* (NS 314-5). The similarity of the West Caucasian numeral 'four' with the East Caucasian word for 'eight' was noted in NS 315.

Such correlation of the West Caucasian form for 'four' with East Caucasian numeral 'eight' and, on the other hand, of the West Caucasian numeral 'eight' with East Caucasian word for 'four' finds some parallel in Indo-European, where the protoform *$okl^{h}]_{1}t^{h}]\bar{o}(u)$ 'eight' is understood as the doubling of the original numeral 'four', i.e. 'eight' was formed as 'two times four'. This is regarded as vestige of the archaic Quaternary system of numeration, later changed into the decimal one (cf. GI 850). Outside Indo-European the formation of the numeral 'eight' on the basis of 'four' is seen in Old Japanese (OJap *ya* 'eight' vs. *yö* 'four'), Burushaski (*w-ālti* 'four' vs. *ālt-ambi* 'eight'), Yukagir (*jalaklan* 'four' vs. *mālajlaklan* 'eight', lit. 'two times four'), in some Austronesian numerals (cf. GI, ibid.).

Abdokov (ZS 154-5) reconstructs PWC **(b)aLˤa* 'eight', comparing it with East Caucasian numerals for 'eight', but both the reconstruction and the comparison with the East Caucasian material is difficult to justify phonetically.

7.4. CWC **ʃˤˊ* > CCirc **γˤ* : Ub *γˊ, γ* : CAbx **ħˤ, ħ*

Examples:

(1) **məʃˤˊa* CCirc **γˤa-gˤə* (**gˤə* 'surface'), Ub *məγˊa*, CAbx **məħˤa* 'road, way', cf. also CCirc **λa-γˤa* 'path, track, trail', **γˤa-məLa* 'food taken along on trip'

(2) **ʃˤə* CCirc **γˤə*, Ub *γə*, CAbx **ħˤa* 'dry', 'to dry out'

(3) **a+ʃˤə* CCirc **-a+γˤə* 'companion, partner', e.g. **γˤəna-γˤə* 'neighbour' (**γˤəna* 'border'), **γˤa-gˤ-a-γˤə* 'companion' (**γˤa-gˤə* 'road'), Ub *-γ* comitative suffix (pl. *-γˊ*), cf. *kˈˊa-γ* 'companion, camarade' (*kˈˊa* 'to go'), *nkʷˈa-γ* 'neighbour' (*nkʷˈa* 'hearth'), CAbx **aħˤə-* preverb 'by, beside', cf. Tap *aħˤ-ga-ra* 'to carry sth by passing by' (*ga* 'to carry'), SAbx *ajˤ-s-ra* 'to pass by' (*sə* 'to go')

(4) **bʃˤˊa* CCirc **bγˤa*, Ub *bγˊə*, CAbx **tə-bħa* 'broad'

(5) **(b)ʃˤə* CCirc **bγˤə*, Ub *γˊa-kˈˊa* 'side'

(6) **nəbʃˤˊa* CCirc **nəbγˤa/ə*, Ub *nabγˊa* 'quail'

(7) **(bə-)ʃˤˊa* CCirc **γˤa* 'to bleat', **γˤa-(r)ĝə* 'to roar (as lion), howl, weep loudly', **γˤa-γˤa* 'to thunder, roar (as guns)', **γˤa-xˤˊa* 'to howl, roar, holler', Ub *γˊa* 'to moo, howl, roar', CAbx **bə-ħˤħˤə* 'to bellow (as bulls, cows)'

(8) **(n)abʃˤˊa* CCirc **(n)abγˤa*, Ub *abγˊa* 'nest' (HV 7), cf. also the Ubykh form *nəbγä* in Dirr 5: 19

Comments to the items in no.:

(1) Circassian shows no traces of the initial **mə-*, present in Abkhaz and Ubykh, having probably lost it (as suggested by Dumézil 1971: 151): **məʃˤˊa* > **mγˤa* > **γˤa*. It is tempting to suppose that the word **γˤaməLa* reflects the older (metathesised) form **γˤamə* 'road' and *La* < **Lə* 'meat'. But there are alternative, probably better suggestions for the etymology of this word (cf. Dumézil 1932: 46 and ES I: 134-5; see also PC 78). In any event, Ubykh and Abkhaz seem to preserve the older phonetic shape of the word, as the related forms in East Caucasian languages indicate, cf. Chech *neqˈ*, Ing, Bats *niqˈ*, Andi *miqˈi*, Axv *miq̄ˈi*, Cham *miqˈ*, Tin *miqˈi*, Kar *miq̄ˈe*, Botl *miq̄ˈi*, Bagv *miq̄ˈ*, God *miq̄ˈi* 'road' (KK II: 189; NS 604). Cf. also ZS 187-8, NS 604.

(3) Comparison of the Circassian suffix with the nouns ending in *-ə* proves that

its actual form is **-a+γ°ə*, i.e. with the directional (or connective) affix *a*, not **-γ°ə* as it is usually presented (cf. for example PC 77). Cf. other examples with nouns ending in *-ə*: **nəbž́-aγ°ə* 'friend, person of the same age' (**nəbž́ə* 'age'), Kab *dəγ°-aγ°* 'co-thief' (*dəγ°ə* 'thief'), etc. Kuipers 1960: 72 connects this Circassian suffix with **γ°ə-na* 'border', **γ°ə-sa* 'companion' (the latter also in Morf 122), while Shagirov (ES I: 146) adds here the verb **č'ə-γ°ə* 'to add up'. In Abkhaz here belongs also **ĥ°ə-za* 'friend, camarade' (with the suffix *-za* 'attached to'), parallel to the structure of **apə-za* 'leader', with **apə* 'the first, the front one' (pace Shagirov (ES I: 139) who derives it from Circ *γ°ə-sa*). It is noteworthy that the plural form of this suffix in Ubykh is *-γ́*, which makes the correspondence regular.

(5) The second part of the Ubykh word is regarded by Nikolayev and Starostin, who proposed this correspondence (NS 473), as a usual singular suffix. If the initial *b-* in Circassian is a historical prefix (cf. NS, ibid.), then it is probably possible to connect the items in (5) and (3).

(6) The genuine Ubykh name for 'quail', i.e. with the palatalised *γ́*, was recorded by Mészáros (MP 294) (not by Dirr, as claimed in NS 841).

7.5. CWC **H* > CCirc **ħ* : Ub *x̌, x̌́* : CAbx **ħ*

Examples:

(1) **Hə* CCirc **-ħa/ə* suffix denoting the action occurring in circles, rounds, Ub *x̌ə-x̌ə* 'by rounds, circularly' (Dumézil, Esenç 1972: 54)

(2) **Haɬ́ə* CCirc **ħa(n)čʰ́ə* 'scoop', Ub *x̌aš́* 'spade, shovel', 'oar'

(3) **Hamə/a* CCirc **ħama/ə* 'threshing-floor', Ub *x̌əmə* 'harvesting', 'harvesting period'

(4) **Ha* CCirc **ħa/ə* 'to carry', CAbx **naħa* 'to pour down (of spirits)', 'to distribute, deliver food or drinks to the table with guests'

(5) **Hak'a* CCirc **ħak'a=ħa-psa-wə* (**psa* 'soul', **-wə* adverbial suffix) 'puffing, panting, hastily', CAbx **ħak'a=psə-k'a* (**psə* 'soul') 'to puff, pant' (SAbx), 'hastily, hurry-scurry' (Tap)

(6) **baHa* Ub *baxa*, CAbx **baħa* (Tap) 'to be angry, sulky'

(7) **Ha* Ub *x̌axa* 'to be astonished, surprised', CAbx **ħa* 'to become afraid, startle'

(8) **(t)Habəl/rə* CCirc **tħa(m)bəLə*, CAbx **rəpħa* 'lung(s)' (?)

(9) **tHara* Ub *tx̌ara* 'to break in small pieces', CAbx **tħara-ħ°a* (adv.) 'regular, rhythmical (of heart's beating)'

(10) **ć°ə-Ha* Ub *ć°əx̌a*, CAbx **ć°ħa* 'to curse, offend'

(11) **k"a/əHa* CCirc **k"əħa* 'to mix up, connect' (used with preverbs), CAbx

**kʷaha* 'to knead, puddle (as dough, clay, mud)', 'to trample, stamp'

Comments to the items in no.:

(2) The meaning of the second elements in the Circassian and Ubykh items is not clear. Tap *pxaħačʼ* 'scoop' is borrowed from Old Kabardian. Cf. also CCirc **ħancʰa* 'wooden spade', which, if it is connected with the items in (2), can indicate the compound character of **Haƛʼə*.

(3) It is not excluded that the Ubykh word is a loan from Circassian (cf. ES II: 119; Notes 11: 46).

(4) CAbx **naha* probably contains the fossilised directional preverb **na* 'thither', cf. Ad *nă-hə-sə*, Kab *nă-ħă-sə* 'to deliver' (*nă-* 'thither', *hə/ă* 'to carry', *sə* 'to reach'), Abx *a-na-ga-ra* 'to bring there' (*ga* 'to carry, bring'). Cf. also CAbx **ćə-naha* 'house woman-servant' (**ćə-* ?), and probably also **čʼ-ha* 'to stand, bear, tolerate', which can be analysed as **čʼə* 'swelling, tumor, hernia' (= 'sickness' ?) and **ħa* 'to carry' (?).

(8) The comparison is quite dubious because of the big differences in the phonetic shape of the Circassian and Abkhaz words. If they are really connected, the evolution of the Abkhaz form can be imagined as follows: **(t)Habərə* > **rəbəHa* > **rəpħa*. **(t)Habəl/rə* is likely to be a compound, cf. for the first part Kab *tħa(m)ś'əγ°* 'liver'.

(10) The first part of CWC **cʼʷə-Ha* is **cʼʷə* 'bad, evil'. In principle it is not excluded that the Ubykh word is borrowed from Abkhaz (cf. Dumézil 1975: 142; Chirikba 1986a: 121).

7.6. CWC **Hˊ* > CCirc **x̌/ħ* : Ub *x̌ˊ* : CAbx **ħ*

Examples:

(1) **Hˊə* — CCirc **na-ħə* (Ad)//**na-x̌ə* (**na-* deictic pronoun, cf. ES I: 281), Ub *ća-x̌ə* (*ća-* comparative prefix), CAbx **j-aha//r-aha* (**j-* possessive prefix of the 3d p.s., **r-* id., pl.) 'more'; cf. also CCirc **kʼə-ħa* 'long' (**kʼə* 'handle, haft'); here belongs also CAbx **ħa-ra-kʼə* 'high, hight'

(2) **Hˊa/ə* — Ub *x̌ə* 'prince', 'chief of the tribe', 'king', 'father-in-law', CAbx **aħə/a* 'prince'

(3) **Hˊa* — Ub *x̌ˊa*, CAbx **ħa* 'to fall' (used only with local prefixes)

(4) **məHˊa* — CCirc **pxa* 'wood (as material)', Ub *məx̌ˊ-ačʼˊa* 'little flat spoon to stir pap' (*ačʼˊa* 'flat'; cf. Dumézil 1969: 109), *məx̌ˊa-ćʷ* 'spoon', CAbx **mħa-ćʷə* 'spoon' (**ćʷə* 'sharpened stick'), **mħa-basta* 'flat wooden spoon to stir pap' (**basta* 'millet pap used as bread'), cf. especially CCirc **pxa-pʰa* 'thin part of wood', 'stick' (**pxa* 'wood',

*$p^h a$ 'nose, front'), CAbx *mħa-pə (*pə 'nose, front'), same meaning as *mħa-basta*

(5) *H'aH'a* Ub *-x̌'ax̌'a*, CAbx *-ħaħa* suffix used to denote intensiveness of colours

Comments to the items in no.:

(1) Dumézil 1932: 88 analyses the Abkhaz item as *aj-ħa* (one of the contemporary forms), explaining the first part as a reciprocal prefix; Shagirov (ES I: 281) agrees with him. An Adyghe-Kabardian correspondence similar to that in (1), but differently distributed, is found in Ad *bLa-(n)tx̌ă*, Kab *bLa-tħă* 'collarbone', shoulder-blade' (Urusov 93; **bLa* 'upper arm and shoulder').

(2) Shagirov's attempt to connect the Ubykh and Abkhaz items with CCirc **pš'ə* 'feudal prince' (cf. ES II: 34) is phonetically improbable. Abdokov (FL 68) compares CAbx **aħə*, adding here also Ub *də-x̌ə* 'the owner', with CCirc **tħa* 'god'. But the Ubykh word is analysed as 'the one who belongs' (cf. ES II: 80). Shagirov rejects the comparison of (2) with CCirc **tħa* 'god' either. Etymologically CWC **H'a/ə* is connected with (1).

(3) Ub *x̌'a* is compared alternatively with CCirc **x°a*, CAbx **ś°a* 'to fall' (cf. MS 114; NS 418).

(4) Shagirov, who proposed the comparison (ES II: 21; MS 79), assumes that Ub *məx̌'a-ć°* might be a loan from Abkhaz. In Abkhaz cf. also **č'a-mħa* 'maple', 'wooden spoon used by shepherds', **šə-mħa* 'cherry-laurel'.

7.7. CWC **H°* > CCirc **x̌°* : Ub *x̌°/x̌, ɣ̌°/ɣ̌* : CAbx **ħ°*

Examples:

(1) **maH°ə* CCirc **max̌(°)-λa*, Ub *məx̌ə*, CAbx *maħ°ə* 'son-in-law', 'brother-in-law'

(2) **H°a* CCirc **x̌°a* 'to file, rub', Ub *x̌°ax̌°a* 'to itch, scratch', CAbx **ħ°a* 'to comb (hair)'

(3) **H°a* CCirc **x̌°a-psa* 'to desire, fall in love with, envy' (**psa* 'soul'), **x̌°a-x̌°a* 'to pronounce a toast or congratulation' (a compound of **x̌°a* 'to say, tell' and *x̌°a* 'to ask, desire'), Ub *x̌°a* 'to ask, demand', CAbx **ħ°a* 'to ask, prey for smb' (SAbx *á-ħ°a-ra*), **nə-ħ°a* 'to prey', 'to congratulate, say toasts', 'to swear, oath' (**nə* 'mother' = 'God's mother'?)

(4) **H°a* CCirc **x̌°a-rə* 'parable', **x̌°a-na* 'to curse, use expletives (to)', **x̌°ə-ś'a* 'to quarrel, swear, grumble' (**ś'a* 'to do'), Ub *wa-x̌ə* 'to shout', CAbx **ħ°a* 'to say, tell' (SAbx *a-ħ°a-rá*), **ħ°ħ°a* 'to cry, shout'

(reduplication of *ħ°a 'to say')

(5) *H°ə CCirc *x̌°ə, Ub x̌ə, CAbx *ħ°ə 'to graze, pasture'

(6) *H°a/ə CCirc *x̌°a in *k'a-ra-x̌°a 'to revolve, rotate' (*k'a 'tip', -ra- instrumental prefix), cf. also CCirc *arx̌°a-na 'whirlpool, gulf, rapids', Tem arx̌°a-ź 'boa (snake)' (-ź(ə) pejorative suffix), Ub č'a-x̌°ə 'to turn (around, in spirals)', CAbx *ħ°ə 'to roll up, curl up, turn, twist'

(7) *H°ə/a CCirc *x̌°ə in *pśa-x̌°ə 'chain, collar' (*pśa 'neck'), *λa-x̌°ə 'fetters' (*λa 'foot'), *q'a-x̌°ə 'bracelet' (*q'a 'hand'), CAbx *ħ°a 'to tie up, wrap up' (used only with preverbs)

(8) *H°ə CCirc *x̌°ə-(n)č'a (*-č'a 'to clean', -n- epenthetic: MS 116), CAbx *r-ħ°ə 'to rob' (*r- causative prefix), Tem also 'raid'

(9) *H°ə CCirc *x̌°a in *x̌°a/ə-wə 'deep ravine', *x̌°a-tʰa 'ravine, gully', *psə-x̌°a 'riverbed, channel' (*psə 'water, river'), Ub t°a-x̌°a 'river' (< 'riverbed' or river-valley' ?), CAbx *ħ°ə-šə 'hollow, depression, gorge', Ku Abzh 'mountain lawn' (cf. also *ħ°ə-pšə 'lawn', if only *ħ°ə here is not from the verb *ħ°ə 'to graze, pasture')

(10) *H°a/ə CCirc *x̌°a in *ćʰa-x̌°a 'to creep, slide', Ub x̧°əx̧°-da 'to crawl, slide, slip', x̧°əx̧°ə-r-da 'id.', CAbx *ħ°a 'to drag', 'to cut the mass (as grass) by strong movements' (used with preverbs), *r-ħ°ħ°a 'id.' (with the causative *r- and emphatic reduplication, cf. the same in Ubykh), *ħ°a-za 'to crawl'

(11) *məH°ə CCirc *(p)x̌°a 'to cover', *tʰ-ja-px̌°a 'cover' (tablecloth, etc.) (*tʰ-ja- prev. 'on top'), *pʰə-px̌°a 'haystack' (*pʰə- prev. 'at the front'), *q'a-px̌°a 'haystack', *q̄°ə-(p)x̌°a 'curtain', cf. also *px̌°a-ntʰa 'trunk, chest', Ub məxə 'maize stalk', CAbx *pħ°ə 'maize straw', *pħ°a-qʷa 'stack of maize straw'

(12) *t°H°a CCirc *tx̌°ə/a in *sə-tx̌°ə 'hoar-frost' (*sə 'snow'), *wə-tx̌°a 'to become turbid, muddy' (*wə- verbal prefix), CAbx *t°ħ°a 'to blow (by mouth)', *śə-(rə-)t°ħ°a 'snow-storm' (*śə 'snow', -rə- causative prefix)

(13) *H°ə/a CWC *g°ə-H°ə > CCirc *g°ə-(r)x̌°ə, Ub g°ə-xə 'mortar', CAbx *la-ħ°a 'to thresh (grains), pound, husk', SAbx a-laħ°a-ra 'mortar for threshing grains', Tap č'-laħ°a-ra 'mortar' (with č'a 'wheat')

(14) *pč/šaH°a CCirc *pčʰax̌°a, Ub pšax̌°a 'sand', CAbx *pšaħ°a 'sea/rivershore'

Comments to the items in no.:

(1) The element -λa in CCirc *max̌°-λa is probably *λa 'blood' (cf. MS 64). The delabialisation of the fricative, parallel to that of Ubykh, is found also in some Kabardian dialects (cf. Ocherki 50, 85).

(2) Ub *x̌ʷax̌ʷa* is reduplicated. An alternative cognate can be Ub *x̌a* 'to scrape off, scrape by comb, scratch' (cf. MS 116).
(3) It is possible that the items given here and in (4) are etymologically connected.
(6) The first part of Ub *čʼa-x̌ʷə* can be perhaps linked to the similar element in CCirc **čʰə́-ħa* 'to roll, wind, wrap' (*-ħa* 'around'). With a less probability the Ubykh item can alternatively be connected with CAbx **čx̌ʷə/a-ra* 'wavy, curly (of hair)', reconstructed on the basis of Tap *čx̌ʷx̌ʷər* 'wavy, curly' (with expressive gemination of *x̌ʷ*) and Bz (Zw) *čx̌ʷartəl* 'with curly hair', 'forelock'.
(7) The connection of CCirc **x̌ʷə* with **x̌ʷə* 'to file, rub', proposed by Shagirov (ES I: 252), does not seem plausible.
(10) *-da* in the Ubykh item is a fossilised suffix; the element *-za* in CAbx **ħʷa-za* can be tentatively compared with CCirc **za* 'to turn'.
(11) The fluctuation **px̌ʷ* ~ **x̌ʷ* in the Circassian items can probably be explained by the influence of the verb **x̌ʷa* 'to take'. Nikolayev and Starostin (NS 827) propose another cognate to the Abkhaz and Ubykh items, CCirc **pxə* 'carrot', which is somewhat less plausible because of the irregular absence of labialisation. Ub *məx̌* in *məx̌-məq* 'bundle, sheaf' also belongs here.
(13) There is no doubt as to the genuine nature of Ub *gʼəxə*, pace Shagirov (ES I: 120), who assumes its Circassian origin. Shagirov analyses the first part of the Circassian and Ubykh words as the verb *gʷə* 'to pound, husk', but in this case we would expect in Ubykh *gʷ*, not *gʼ*. It is possible to see in Circ **gʷə-*, Ub *gʼə* either CWC **gʷʼə* 'heart', or **gʷʼə* 'surface'. The second part cannot correspond to CAbx **qʷa* 'to press' (pace ES, ibid.), as such a correspondence does not exist. See the etymology of the first part of the Abkhaz word under CWC **Ł*.
(14) The affricate in Common Circassian cluster **pčʰ-* must be original (as opposed to the fricative in Abkhaz). From the Abkhaz group only South Abkhaz seems to have preserved the original Common Abkhaz form. The correspondences of Tap *pčaqʷa* and Ash *pšaqʷa* 'sand' to their Circassian or Abkhaz counterparts are also irregular.

7.8. In the following cases we have probably a (dialectal) variation in the West Caucasian between the uvular stop and pharyngeal spirant. Note that such discrepancies are sometimes found within Circassian isolects as well, cf. Baksan Kab *x̌ʷasčʼā* vs. Standard Kab *qʷaskʼā* (cf. Ocherki 255), etc.

CWC **qʷ* ~ **Hʷ* > CCirc **q̄ʷ/x̌ʷ/x̌* : Ub **qʷ/q* : CAbx **Hʷ*
Examples:

(1) **pqˀə//*pHˀə* CCirc **pq̄ˀə//*pχˀə* 'plum', Ub *pqə* 'a sort of plum with big fruit', CAbx **(p)ħˀa* 'plum'
(2) **qˀənə//Hˀənə* Ub *qˀənə*, CAbx **ħˀən-apə* 'mouse, rat', **ħˀənə-gˀə* 'mouse' (Ash)
(3) **ža-qˀa/ə//*ža-Hˀa/ə* CCirc **žaqˀə* 'to belch' (I don't have the Bzhadygh or Kabardian form), cf. also CCirc **ja-qʰˀə* 'chew, cud' (Urusov 102; **ja* 'bad' ?), CAbx **žaħˀa* 'to ruminate, chew the cud (as cow)'

Comments to the items in no.:
(1) For Circassian Kuipers (PC 64) reconstructs CCirc **q̄ə-śʷc'a* 'plum' (*śʷc'a* < **śʷəc'a* 'black'), though Sh *pχˀə-śˀt'ă//qˀəśˀt'ă//pχəśˀt'ă* 'plum' (ShD 117) suggests something like **pq̄ˀə-śʷc'a* or **pχˀə-śʷc'a*. Cf. also Ad *pχă-gˀə-λ* (Tem), *pχə-gˀə-λ* (Sh) 'alycha, plum', Ad *pχă-śhă=mə-śhă* 'fruits' (*pχă* 'plum', *mə* 'apple', *śhă* 'head', here 'sort') (ES II: 22, 24), Ersakon, Mozdok Kab *qʷə-śhă=mə-śhă* 'id.' (with *qʷə* 'plum'; Ocherki 49, 164). In Abkhaz the forms also vary: Abzh *a-ħˀa-sa*, Tap *ħˀa-sa* 'alycha (sort of plum)' (Tap also 'prune') < **ħˀa-śa* 'alycha', lit. 'small (**śa*) plum'; Abzh *a-bħˀa*, Bz *a-pħˀa* 'plum, prune' < **pħˀa*. It is difficult to explain the glottalised *qʷ* in Sa *a-qʷa-sa* 'alycha'.

It is not clear whether Bzh *χərc*, Tem, Abdz *qəcă*, Sh *pχˀə-că* 'peach' (ShD 117) also belong here, cf. the discussion in ES II: 22; NS 873.

It is interesting to note the structural and material similarity to CAbx **pħˀa-śa* 'alycha' (although with a different order of constituents) of Avar *ʕišin-piq̄* 'alycha' (with *ʕišin* 'small, little' and *piq̄* 'fruit').
(2) The second element in CAbx **ħˀən-apə* is unclear. Can it be linked to CAbx **aba* 'male' with the devoicing of *b* under the influence of *ħˀ* ? Cf. a similar devoicing in SAbx *a-ħˀa-pa* 'hog' < **ħˀa* 'swine' + **aba* 'male'. The last segment in the Ashkharywa word is probably CWC **gˀə* 'small, little'.
(3) See the comments to this comparison above, in 3.4.1. (4).

7.9. CWC **Hˀˊ* > CCirc **χˀ* : Ub *χˊ* : CAbx **ħˀ/ħ*
Examples:
(1) **pHˀˊa/ə* CCirc **pχˀə*, Ub *pχˊa*, CAbx *pħa* 'daughter', Ub *pχˊa-šˀ*, CAbx **pħˀə-śə* 'woman, wife'
(2) **laHˀˊə* CCirc **aχˀə* (Sh), Ub *Laχˊə*, CAbx **laħa* 'fig'
(3) **Hˀˊə/a* CCirc **χˀa/ə* 'to ripen, grow, increase, become, happen, be (present)', cf. also Kab *xa-χˀa* 'profit', Ub *χˊə* 'to earn, get', 'to increase, add up', CAbx **r-ħa* 'to earn' (**r-* causative)

Comments to the items in no.:

(1) The elements *-šˤ*, *-śə* in the Ubykh and Abkhaz words for 'wife' are diminutive suffixes. In Tapanta forms like *pxˇas*, *pxˇəs* (besides more usual *pħˤəs*) are also found (cf. Lomtatidze 1944: 56). Historically CWC **pHˤa* can represent a compound **pa-Hˤa*, cf. CAbx **pa* 'son, male child' and CAbx **aj-ħˤ-šˇa* 'sister' vs. **aj-šˇa* 'brother' (**aj-* reciprocal prefix, **šˇa* 'blood'), the element **ħˤ* bearing the notion of 'female, feminine'. **pa-Hˤa*, thus, can be explained as 'female child' (cf. Marr 1938: 42-43). As to the irregular delabialisation in CAbx **pħa*, cf. also delabialisation in TuBz *a-jaxˇšˇa*, Sa, Tap *axˇšˇa* 'sister'.

(2) In CCirc **axˇˤə* the first consonant was lost. Rogava 1985: 39 suggests here a process **laħˤə* > **jaħˤə* > **aħˤə* > **axˇˤə*. The CWC word has an obvious Kartvelian parallel, cf. PK **layw-* 'fig' > Geo *leyw-*, Meg-Laz *luy-* 'id.'. The vowel *e* in the Georgian form is from *a* (EK 119), cf. Geo *mo-lay-ur-i*, Meg *ma-lay-ur-i*, Laz *ma-layur-e* 'oriole'. I agree with Rogava that Svan *leyw* 'flesh, meat' does not belong here (pace EK 119). Rogava derives it from Circ **Lə-γˤa* in Ad *Lə-γˤa=Lə-bžˇ*, Kab *Lə-γˤa=Lə-bź* 'meat'. Though Rogava (ibid.) assumed a Kartvelian borrowing of the West Caucasian word for 'fig', I think that the opposite direction of the borrowing is more probable.

IV. THE RECONSTRUCTION OF THE COMMON WEST CAUCASIAN RESONANTS

Unlike other resonants, well-preserved both in initial and medial position, the reconstruction of **r* is somewhat more complicated, as it was not preserved initially in Circassian and Ubykh, yielding various reflexes: **d-*, **t-*, **L*. Even in Abkhaz, when the initial **r-* is normally preserved, there is sometimes a fluctuation between **r-* and **l-*; this situation is partly preserved in contemporary Abkhaz dialects; cf. also the synchronically observed regular shift *r* > *d*, when the 3d p.pl. marker *r-* precedes the causative prefix *r(ə)-*, e.g. SAbx *jə-l-də-r-ba-wa-jt'* "it (*jə*)-to her (*l*)-they (*də* < **rə*)-causative (*r*)-see", *jə-d-də-r-ba-wa-jt'* "it (*jə*)-to them (*d* < **r*)-they (*də* < **rə*)-causative (*r*)-see". The interdiction on initial *r-* is characteristic for some other Eurasian (proto)languages as well, cf., for example, Proto-Indo-European, or Basque. Medial **-r-* is, on the contrary, well-preserved in all three languages.

1. CWC **m* > CCirc **m* : Ub *m*, *m̲* : CAbx **m*

Examples:

(1) **mə* CCirc **mə*, Ub *mə*, CAbx *mə* negative affix

(2) **məλˤa* CCirc **maxˤa*, Ub *məśˤa*, CAbx **məša* 'day'

(3) **məʒa* CCirc **maza*, Ub *məʒa*, CAbx **məʒə* 'moon, month'

(4) **məć^{w}a* CCirc **maś^{w}a*, Ub *məǯ'a*, CAbx **mca* 'fire'
(5) **mač'ə* CCirc **mač'a*, Ub *mač'*; CAbx **mač'ə* 'little, small'
(6) **məš^{ʷ}'a* CCirc **məśa*, Ub *məš^{ʷ}a*, CAbx **məš^{ʷ}ə* 'bear'
(7) **maH^{ʷ}ə* CCirc **maχ^{ʷ}-λa*, Ub *məχə*, CAbx **maħ^{ʷ}ə* 'son-/brother-in-law'
(8) **mə* CCirc **mə* 'wild apple', Ub *mə̲* 'apple'
(9) **(č)k'amp'əla* Kab *šk'amp'əL* 'cork', Ub *k'amp'əLa* 'acorn', Ash, Ahch *a-k'amp'əl* 'small felt ball'
(10) **ma* CCirc **-ma* instrumental suffix (cf. ES II: 96), Ub *-ma* 'id.', CAbx **a-m-ħa* 'handle', **ma* 'hand', **ma* 'to have' < *'to have in hand'
(11) **ma/ə* CCirc **ma*, Ub *mə-sa* 'smell, odour', CCirc **p^{h}a-ma* (**p^{h}a-* prev. 'nose, front'), Ub *fə-mə* 'to smell'
(12) **ma/əć'a/ə* CCirc **mac'a* 'locust', CAbx **məć'ə* 'fly'
(13) **mala-ƛ'ə* Circ **maLa-λ'a*, CAbx **mala-š'ə(-jə)* 'hunger; hungry', 'to starve'
(14) **məč'ə* CCirc **ś^{w}a-məč'ə* 'coal', CAbx **məč'ə* 'wood (as material), firewood'
(15) **tqamə* Ub **tχamə*, CAbx **qamə* 'fur-coat'

Comments to the items in no.:

(8) Pharyngealisation in Ub *mə̲* can be expressive, in denoting the wild apple (cf. MS 78).

(10) The Circassian instrumental suffix **-ma* is singled out by Shagirov from such Circassian words as **wə-ma* 'wooden club for hammering' (**wa* 'to beat, strike'), **q'a-ma=psə-ma* 'tool' (**q'a* 'hand', **psə* 'to plane, shave'), and in Ubykh cf. *k'a-ma* 'hammer' (cf. *k'ə* 'to forge'), *g'aš^{ʷ}a-ma* 'tool for cutting, chopping, digging, etc.' with *g'aš^{ʷ}a* 'hammer' in the first part (cf. ES II: 96). According to Abdokov (FL 59), these suffixes are derived from the old word **ma* 'hand', akin to CAbx **ma* 'id.'. In Circassian the old **ma* 'hand' might be seen also in **bžə-mə* 'fist', **ĭa-ma* 'wing', **sa/ə-ma* 'left (side)' (cf. CAbx **arə-ma* 'id.'), **k̆^{ʷ}a-ma* 'twig', **q̆^{ʷ}a-ma* 'twig', **ma-q^{ʷ}ə* 'shield' (cf. CAbx **ma-nə-za* 'shield, cuirass'), **ma-ž'a* 'comb' (**ž'ə* 'to comb hair'). In the last two examples **ma* is used in preposition as an adjective (Rus ручной, ручная), i.e. 'hand-shield', 'hand-comb'.

The pharyngealisation in the Ubykh word can reflect a deleted pharyngal, corresponding to *ħ* in CAbx **amħa*, thus CUb **ma-ħa* (cf. MS 133).

(13) The second element of the compound is CWC **ƛ'ə* 'to kill, die'. The meaning of the final *-jə* in CAbx, attested only in Tapanta, is unclear. CWC **mala* meant in all probability 'food'. Cf. also CCirc **məLa* in **γ^{ʷ}a-məLa* 'provisions' (for **γ^{ʷ}a* cf. **γ^{ʷ}a-g^{ʷ}ə* 'road', with **g^{ʷ}ə* 'surface'), Kab *măq^{w}-məLă* 'forage, fodder' (*măq^{w}* 'hay').

(14) As to the first part of CCirc **ś^{w}a-məč'ə*, Shagirov (ES II: 102) explains it as

'fire' (i.e. **maśʷa*), while Nikolayev and Starostin (NS 834), not accepting this analysis, see here PCirc **ćʷa-* 'black', i.e. 'black wood'.

2. CWC **n* > CCirc **n* : Ub *n* : CAbx **n*

Examples:

(1) **bana* CCirc **p̄ana* 'prickle, thorn(bush)', Ub *bana* 'grass (especially as used in medicine)', CAbx **bana* 'forest, wood'

(2) **(a)na/ə* CCirc **nə*, **(j-)ana*, Ub *na*, CAbx **anə* 'mother', cf. also CAbx **jənə* 'mother (of animals)'

(3) **nana* CCirc **nana*, Ub *nan(a)*, CAbx **nana* 'mother, mummy', 'grandmother, granny'

(4) **na* CCirc **na/ə*, Ub *ana-n*, CAbx **a-na* 'there', Ub *na-γa*, CAbx **a-na-q'a* 'there' (*-γa*, **-q'a* directional suffixes)

(5) **k'ănə* CCirc **k'ănə* 'nucklebone (used in bone game)', Ub *k'ăna* 'spindle', SAbx *a-k'ăn* 'big funeral candle with hanging sweets', 'high pole without twigs'

(6) **nazə//*nəza* CCirc **nazə* 'hem, border, edge', Kab *să-nəza* 'selvage, fringe of fabrics', Ub *nəza* 'veil', CAbx **nəza* in **ǯʷa-nəza* 'spleen' (**ǯʷa* 'rib', 'side'), **ma-nəza* 'shield, cuirass' (**ma* 'hand'), **šă-nəza* 'kind of women's shoes put over the stockings' (**šă* 'foot, leg'), SAbx *a-mx̌-nəza* 'companion in cultivating the field' (*a-mx̌ə* 'field with corn', 'arable land'), *a-mjʷa-nəza* 'companion' (*a-mjʷa* 'road')

(7) **ʕʷəna* CCirc **wəna*, CAbx **ħʷəna* 'house'

(8) **janə* CCirc **janə*, CAbx **anə* 'whole' (e.g. day, year)

(9) **na/ə* CCirc **na* 'to stay, remain, be stuck' (used only with local preverbs), Ub **-nə* oblique case suffix often having locative meaning, CAbx **nə* 'to be on sth', locative suffix **-nə* 'country, land of'

(10) **ʕʷənə* Ub *γʷənə* 'tree', CAbx **ćʷə-ħʷanə* 'stake, picket' (**ćʷə* 'sharpened stick')

(11) **qʷ/Hʷənə* Ub *qʷənə*, CAbx **ħʷən-apə* 'rat, mouse', Ash *ħʷən-gʷə* 'mouse'

Comments to the items in no.:

(4) The Circassian deictic pronoun **na* is found, in particular, in such forms as **na-sə* 'to reach' (**sə* 'to move, go'), **na-γa-p̄a* 'last year', **nə-č̌ăp̄a* 'this night', Kab *nə-gă* 'now', etc. Ub *ana* and CAbx **a-na* are combinations of two deictics, **a* and **na*.

(6) Shagirov's analysis of CAbx **ǯʷa-nəza* as **ǯʷa* 'rib', 'side' plus **nəza* (cf. ES I: 277) is (pace NS 1099) quite convincing: it is corroborated by the other Abkhaz

compounds, given in (6). Bringing in Ad *ǯănăź* 'rennet, abomasum', taken in NS as a cognate to CAbx **ǯºa-nəza*, is all too risky: the word can be a mere semantic derivation of homophonic Ad *ǯănăź* 'old shirt, dress', analysed as *ǯănă* 'shirt' (< CCirc **gʼana*) and *źə* 'old'. Even if there is no etymological connection between these two Adyghe homophones, still the analysis of Ad *ǯănăź* 'rennet, abomasum' remains rather uncertain: in absence of a reliable Kabardian or Shapsygh counterpart (which, of course, cannot be Kab *źă-n=fă-n* 'intestines (of animal); entrails', presented as such in NS), it is not possible to determine, whether the initial affricate comes from CCirc **ǯʼ* or **gʼ*. The final element, *-ź*, in its turn, can be the usual pejorative suffix *-źə*, derived from **źə* 'old'. On the other hand, the Bzyp form of the word for 'spleen' is *a-vanəza*, i.e. with front *z*, which brings another obstacle: an irregular correspondence between Adyghe *ź* and Abkhaz *z*. It is much more convincing to compare the Daghestanian words for 'spleen', given in NS as cognates to CAbx **ǯºa-nəza* 'spleen' and Ad *ǯănăź* 'rennet, abomasum' (cf. Lez *cülez*, Tab *ẑºelerẑº*, Agul *zºelez*, Rut *ziliz*, Tsax *zɬlzam*, Udi *zizam*) directly with CCirc **zazə*, Ub *zaza*, CAbx **zə* 'bile, gall-bladder'.

(9) The Ubykh suffix is found in *a-dºə-n* 'outside' (*dºə* 'field'; cf. SAbx *a-dº-nə* 'id.'), *ana-n* 'then', *wana-n* 'there', etc. Historicaly it can go back to the locative morpheme.

3. CWC **l* > CCirc **L* : Ub *L* : CAbx **l*

Examples:

(1) **mala-ƛʼə* CCirc **maLa-ƛʼa*, CAbx **mala-šʼə(-jə)* 'hunger'

(2) **bla/ə* CCirc **bLa* 'to burn, shine', CAbx **blə* 'to burn'

(3) **gʼala* CCirc **gʼaLa/ə* 'to slip, fall, rock', CAbx **gʼala* 'to swing, reel, stagger', 'to gad about', 'to idle, loaf'

(4) **bla* CCirc **qʰa-bLa* 'stretcher for carrying the dead' (**qʰa* 'grave'), CAbx **qºə-bla/ə* 'cross-beam', 'beam over the hearth', cf. also Tap *čºə-mla* 'ladder' (*čºə* < **cºə* 'to plane'), with *m* < *b*

(5) **pʼələ-pʼələ* CCirc **bLa-bLə* 'to hang in large numbers', CAbx **pʼələ-pʼələ* 'to swarm, teem with sth' (assimilation **pʼəLə* > **pʼLə* > **bLə* in Circassian)

(6) **kʼala/ə* CCirc **kʰʼa/əLə*, CAbx **kʼala* 'hut'

(7) **la* Ub *bLa//La*, CAbx **bla//la* 'eye'

(8) **(č)kʼampʼəla* Kab *škʼampʼəL* 'cork', Ub *kʼampʼəLa* 'acorn', Ash, Ahch *a-kʼampʼəl* 'small felt ball'

(9) **laHºə* CCirc **aχºə* (Sh), Ub *Laχə*, CAbx **laha* 'fig'

(10) **la* CCirc **-La/ə* habitual/excessive suffix, CAbx **-la* durative suffix

(11) **la* Ub *-La* conjunctive suffix 'and', instrumental suffix, CAbx **-la* comitative suffix 'with', instrumental suffix

Comments to the items in no.:

(1) The same item might be presented in the Kabardian suffix *-bLă* 'greedy', cf. *bəLəm-bLă* 'greedy for wealth' (*bəLəm* 'cattle', 'wealth'), *nəba-bLă* 'gluttonous' (*nəbă* 'belly'), if it is not derived from **bLa/ə* 'to burn' (cf. Morf 132).

(10) The Circassian habitual suffix **-La* is found in the following examples: Tem *λă?°a-La* 'asking constantly', *λăpăwa-La* 'to stumble all the time' (*wə-λăpăwa* 'to stumble'), Ad *g°əšə?a-Lă* (*g°əšə?a* 'to talk'), Kab *psălа-Lă* (*psală* 'word') 'talkative', Kab *wălBăna-Lă* 'rainy' (*wălBăna* 'rain'), Kuban Kab *x°ăba-Lă* 'always warm' (*x°abă* 'warm'), *ś'ə?a-Lă* 'always cold' (*ś'ə?ă* 'cold') (cf. Ocherki 206). In Abkhaz: *k'rə-fa-la* 'do eat !'//'eat regularly !' (*a-k'rə-fa-ra* 'to eat sth'), *š°ə-x̌°mar-la* 'do play !'//'play regularly !' (*š°ə-* 'you').

(11) An example of the instrumental-comitative function in Ubykh is *a-wərəs-ā-La* 'with the Russians' (cf. Dumézil 1975: 55), in Abkhaz *a-laba-la* 'by/with the log (*a-laba*)', *a-maħ°ə-la* 'co-bridegroom' (*a-maħ°*).

4. CWC **r* > CCirc **d-, ī-, -r-* : Ub *L-, d-, -r-* : CAbx **r-, *l-, *-r-*

4.1. Initial **r-*

Examples:

(1) **rə-* Ub *də-*, CAbx **rə-* causative prefix
(2) **ra* CCirc **da*, Ub *La*, CAbx **ra* 'nut'
(3) **ra/ə* Ub *La*, CAbx **rə* 'army'
(4) **raʒ°ənə* CCirc **īəž°ənə*, Ub *daš°anə*, CAbx **raʒənə* 'silver'
(5) **raH°a* CCirc **tħa-rəq̄°a*, Ub *dax̌°a* 'pigeon, dove', CAbx **laħ°a* 'rook, raven'
(6) **ras°a/ə* CCirc **c^{h}ə* 'hair, wool', **-c^{h}a* 'hairy', Ub *daš°ə*, CAbx **laśa* 'wool'

Comments to the items in no.:

(3) Though CCirc **ʒa* 'army' might be related to the respective Ubykh and Abkhaz items, one would expect **da*, rather than **ʒa*. Nikolayev and Starostin (NS 249) reconstruct here PWC **ŕə*, i.e. a palatalised resonant.

(5) The reconstruction of CWC **H°* here is tentative because of the irregular correspondence. In Proto-Abkhaz the fluctuation **r- ~ *l-* must be supposed, as nowadays in *a-l-aš°a-ra//a-r-aš°a-ra* 'to weed' (*l-//r-* < **rə-* causative prefix).

(6) Cf. the comment to this comparison in 3.3.6. (5).

4.2. Medial **-r-*

Examples:

(1) **bərə-bərə* CCirc **bərə-sərə* 'noise of flurry, scandal, etc.', Ub *bər-bər* 'to crackle (as wood in fire)', CAbx **bərə-bərə* 'frowling, grumbling' (onomat.)

(2) **p'ara/ə-p'ara/ə* CCirc **p'ara-p'ara* 'chatter, twaddle', CAbx **p'arə-p'arə* 'to chatter, twaddle' (onomat.)

(3) **g°arta* CCirc *k̄°art^{h}a/ə* 'certain (solid) number' (Ad), '(large) herd' (Kab), CAbx **g°arta* 'herd, flock', 'big quantity of sth/smb'

(4) **t'ara/ə* CCirc **t'ara* > Kab *wə-t'ără-zə* 'to curl (of hair)', Ub *t'ər* 'to ooze out, exude (as glutinuous liquid)' (Dumézil 1977: 22), CAbx **t'arə* 'to bend (of sth flexible)', **t'arə-t'arə* 'to be flexible, viscous, bending, lithe, tall and elegant'; cf. also CCirc **t'ara* 'to sport, gamble (of horse)'

(5) **-rə-* CCirc **-rə-*, Ub *-rə-*, CAbx **-rə-* connective affix

(6) **-ra/ə-* CCirc **-rə-*, CAbx **-ra-* translative affix 'through'

(7) **-ra/ə* CCirc **-rə*, CAbx **-ra* suffix in the personal pronouns: CCirc **sa-rə* 'I', **wa-rə* 'you', CAbx **sa-ra* 'I', **wa-ra* 'you (male/hum; nonhum), **ba-ra* 'you (fem/hum), **ja-ra* 'he (male/hum; nonhum), **la-ra* 'she (fem/hum), **ħa-ra* 'we', **da-ra* 'they'

(8) **pərə* CCirc **p^{h}ərə* 'onomatopoeia for the sound of bird's flight', Ub *pərə*, CAbx **pərə* 'to fly'

(9) **g°ərə* CCirc **g°ərə-yə* 'kingpin of cart', CAbx **g°ərə* 'needle'

(10) **k'ara//k'ərə* CCirc **k'ərə* 'thick, dense (of wool, beard, etc.), long (as hair), high (as grass)', CAbx **k'ak'ara* 'grove; thicket'

(11) **k^{w}ərə* CCirc **k^{w}ərə//k^{w}ara* 'to fall', Ub *k^{w}ərə* 'to slip, slide', CAbx **k^{w}ərə* 'to roll (of small objects), slide, crawl'

(12) **γarə* CCirc **γarə* 'prisoner', Ub *γər* 'prisoner', 'slave', CAbx **γarə* 'poor'

Comments to the items in no.:

(5) The connective *-rə-* in Circassian is found in such items as CCirc **k̄°ə-rə-t^{h}ə* 'middle one' (**k̄°ə* 'core, middle', **t^{h}ə* 'to stay'), **bĝə-rə-sə* 'mountaineer' (**bĝə* 'mountain', **sə* 'to sit'), **wəna-rə-sə* 'stay-at-home' (**wəna* 'house'), **g°ə-rə-λə* 'idea' (**g°ə* 'heart', **λə* 'to lie, contain'), Ad *tħa-rə-ʔ°ə* 'oath' (*tħa* 'god', *ʔ°ə* 'to say'), etc. In Ubykh this affix, which Dumézil 1969: 106 called "obscure", is found, for example, in Ub *daγ'ə-rə-məʒə*, *dəγə-rə-məʒə* 'kind of pricky tree' (cf. *dγa-məʒə* 'id.', HV 549), *g'ā-r(ə)-γ°a* 'hollow, hole' (cf. Ub *g'ā-γ°a* 'id.', HV 694, 702), maybe also in Ub *bza-rə-x̌°a* 'big pool' (*bzə* 'water'). In Abkhaz it is found, for example, in CAbx **bγa-rə-bəfi°ə/a* 'vertebra' (**bγa* 'backbone', **bəfi°ə/a* 'bone'), Abzh

a-šx̌a-r-pə 'the mountainous area' (*a-šx̌a* 'mountain', *-pə* 'nose, front'), SAbx *a-čə-r-g°ə* 'udder' (*g°ə* 'core, heart'), etc. In Abkhaz this affix is often confused with the homophonic 3d p.pl. possessive affix ('theirs').

(6) These affixes can be linked with CAbx **rə* 'to cross water'.

(9) The comments to the Circassian item see above, under CWC **g°* in 1.3.3. (7).

V. THE RECONSTRUCTION OF THE COMMON WEST CAUCASIAN GLIDES

1. CWC **w* > CCirc **w* : Ub *w* : CAbx **w*

Examples:

(1) **wa* CCirc **wa*, Ub *wə-γ°a*, CAbx **wa-ra* 'you' (in Abkhaz: 2d p.sg. male/hum and nonhum)

(2) **wə/a* CCirc **wə/a*, Ub *wa-na*, CAbx **wa/ə* deictic pronoun 'this'

(3) **wə* CCirc **wə-*, Ub *wə-* verbalising prefix, CAbx **wə* 'to do, make'

(4) **wə/a* CCirc **wə/a* 'long', 'deep', Ub *wa*, CAbx **awə* 'long, tall'

(5) **wasa* CCirc **wasa* 'price', CAbx **wasa* 'sheep'

(6) **wə* CCirc **wə* 'to put into, insert throughout the surface of, thread (a needle)' (only with local preverbs), Ub *wə* 'to carry'

(7) **wa* CCirc **wa* 'sky, heaven', **wa-šx̌°a* 'oh, heavens !', 'I swear ! (folk.), Ub *wa*, *wa-ḫa//wa-ba* 'God'

(8) **wə* Ub *γ°a-wə*, CAbx **awə* 'to find, get'

(9) **wə/ap'a/ə* CCirc **wəp'-č'a* (*č'a* 'flat and thin'), CAbx **wa/əp'a* 'felt coat', **wa/əp'a-ć°a* 'felt' (**ć°a* 'leather, skin')

(10) **-wa* CCirc **-wa* gerundial suffix (e.g. CCirc **ča-wa* 'running'), CAbx **-wa* gerundial suffix (SAbx *sə-j°-wa* 'I running', *sə-pa-wa* 'I jumping')

(11) **-wə* CCirc **-wə* marker of transformative case (e.g. Kab *txəλə-w*, Ad *txəλ-ăw* 'book', transform. case), adverbial suffix (e.g. *daxa-w* 'nicely, beautifully'), Ub *-w* adverbial suffix (e.g. *də-x̌aǎa-w* 'surprising', with the relative prefix *də-* and *x̌aǎa* 'to be surprised'), CAbx **-wə* adverbial suffix (e.g. Bz *fa-w*, *ž°ə-w* 'sth to eat, sth to drink', *jə-bzəja-w* 'it is being good')

(12) **wa* CCirc **-wa* vocative suffix (e.g. in Kuban Kab *dadă-wă* in addressing the grandfather (*dadă*), *nəsă-wă* in addresing the daughter-/sister-in-law (*nəsă*), etc., cf. Ocherki 39), Ub *wā*, CAbx *wa* vocative (prepositional) particle

(13) **wadə* CCirc **wadə* 'thin, skinny', Ub *wad-ja* 'to get lost', 'to die, perish' (< *wadə-ja*)

Comments to the items in no.:

(2) The reconstruction of CCirc **wə/a* is based on Bzh *wa/wə*, Sh *wə* 'that', Bzh, Sh *wə-da* 'there, thither', Ad *a-w*, Kab *a-wă* 'by there', etc. (cf. Morf 207; MS 48-49). *-na* in Ub *wa-na* is another deictic element.

(3) Besides CCirc **wə-* verbal prefix meaning 'to make', 'to become', cf. also CCirc **ja-ba-wə* 'to kiss, give a smacking kiss' (**ja-* objective prefix, **ba* 'kiss'), with final **wə*, i.e. 'to make smb a kiss' (cf. MS 113-4), cf. SAbx *ba q'a-c'a-ra* 'to make (*q'a-c'a-ra*) a kiss (*ba*)' (in baby talk). An example for the prefix *wə-* in Ubykh, which often has causative/transitivizing meaning, is *t*ə* 'to get out' vs. *wə-t*ə* 'to take out, make get out' (cf. MS, ibid.).

(4) The reconstruction of the Circassian counterpart to Ubykh and Abkhaz items is based on the following material: Ad *γ°ag°-wa-n(ă)*, Kab *γ°ag°-a-nă* 'long distance (as of road, trip)' (CCirc **γ°a-g°ə* 'road'; Shagirov (ES I: 133) tentatively sees in the second part of this word CCirc **wana* 'saddle', with the elision of *w* in Kabardian, which I don'd find semantically plausible), CCirc **k^{h}ə-wə* 'deep' (**k^{h}ə* 'middle, centre'), **x̌°a-wə* 'deep ravine' (for **x̌°a* cf. also **x̌°a-t^{h}a* 'ravine, gully').

(7) CCirc **wa-šx̌°a* is explained as 'blue sky' (cf. PC 87). Ub *wašx̌°a* 'god', 'thunder and lightning' (MP 200), as well as CAbx **wašx̌°a* 'oath' (cf. ES II: 90) are considered to be loans from Circassian. In any event they clearly indicate the sacral meaning of CCirc **wa-šx̌°a*, pace ES II: 89-90. The original meaning of the Ubykh word in (7) could also be 'sky', as was suggested by Shagirov (ES II: 89; MS 69). The element *-ḇa* is explained as 'grey' (cf. MS 69). The typological parallels to the designation of god by the word for 'sky' is well-known in a number of ancient traditions, cf. the name of the Greek god Οὐρανός, meaning 'sky', Hurrito-Hittite god *Anu-*, corresponding to Shumer *AN* 'sky', Akkadian *Anum* (cf. GI 903).

(8) The first part of Ub *γ°a-wə* is compared with CCirc **γ°a-t^{h}ə* 'to find' (cf. MS 99).

(10) It is noteworthy that the Circassian suffix has an archaic variant *-g°a*, e.g. in Kabardian texts of the last century *x°ădă-g°ă* 'like, similar' (cf. Urusov 296). This has its parallels in Abkhaz, cf. Abzh *sə-m-ca-wa* 'I not going', *sə-m-ca-k*a* 'I not in the process of going' with a rather subtle semantic difference between the two forms. The second form in Abkhaz is etymologically transparent: *sə* 'I', *m* 'not', *ca* 'go', *k*a* gerundial suffix, supposedly derived from the verb **ak*ə* 'to be, exist', i.e. 'being'. Can the suffix *k*a* indicate the older form of the verb, namely **ak*a*, with the final *-a* ? In any case we have symmetrical pairs CCirc **-wa* ~ **-g°a* and CAbx **-wa* ~ **-k*a*. While the material and semantic identity of the Circassian and Abkhaz suffixes is beyond doubt, the question remains whether CWC **-wa*

and **-kʷa* represent etymologically one and same suffix? Note that the CAbx **akʷə* 'to be, exist' is undoubtedly connected with the corresponding verb in East Caucasian: cf. Avar *b=uk'-ine*, Andi *=ik'uda*, *=k'udu*, Lak *=ik'wan* (cf. SS 120).

2. CWC **j* > CCirc **j* : Ub *j* : CAbx **j*

Examples:

(1) **ja/əba* CCirc **ja/əba*, Ub *jaḫa*, CAbx **jəba* 'orphan'

(2) **ja* CCirc **ja-zə* 'he himself' (**zə* 'one'), CAbx **ja* 'he', 'it', Ub *jə-na* 'this', CCirc **jə-gʲə* 'now' (*-gʲə* 'and'), **nə-ja-pa* 'today', CAbx **ja-x̌ʲa* 'today', **ja-ćə* 'yesterday', **ja-qa* 'yesterday night' (cf. MS 47, 48)

(3) **ja* CCirc **ja/ə*, Ub *ja* 'to coat (the walls of the house)'

(4) **dəjə* CCirc **dəjə* 'to cool off, harden, grow numb', Ub *dja* 'corpse, dead'

(5) **ja* CCirc **-ja/ə* suffix 'up, upwards' (e.g. Ad *dă-kʷă-jă*, Kab *dă-kʷă-jə* 'to climb'), Ub *jə-* preverb meaning 'in the direction of the speaker', CAbx **ja-* prev. 'over sth' (e.g. SAbx *a-ja-s-ra* 'to go over sth')

(6) **-jə* CCirc **-jə*, Ub *-j*, CAbx **-jə* 'and'

(7) **janə* CCirc **janə*, CAbx **anə* 'whole' (e.g. day, year)

(8) **p'a/əjə* CCirc **p'əjə* 'to stick out, be visible', CAbx **p'ajə-p'ajə* 'to swell up', 'to be full to overflowing', cf. also CAbx **č'a-p'ajə* and **č'-aħˤ-ta-p'ajə* under CWC **p'* in 1.1.3. (9)

(9) **k'ʲəjə* CCirc **k'ʲəjə* 'to shriek, howl', CAbx **k'ʲəjə* 'to miaw', 'to caw (of some birds, e.g. raven)'

(10) **śˤəjə* CCirc **śˤəjə*, Ub *śˤəjə*, CAbx **śˤəjə-śˤəjə* 'to whistle'

(11) **ja/ə* Ub *ja*, CAbx **jə* 'to strike, beat'

(12) **aja* Kuban Kab *ajă* (Ocherki 43), Kab *aħăj* 'yes, certainly' (Urusov 187), CAbx **ajə(-ajə)*, **aja-wə* 'yes'

Comment:

The reconstruction of CAbx **jə* in (11) is based on the analysis of the morphemes *jə* in CAbx **ǯʲə-jə* 'ironsmith' and **x̌ʲə-jə* 'goldsmith' (**x̌ʲə* 'gold'). It is possible that **ǯʲə* in the first example is an old word for 'iron' or 'metal', found also in **ǯʲ-aħˤa* 'iron hammer', with **aħˤa* 'sword', which originally might have meant simply 'the striking weapon'. Words like CCirc **γˤə-k'ʲa*, Ub *wə-k'ʲə* 'blacksmith' (lit. 'iron-forge'), Kab *dəśă-k'ʲ* 'jeweller' (*dəśă* 'gold', **k'ʲa/ə* 'to forge') suggest that in the second part of the Abkhaz words (**jə*) we should see the verbal root meaning 'to forge', akin to Ub *ja* 'to beat, strike'.

CHAPTER VI

THE RECONSTRUCTION OF THE COMMON WEST CAUCASIAN VOCALIC SYSTEM

The Common West Caucasian vocalic system comprised two phonemes: **a* and **ə*, much as in present-day Tapanta. I shall first show correspondences between the non-initial vowels, and then discuss the problem of initial **a-*.

1. IDENTICAL CORRESPONDENCES IN NON-INITIAL VOWELS

1.1. CWC **a* > CCirc **a* : Ub *a* : CAbx **a*

1.1.1. Medial **-a-*:

Examples:

(1) **dada* CCirc **dada* 'grandfather', Ub *dad* 'father', CAbx **dada* 'grandfather', 'father'

(2) **mač'ə* CCirc **mač'a*, Ub *mač'*, CAbx **mač'ə* 'small, little, few'

(3) **dG°-a-za* CCirc **t'q"aza*, Ub *t'q"aza*, CAbx **ĥ°aza* 'twins'

(4) **g°ăš°ə* CCirc **waš^{h}ə*, Ub *g°ăš°a*, CAbx **(aj)g°aš°ə* 'axe'

(5) **laH°ə* CCirc **ax°ə* (Sh), Ub *Lax°ə*, CAbx **laĥa* 'fig'

(6) **tqamə* Ub **txamə*, CAbx **qamə* 'fur-coat'

(7) **bana* CCirc **pana* 'prickle, thorn(bush)', Ub *bana* 'grass (especially as used as a remedy)', CAbx **bana* 'forest, wood'

(8) **wasa* CCirc **wasa* 'price', CAbx **wasa* 'sheep'

(9) **t'at'a* CCirc **t'at'a*, Ub *t'at'a*, CAbx **t'at'a* 'mild, soft, glutinous'

(10) **k°ak°a* CCirc **k°ak°a* 'to be all shivering', Ub *k°ak°a* 'to be wrinkled, creased', 'to contract, shink, shrivel up', CAbx **qə-r-k°ak°a* 'to hang one's head', 'being depressed, downcast'

1.1.2. Final **-a*:

Examples:

(1) **(a)ga* CCirc **-g'a* 'bad, insufficient, lacking', Ub *ag'a* 'bad, evil', CAbx **aga* 'silly, stupid'

(2) **tq°a* CCirc **tx°a* 'to grow grey (of hair)', 'dum grey (colour of horse)', Ub

tx̌ˤa 'ashes', CAbx **qˤa* 'ashes', 'grey' ('the colour of the ashes')

(3) **q'a* CCirc **q'a*, Ub **q'a*, CAbx **q'a* 'to be, exist'

(4) **məH́a* CCirc **pxa* 'wood (as material)', Ub **məx̌́-ač'a* 'little flat spoon to stir pap' (*ač'a* 'flat', cf. Dumézil 1969: 109), **məx̌a-ćʷ* 'spoon', CAbx **mħa-ćʷə* 'spoon' (**ćʷə* 'sharpened stick'), **mħa-basta* 'flat wooden spoon to stir pap' (**basta* 'millet pap')

(5) **sa* CCirc **sa*, Ub **sa*, CAbx **sa* 'I'

(6) **ža* CCirc **ža* 'sleigh, sledge', Ub *ža* 'block, log, billet', CAbx **aža* 'ash-tree'

(7) **šˤa* CCirc **ja-ša* 'to be after sth, hunt, fish' (**ja-* objective prefix), **ša-kʷa* 'hunter', 'to hunt' (**kʷa* 'to go'), Ub **šˤa-k'a* 'hunter' (**k'a* 'to go'), CAbx **šˤa-ra-ća* 'to hunt' (**-ra* abstract suffix, **ća* 'to go')

(8) **La* CCirc **γa-qʷə-La* 'to fool' (Ad), 'to tempt, seduce' (Kab) (**γa-* causative, **qʷə-* prev. 'mouth'), **qʷə-La* 'fool', Ub *La*, CAbx **ža* 'to fool'

(9) **λa* CCirc **λa*, Ub *λa-p'a*, CAbx **šˊa-pʷə* 'foot'

(10) **Hˤa* CCirc **x̌ˤa* 'to file, rub', Ub *x̌ˤax̌ˤa* 'to itch, scratch', CAbx **ħˤa* 'to comb (hair)'

1.2. CWC **ə* > CCirc **ə* : Ub *ə* : CAbx **ə*

1.2.1. Medial **-ə-*:

Examples:

(1) **k'əjə* CCirc **k'əjə*, CAbx **k'əjə* 'to shriek, howl, miaw, caw'

(2) **pəǯə* CCirc **pəǯə*, CAbx **pəǯə* 'buckle, clasp'

(3) **ĝəzə* CCirc **ĝə(r)zə*, CAbx **ĝəzə* 'to moan, groan, sob'

(4) **śˤəjə* CCirc **śˤəjə*, Ub *śˤəjə*, CAbx **śˤəjə* 'to whistle'

(5) **məšˤa* CCirc **məśa*, Ub *məšˤa*, CAbx **məšˤə* 'bear'

(6) **ʕˤəna* CCirc **wəna*, CAbx **ħˤəna* 'house'

(7) **pərə* CCirc **pʰərə* 'onomatopoeia for the sound of bird's flight', Ub *pərə*, CAbx **pərə* 'to fly'

(8) **kʷərə* CCirc **kʷərə* 'to fall', Ub *kʷərə* 'to slip, slide', CAbx **kʷərə* 'to roll (of small objects), slide, crawl'

(9) **cəγˤa/ə* CCirc **c̄əγˤa* 'mouse', CAbx **c(')əγə* 'marten'

1.2.2. Final **-ə*:

Examples:

(1) **gˤə* CCirc **gˤə*, Ub *gˊə*, CAbx **gˤə* 'heart'

(2) **kʷərə* CCirc **kʷərə* 'to fall', Ub *kʷərə* 'to slip, slide', CAbx **kʷərə* 'to roll

(of small objects), slide, crawl'
(3) *ć°ə CCirc *ć°ə, Ub ć°ə, CAbx *ć°ə 'bull'
(4) *čə CCirc *čʰə, Ub čˊə, CAbx *čə 'horse'
(5) *ž°ˊə CCirc *źə, Ub ž°ə, CAbx *až°ə 'old'
(6) *p'ƛ'ˊə CCirc *p'l'ə, Ub p'ƛ'ə, CAbx *pšˊə 'four'
(7) *bLə CCirc *bLə, Ub bLə, CAbx *bžˊə 'seven'
(8) *tx̌°ə CCirc *tx̌°ə, Ub tx̌°ə, CAbx *x̌°ə-ša 'butter'
(9) *raʒ°ˊənə CCirc *ɪ̄əžˊənə, Ub daš°anə, CAbx *raʒənə 'silver'
(10) *γarə CCirc *γarə 'prisoner', Ub γər 'prisoner', 'slave', CAbx *γarə 'poor'

2. NON-IDENTICAL CORRESPONDENCES IN VOWELS

Besides the identical correspondences presented in the preceding paragraphs, one also comes across sets of non-identical correspondences between the languages. The general approach chosen for the reconstruction of vowels in such cases is as follows: if in two languages we have one and the same vowel vs. a different vowel in the third language, the vowel which is found in two languages is reconstructed.

2.1. Reconstruction of medial *-a-
2.1.1. CCirc *-a- : CAbx *-a- : Ub -ə-
(1) *γarə : CCirc *γarə 'prisoner', CAbx *γarə 'poor', Ub γər 'prisoner', 'slave'
(2) *maH°ə : CCirc *max̌°-λa, CAbx *maħ°ə, Ub məxə 'son-/brother-in-law'
(3) *mark°ˊa : CCirc *mark°a, CAbx *mark°ə-, Ub mə(r)k'a- 'kind of berries'

2.1.2. Ub -a- : CAbx *-a- : CCirc *-ə-
(1) *dəγac/čˊa : Ub dγačˊa 'kind of evergreen tree', 'juniper', CAbx *dəγaʒˊa 'ilex, holly', Sh (ShD 11) dəγəča 'bay-tree'
(2) *raʒ°ˊənə : Ub daš°anə, CAbx *raʒənə, CCirc *ɪ̄əžˊənə 'silver'

2.2. Reconstruction of medial *-ə-
2.2.1. CCirc *-ə- : Ub -ə- : CAbx *-a-
(1) *č(ˊ)ədə : CCirc *čʰˊədə, Ub čədə, CAbx *čada/ə 'donkey'

2.2.2. CCirc *-ə- : CAbx *-ə- : Ub -a-
(1) *raʒ°ˊənə : CCirc *ɪ̄əžˊənə, CAbx *raʒənə, Ub daš°anə 'silver'

2.2.3. Ub -ə- : CAbx *-ə- : CCirc *-a-
(1) *məć°a : Ub məžˊa, CAbx *mca, CCirc *maś°a 'fire'

(2) **məlˠ'a* : Ub *məśˠa*, CAbx **məšə*, CCirc **maxˠa* 'day'
(3) **məʒa* : Ub *məʒa*, CAbx **məʒə*, CCirc **maʒa* 'moon, month'

2.3. Reconstruction of final **-a*

2.3.1. CCirc **-a* : Ub **-a* : CAbx **-ə*

(1) **psa* : CCirc **psa*, Ub *psa*, CAbx **psə* 'soul'
(2) **plλa* : CCirc **plλa*, Ub *plλa*, CAbx **pšə* 'to look'
(3) **t'a* : CCirc **t'a-p'qʷə* 'to rip open', **t'a-č'ə* 'to undress', **t'a-tʰa* 'to come loose, be unfastened', Ub *t'a* 'to rip', *t'a-la* 'to rip completely' (Dumézil, Esenç 1972: 52), CAbx **t'ə* 'to open', **t'-la* 'to rip', **r-t'-la* 'to untie, unbind' (**r-* causative)
(4) **źˠa* : CCirc **źˠa* 'to be boiled (of food)', Ub *źˠa*, CAbx **źˠə* 'to boil'
(5) **məlˠ'a* : CCirc **maxˠa*, Ub *məśˠa*, CAbx **məšə* 'day'
(6) **məʒa* : CCirc **maʒa*, Ub *məʒa*, CAbx **məʒə* 'moon, month'

2.3.2. CCirc **-a* : CAbx **-a* : Ub *-ə*

(1) **bɾˠ'a* : CCirc **bγˠa*, CAbx **tə-bħa*, Ub *bγ'ə* 'broad, wide'
(2) **śˠa* : CCirc **śˠa*, CAbx **śˠa(-ra)*, Ub *śˠə-γˠa* 'you' (pl.)
(3) **wa* : CCirc **wa*, CAbx **wa* (in Abkhaz: 2d p.sg. male/hum and nonhum), Ub *wə-γˠa* 'you'

2.3.3. Ub *-a* : CAbx **-a* : CCirc **-ə*

(1) **tqˠa* : Ub *ša-txˠa* 'praise' (*ša* 'head'), CAbx **čqˠa* 'to boast', CCirc **šʰ'ə-txˠə* 'to praise, flatter' (**šʰ'ə-* 'location')
(2) **qˠ'a* : Ub *x̌'a*, CAbx **ħa*, CCirc **qʰˠə-źə* 'pear'
(3) **ča* : Ub *ča* 'to fall (of heavy objects)', CAbx **čča* 'to flow (of water)', CCirc **čə* 'to run', 'to flow (of water)'
(4) **za* : Ub *za*, CAbx **za*, CCirc **zə* 'one'

2.4. Reconstruction of final **-ə*

2.4.1. CCirc **-ə* : Ub *-ə* : CAbx **-a*

(1) **zˠə* : CCirc **źˠə*, Ub *źə* 'to comb', CAbx **zˠ(zˠ)a* 'to scutch, swingle (flax, wool, etc.)', 'to tear in pieces', 'to harrow'
(2) **psə* : CCirc **psə*, Ub *psə*, CAbx **aj-mə-psa* 'to sneeze'
(3) **qˠə* : CCirc **ħa-q̄ˠə/a* 'to bark, make noise' (**ħa* 'dog'), **q̄ˠə-γə* 'to howl (as dog)', Ub *qˠə* 'to bark', CAbx **qˠa-ħ(ħ)ə* '(to) howl, yell, bellow, shout'

2.4.2. CCirc *-ə : CAbx *-ə : Ub -*a*

(1) **k'ʼanə* : CCirc **k'ʼanə* 'nucklebone (used in bone game)', Abx *a-k'ʼan* 'big funeral candle with hanging sweets', 'high pole without twigs', Ub *k'ʼana* 'spindle'

(2) **pəzə* : CCirc **bzə*, CAbx **psə*, Ub *abza* 'female (of animals)'

(3) **pśə* : CCirc **pśə* 'to get tired', Kab also 'to get out of breath', CAbx **pśə* 'to die', **r-pśə* 'to put/blow out (as fire, light)', 'to kill', 'to exhaust, starve' (**r-* causative), Ub *pśa-χ̌ʷə* 'to breath'

(4) **dGʷə* : CCirc **t'q'ʷə*, CAbx **ĥʷə*, Ub *t'q'ʷa* 'two'

(5) **kʷə* : CCirc **kʰʷə* 'to dare, venture', CAbx **kʷə* 'to swear, vow', 'vow, oath', **kʷə-k'ə* 'to aim at, to decide, to plan, intend' (**k'ə* 'to take'), Ub *kʷa* 'to dare, risk'

2.4.3. Ub -*ə* : CAbx *-ə : CCirc *-*a*

(1) **p'ɬ'ə* : Ub *p'ɬ'ə-fa* 'breast, bosom' (*fa* 'nose, front'), CAbx **pš'ə* 'side', 'waist', 'skirt of cherkesska (Caucasian man's jacket) on the waist', CCirc **p'λ'a* 'upper back, shoulder', 'the top, front part of sth', Kab also 'blouse, (woman's) jacket'

(2) **ʒə* : Ub *ba-(n)ʒə* 'fly', CAbx **ʒə* 'flea', CCirc **ba-ʒa* 'fly', **bžə-ʒa* 'flea'

(3) **-čə* : Ub *-čə* privative suffix, CAbx **psə-čə* 'weak' (**psə* 'soul'), CCirc **-n(ə)-čʰa* privative suffix

(4) **mač'ə* : Ub *mač'*, CAbx **mač'ə*, CCirc **mač'a* 'little, small, few'

It is less certain which vowel should be reconstructed when we have a non-identical correspondence between two languages. In such cases only a reconstruction **a/*ə* is possible. But in cases of reduplication, when syllables have different vowels, the original vowel can be established by comparison with the corresponding vowels in another language, e.g. CCirc **λa-wə-g'ə́g'a* 'to fuss, bustle' (**λa* 'foot', **wə-* verbal prefix), Sh (ZS 146) *g'ə́rg'a*, CAbx **g'ág'a* 'round, circle', 'to spin, turn, go round', 'to make sth quickly and skilfully'. Here we can reconstruct CWC **g'ág'a* on the basis of the Abkhaz evidence, which represents a reduplication of the root *g'a*, and retains the original vowel in both syllables of the reduplicated root.

3. THE PROBLEM OF ROOT-INITIAL **a-* IN COMMON WEST CAUCASIAN

Though Common Circassian, Ubykh and especially Common Abkhaz possess quite a number of roots with an initial vowel (viz. *a-*), it is not yet clear whether

this indicates that the roots with vocalic anlaut should be reconstructed for Common West Caucasian as well, or whether such a situation is a result of a later (individual) development. This applies especially to Common Abkhaz and Ubykh, as they share a number of common roots with initial *a-*. Below I group all instances of such cases.

*Roots with initial *a- shared by Circassian and Abkhaz*

One of the few examples of this kind is CCirc **-a+γ°ə* comitative suffix (e.g. **γ°ag°-a+γ°ə* 'companion', with **γ°a-g°ə* 'road'), CAbx **aɦ°ə-* preverb 'by, beside, by passing'. The Circassian suffix is likely to be derived from **γ°əna* (**γ°ə-na*) 'border' with the prefixation of the connective affix **a*. The Abkhaz counterpart, in its turn, can be analysed as the preverb **a-* (found, for example, in *a-px̌'a-ra* 'to read') and the element **ɦ°ə*, akin to the first part of CCirc **γ°ə-na* 'border'.

The other two cases are kinship-terms: CCirc **nə//*j-ana*, CAbx **anə* 'mother' (cf. Ub *nə* 'id.'), CCirc **ĭə//*j-aĭa*, CAbx **abə/a* 'father' (cf. Ub **t°ə* 'id.'). The parallel Circassian forms without **a-*, as well as the Ubykh cognates, indicate that in Circassian and Abkhaz we are dealing in fact with old prefixed forms, probably with possessive semantics.

*Roots with initial *a- shared by Ubykh and Abkhaz*

Unlike the preceding case, there is a much more numerous set of common Abkhaz and Ubykh roots with vocalic anlaut. These are the following:

(1) Ub *c°ābγa* 'hut', CAbx **abɦa* 'fortress, 'stone palace', 'stone fence'; the long *ā* in Ubykh indicates that we deal with **c°a-abγa*. For the first part cf. Ub *c°əja* 'house'.

(2) Ub *abγa* (DA III: 217) 'thin, skinny, weak', CAbx **abɦa* 'thin, skinny' vs. CCirc **bγa* 'barren, dry (of cows)', **na-bγa* 'near-sighted' (**na* 'eye').

(3) Ub *agʼa* 'bad, evil', CAbx **aga* 'silly, stupid' vs. CAbx **gə* 'to be defective, lacking', CCirc **-gʼa* 'bad, insufficient, lacking'.

(4) Ub *ž°aqa* 'late (time)', CAbx **aqa* 'night'; the initial fricative in Ubykh might be *ž°ə* 'old', which allows us to analyse the Ubykh compound as **ž°ə-aqa*.

(5) Ub *aš°a* 'scythe, sickle', CAbx **aśa* 'sword' vs. CCirc **sa* 'sabre', 'knife'.

(6) Ub *dāγʼa* 'fresh, young, new, brave' (DA III: 226), CAbx **aγʼa-ɦ°ə* 'brave' (*-ɦ°ə* agent suffix); the long vowel in Ubykh implies **də-aγʼa*, with the relative prefix *də-* 'which, the one who'.

(7) Ub *māγʼa//maγʼa* 'twisted, oblique, indirect' (**mə-* negation), CAbx **arəγʼa* 'right (side)', **aj-γʼa* 'good, excellent' (**ajə-* reciprocal prefix), cf. also Ub *bLa-māγʼa* (*bLa* 'eye'), CAbx **m-aryʼa* 'squint-eyed' (**mə-* negation); it is

possible that the items in (6) and (7) are etymologically identical.

(8) Ub *aγ°a* (DA III: 217), CAbx **aɦ°a* 'den, hole, lair' (in CAbx also 'nest'), vs. CCirc **γ°a* 'burrow, den, hole'. Though when used in isolation the Abkhaz item shows no trace of the initial **a-*, it shows up in the compound **g°aɦ°a* 'hollow, precipice, deep', containing **g°ə* 'surface', thus **g°ə-aɦ°a* > **g°aɦ°a*, just as in Ub *g'āγ°a* 'den, hole', from **g'ə-aγ°a* (with *g'ə* 'surface', *aγ°a* 'den, hollow').

(9) Ub *amp'a* (DA III: 233-4), CAbx **amp'ə-t'asa* 'lead'.

*Root-initial *a- present only in one language*

(1) CCirc **#aC-* : Ub, CAbx **#C-*

(a) CCirc **aāaqa*, Ub *taqa* 'cock, rooster'.

(b) CCirc **ačʰa-x°ə* (**x°ə* 'white'), **ačʰa-pλə* (**pλə* 'red') 'sorts of millet', cf. also Kab *ašă-məxă* 'shepherd's purse' (kind of grass), CAbx **ča/ə-ɦ°ə-ra* 'harvest'; in Tap also 'grain harvest', 'bread'.

(c) CCirc **ačа* 'billy-goat', cf. CAbx **ča* 'female deer', **ča-c̄°ə* 'male deer' (**c̄°ə* 'bull').

(2) Ub **#aC-* : CCirc, CAbx **#C-*

(a) Ub *abza*, CCirc **bzə*, CAbx **psə* 'female (of animals)'.

(b) Ub *abə* 'big, thick' (HV 260), 'rather big' (DA III: 217), CCirc **ba* 'much, many', CAbx **-ba/ə* 'big' (in compounds).

(c) Ub *aź-q'a* (< **aźə-q'a*), CCirc **ž'ə/a* 'right (side)'.

(d) Ub *ag°ə*, CCirc **-g°a/ə*, CAbx **-g°ə* 'short, small'.

(e) Ub *akʷə* 'bush, shrub', Abx *kʷə* in: *a-kʷəmaryʼayʼ* 'haw-thorn', *a-kʷəmark'at'əl* 'a kind of thorny bush', Bz *a-kʷərmaxʼc* '(long) switch, dry branch', Abx *a-kʷək'ʷəmdər* 'bush(es)', cf. also *kʷə* in CCirc **ħam(š)kʷə(n)t'ə* 'haw-thorn berries'.

(f) Ub *ačʼa* 'wide and flat', CCirc **p'qʷa-čʼa* 'thin (of flat hings)', CAbx **čʷa* 'thin'.

(3) CAbx **#aC-* : CCirc, Ub **#C-*

(a) CAbx **apš'ə* 'big, strong, great, powerful', CCirc **pš̌'ə* 'feudal prince', also 'father-in-law' (connected with **pš̌'ə* 'to swell' ?).

(b) CAbx **apš'ə*, CCirc **pλə-ž'ə*, Ub *pλə* 'red'.

(c) CAbx **r-aźa*, CCirc **zə*, Ub *za* 'to decant, filter'.

(d) CAbx **až'a*, Ub *La* 'hare'.

(e) CAbx **aža* 'time' vs. CAbx **-ža*, Ub *-xa* suffix 'time for doing sth'.

(f) CAbx **aña-šʹa* 'to be lazy, idle', CAbx **aña/ə(r)-la=psə-la* 'hardly' (**psə* 'soul', **-la* instrumental suffix), CCirc **za-γa* 'rest' (Kab), **za-γə* 'to become rest, calm' (**za-* reciprocal prefix).
(g) CAbx **aña* 'leather strap', CCirc **γa*, Ub *-γə* 'to be suspended'.
(h) CAbx **aña-(n)da* 'fence', 'edge', cf. also **ħ°a-ña(-da)* 'border', Ub *g°a-γa* 'fenced part of land, yard' (from **g°ə* plus **aγa* ?).
(i) CAbx **awə*, Ub *wa* 'long, tall', CCirc **wə/a* 'long', 'deep'.
(j) CAbx **awə*, Ub *γ°a-wə* 'to find, get'.
(k) CAbx **añə* 'prince', Ub *ǯʹə* 'prince', 'tribal chief', 'king', 'father-in-law'.
(l) CAbx **ažа* 'ash-tree', CCirc **ža* 'sleigh, sledge', Ub *ža* 'block, log, billet'.
(m)CAbx **až°ə*, CCirc **źə*, Ub *ž°ə* 'old'.
(n) CAbx **aγʹa* 'seed', 'male animal or bird left for reproduction', CCirc **ĝa* 'scrotum, testicle', Ub *-źa* 'male' (in compounds).

There may be two options to the problem of roots with initial **a-*: either the vocalic anlaut should be reconstructed for Common West Caucasian, or it must be regarded as relic of a prefix **a-*. It is noteworthy that such cases, as was noted by Dumézil (DA III: 217), are predominantly limited to nominal and especially adjectival roots.

There are almost no examples where such roots are shared by all three languages (not taking into account the demonstrative pronoun **a*). The only case which can be cited in this connection, is CCirc **armawə*, Ub *armawə* 'awkward, lazy person', Ub *arma*, CAbx **arəma* 'left (side)'. But the Circassian word is likely to be an Abkhaz loan, probably through Ubykh intermediary (which is confirmed by the presence of the Ubykh derivational suffix *-(a)wə*). The Abkhaz word contains **ma* 'hand'.

It is possible to assume that in many cases we really have to deal with a petrified possessive prefix **a-//*ja-* 'its'. The prefixal character of such formations can sometimes be proved, cf., for example Ub *ac°ə* 'damage, loss', corresponding to CAbx **ć°-gʹa* 'bad, evil', CAbx **ja-ć°a* 'worse'; cf. also Ub, CAbx **ć°ə-* objective version prefix with the meaning 'despite, against the will, to the detriment of' (cf. DA III: 217). Another example can be Ub *atʹə* 'soft, overripe' (DA III: 217) vs. CCirc **jatʹa* 'clay, earth, mud', CAbx **qʹ-atʹa* 'slushy, diluted (by water)', 'soft, mild', and CCirc, PUb, CAbx **tʹa-tʹa* 'mild, soft, glutinous'. In case of Ub *agʹa* 'bad, evil', CAbx **aga* 'silly, stupid' vs. CCirc **-gʹa* 'bad, insufficient, lacking', cf. verbal roots CAbx **gə*, Ub *gʹa* 'to be lacking, defective, deficient'. Cf. also CCirc **janə*, CAbx **anə* 'whole (e.g. day, year)'.

It is possible to conclude that in most cases we are dealing with the

possessive prefix (**ja-* > **a-*), which formed adjectives from nouns and verbs. Some of such adjectives were later substantivised, preserving the fossilised prefix. In Common Abkhaz this prefix also acquired the semantics of comparison (**ja-*), which was later influenced and partly merged with the reciprocal prefix **ajə-*, whence such parallel forms as **ja-ħa* ~ **aj-ħa* 'more', **ja-ć'a* ~ **aj-ć'a* 'less', **ja-ć°a* ~ **aj-ć°a* 'worse', etc. Sometimes, however, the root-initial vowel might result from the elision of a root-initial consonant.

CHAPTER VII

THE RECONSTRUCTION OF PROTO-CIRCASSIAN, PROTO-ABKHAZ AND PROTO-UBYKH PHONEMIC SYSTEMS

The reconstruction of the phonemic systems of Common Circassian and Common Abkhaz was achieved by the method of internal reconstruction, based on the comparison of dialects of the respective languages: no phoneme has been reconstructed which is not present in at least one of the existing dialects. On the contrary, the phonemic system of Proto-Ubykh can be discussed only on the basis of external reconstruction, as Ubykh, at the stage it was recorded, did not have any significant dialectal differences.

1. PROTO-CIRCASSIAN

Proto-Circassian Consonant System

	Stops				Affricates			Spirants		Resonants		Glides
Labials	*b*	*p*^{h}	*p̄*	*p'*				(*f*)		*m*		*w*
Dentals	*d*	*t*^{h}	*t̄*	*t'*	*ʒ*	*c*^{h}	*c̄*	*c'*	*z* *s*	*n*	*r*	
Dent.-alveol. labialised					*ʒ*$^\circ$	*ć*$^{h\circ}$	*ć*$^\circ$	*ć'*$^\circ$	*ź*$^\circ$ *ś*$^\circ$			
Alveolars palatalised					*ǯ*	*č*^{h}	*č̄*	*č'*	*ž* *š*			
					ǯ'	*č*$^{h\prime}$	*č̄'*	*č'*$^\prime$	*ž'* *š'*			
Laterals						*ƛ'*			*L* *λ*		*l*	
Palatals												*j*
Velars	*g*	*k*^{h}	*k̄*	*k'*					*ĝ* *x*			

palatalised	g'	$k^{h}{}'$	$\bar{k}'$	k''		
labialised	g°	$k^{h\circ}$	$\bar{k}^{\circ}$	$k^{\circ\circ}$		x°
Uvulars		q^{h}	$\bar{q}$	q'	γ	$\check{x}$
labialised		$q^{h\circ}$	$\bar{q}^{\circ}$	$q^{\circ\circ}$	γ°	$\check{x}^{\circ}$
Pharyngals					ς	H
labialised					ς°	H°

Comments to the Proto-Circassian reconstruction:

The main differences between my reconstruction of the Proto-Circassian phonemic system and the reconstructions made in Balkarov 1970: 259 and in NS 197-199 are as follows:

(1) Unlike Balkarov 1970 and NS, for both Common- and Proto-Circassian I tentatively reconstruct the peripheral fricative **f*, the evidence for which is found only in an Adyghe onomatopoeic root, which might have possible correspondences in sister-languages (see under CWC **f* in 3.1.1.).

(2) My reconstruction of the Proto-Circassian middle affricates **ʒ* and **ć* is based not on internal Circassian correspondences, but on the evidence of the sister languages.

(3) For Common- and Proto-Circassian I reconstruct both plain and palatalised voiced alveolar affricates, contrary to NS, who give no plain affricates.

(4) Unlike NS, I do not find enough evidence to reconstruct an opposition lax-tense for Proto-Circassian fricatives, as Kabardian shows no traces of this opposition in its reflexes of Proto-Circassian fricatives. The opposition *š, š́* vs. *š̌, š̌́* can therefore be regarded as the result of an independent Adyghe development.

(5) Unlike NS, I do not reconstruct a voiced lateral affricate (**Ł*), regarding the correspondence Ad *ĝ* : Kab *ž* as a mere irregularity in one of the languages (parallel to the irregular fluctuation *x* ~ *š* in Kabardian dialects, cf. Ocherki 31).

(6) On the basis of the Abkhaz evidence, I reconstruct for Proto-Circassian a set of plain velar stops, which merged in Common Circassian with the palatalised series (cf. under CWC **g*, **k*, **k'* in 1.3.1, 1.3.5, 1.3.10).

(7) I do not reconstruct the palatalised **ĝ́*, present in NS.

(8) I agree with Balkarov 1970: 258, 259 and Kuipers (PC) that in place of the glottal stops (*ʔ, ʔ°*), present in most of Circassian dialects, uvular stops **q'*, **q'* should be restored. Such reconstruction is supported not only by external data (i.e. by Ubykh and Abkhaz material), but also by the preservation of these consonants in the Hakutsw subdialect of Shapsygh Adyghe. Nikolayev and

Starostin instead reconstruct plain and labialised glottal stops. By the way, the absence of a labialised glottal stop in the chart of Proto-Circassian consonants in NS is obviously due to an oversight, as this phoneme is found in the Proto-Circassian material given in the North Caucasian Dictionary. The same reason can explain the absence of **j* in the Proto-Circassian chart in NS 199.

(9) On the basis of the correspondence Ad *ħ* : Kab *x̌* Nikolayev and Starostin reconstruct palatalised *x̌ʲ* (NS 199), while I interpret this correspondence as evidence for CWC **Hʲ*, which gave in Ubykh *x̌ʲ* and in Common Abkhaz **ħ*.

(10) Unlike Nikolayev and Starostin, I reconstruct for Proto-Circassian the voiced pharyngals **ʕ*, **ʕʷ*. In my opinion, in Common Circassian and in Ubykh they merged with the uvular **γ*, **γʷ*, while in Common Abkhaz they changed into **ħ*, **ħʷ* (i.e. phonetically weakened variants of **ʕ*, **ʕʷ*). For Proto-Circassian I also reconstruct labialised **Hʷ* > CCirc **x̌ʷ*.

Phonetic developments from Common West Caucasian to Proto- and Common Circassian

CWC	>	PCirc	>	CCirc
**p*		**pʰ*, **p̄*		**pʰ*, **p̄*
*(*dʷʲ*		**dʷ*		**d)*
**g*, **gʲ*		**g*, **gʲ*		**gʲ*
**k*		**kʰ*, **k̄*		**kʰ*, **k̄*
**kʲ*		**kʰʲ*, **k̄ʲ*		**kʰʲ*, **k̄ʲ*
**k'*, **k'ʲ*		**k'*, **k'ʲ*		**k'ʲ*
**gʷ*, **gʷʲ*		**gʷ*		**gʷ*
**kʷʲ*		**kʰʷ*, **k̄ʷ*		**kʰʷ*, **k̄ʷ*
**kʷʲ*		**kʷ*		**kʷ*
**G*, *(*Gʲ)*		**q̄*		**q̄*
**Gʷ*		**q̄ʷ*/**qʷ*/*qʰʷ*		**q̄ʷ*/**qʷ*/*qʰʷ*
*(*Gʷʲ*		**qʷ*		**qʷ)*
**q*		**qʰ*, **q̄*		**qʰ*, **q̄*
**qʷ*		**qʰʷ*, **q̄ʷ*		**qʰʷ*, **q̄ʷ*
**qʷʲ*		**qʰʷ*		**qʰʷ*
**q'*, **q'ʲ*		**q'*		**q'*
**qʷʲ*		**qʷ*		**qʷ*
**c*		**cʰ*, **c̄*		**cʰ*, **c̄*
**ʒ́*		**ʒ́*		**ʒ/ź*
**ć*		**ć*		**s*

*ć'	*ć'	*ś'/c'
*ć°	*ć^{h}°, *č°	*ć^{h}°, *č°
*ć'°	*ć'°	*ś'°
(*ʒ°	*c̄	*c̄)
*ʒ°´	*ž´	*ź´
*č	*č^{h}, *č	*č^{h}, *č
*č´	*č^{h}´, *č´	*č^{h}´, *č´
(*č°	*š	*š)
(*č'°	*č'´	*č'´)
*ž°	*ž´	*ź´
*s°	*s	*s
*ž°	*ž	*ź
*ž°´	*ź/*ž´	*ź/*ž´
*š	*š^{h}, *š	*š^{h}, *š
*š´	*š^{h}´, *š´	*š^{h}´, *š´
*š°	*š^{h}, *š	*š^{h}, *š
*š°´	*ś (, *š^{h}´)	*ś (, *š^{h}´)
*Ɬ	*tɬ	*tɬ
*ƛ	*č^{h}´, *č´	*č^{h}´, *č´
(*ƛ´	*č^{h}´	*č^{h}´)
(*ƛ°	*č^{h}, *č	*č^{h}, *č)
(*ƛ°´	*č´	*č´)
*ƛ'´	*ƛ'	*λ'
*L´	*L	*L
*λ´	*λ	*λ
*λ°, *λ°´	*x°	*x°, *x
*ǧ, *ǧ´	*ǧ	*ǧ
*x, *x´	*x	*x
*x°, *x°´	*x°	*x°
*γ, *γ´	*γ	*γ
*γ°, *γ°´	*γ°	*γ°
*x̌, *x̌´	*x̌	*x̌
*x̌°, *x̌°´	*x̌°	*x̌°
*ʕ, *ʕ´	*ʕ	*γ
*ʕ°, *ʕ°´	*ʕ°	*γ°
*H	*H	*ḥ
*H´	*H/x̌	*ḥ/x̌
*H°, *H°´	*H°	*x̌°

**l*	**l*	**L*
**r*	**d-/*t̄-, *-r-*	**d-/*t̄-, *-r-*

2. PROTO-ABKHAZ

Proto-Abkhaz Consonant System

	Stops	Affricates	Spirants	Resonants	Glides
Labials	*b p p'*		*v f*	*m*	*w*
Dentals	*d t t'*	*ʒ c c'*	*z s*	*n r*	
labialised	*dˢ tˢ t'ˢ*				
Dent.-alveol.		*ʒ́ ć ć'*	*ź ś*		
labialised		*ʒ́ˢ ćˢ ć'ˢ*	*źˢ śˢ*		
Alveolars		*ǯ č č'*	*ž š*		
labialised		*ǯˢ čˢ č'ˢ*	*žˢ šˢ*		
palatalised		*ǯ́ č́ č'́*	*ž́ š́*		
Laterals			*λ*	*l*	
			Ĺ λ́		
Palatals					*j*
Velars	*g k k'*		*ĝ x*		
labialised	*gˢ kˢ k'ˢ*		*xˢ*		
palatalised	*ǵ ḱ k'́*		*ĝ́ x́*		
Uvulars	*q q'*		*γ χ̌*		
labialised	*qˢ q'ˢ*		*γˢ χ̌ˢ*		
palatalised	*q́ q'́*		*γ́ χ̌́*		
Pharyngals			*ʕ H*		
labialised			*ʕˢ Hˢ*		

Comments to the Proto-Abkhaz reconstruction:

Differences with the Proto-Abkhaz system elaborated by Nikolayev and Starostin (NS 193-194) are as follows:

(1) Unlike NS, I tentatively reconstruct the rare voiced fricative **v*, found only in a few onomatopoeic roots.

(2) I reconstruct the lateral spirants **L´*, **λ*, **λ´* (absent from NS), which are reflected in the sister languages as **L*, **λ* and merged in Common Abkhaz with **ž´*, **š* and **š´*, respectively.

(3) I reconstruct a set of velar spirants **ĝ*, **ĝ´*, **x*, **x´*, **x°* on the basis of the evidence of the sister languages. The same applies for the reconstruction of the uvular **q´*.

Phonetic developments from Common West Caucasian to Proto- and Common Abkhaz

CWC	>	PAbx	>	CAbx
*(*d°´*		**ʒ*		**ʒ)*
*(*t°´*		**ć*		**ć)*
**g°*, **g°´*		**g°*		**g°*
**k°*, **k°´*		**k°*		**k°*
**k»*, **k»´*		**k»*		**k»*
**G*, **ʕ*		**ʕ*		**ħ*
*(*G´,) *γ´*		**γ´*		**γ´*
**G° (,*G°´)*		**ʕ°*		**ħ°*
**q´*		**q´*		**x̌´*
**q°´*		**H(°)*		**ħ*
**q»*, **q»´*		**q»*		**q»*
**ʒ (,*ʒ°´)*		**ʒ*		**ʒ*
**ẑ°*		**ẑ°*		**ẑ°*
**ś*, **s°*		**ś*		**ś*
**ž°*, **ž°´*		**ž°*		**ž°*
**š°*, **š°´*		**š°*		**š°*
**Ł*		**l*		**l*
**ɬ (,*ɬ´)*		**x̌*		**x̌*
*(*ɬ°*		**ć°*		**ć°)*
*(*ɬ°´*		**ẑ°*		**ẑ°)*
**λ'´*		**λ´*		**š´*
**L´*		**L´*		**ž´*
**λ*		**λ*		**š*

*λ´	*λ´	*š´
*λ°, *λ°´	*š	*š
*ĝ, *ĝ´	*ĝ, *ĝ´	*γ, *γ´
*x	*x	*x̌
*x´	*x´	*x̌´
*x°	*x°	*x̌°
*x°´	*x	*x̌
*γ°´	*ź°	*ź°
*x̌°´	*x̌´	*x̌´
*ʕ, *ʕ´	*ʕ	*ĥ
*ʕ°	*ʕ°	*ĥ°
*ʕ°´	*ʕ°/*ʕ	*ĥ°/*ĥ
*H, *H´	*H	*ħ
*H°	*H°	*ħ°
*H°´	*H°/H	*ħ°/ħ
*r	*r-/*l-, *-r-	*r-/*l-, *-r-

3. PROTO-UBYKH

Proto-Ubykh Consonant System

	Stops	Affricates	Spirants	Resonants	Glides
Labials	*b p p'*		*f*	*m*	*w*
pharyng.	*b̲ p̲ p̲'*		*f̲*	*m̲*	*w̲*
Dentals	*d t t'*	*ʒ c c'*	*z s*	*n r*	
labialised	*d° t° t'°*				
Dent.-alveol.		*ʒ́ ć ć'*	*ź ś*		
labialised		*ʒ́° ć° ć'°*	*ź° ś°*		
Alveolars		*ǯ č č'*	*ž š*		
labialised			*ž° š°*		
palatalised		*ǯ´ č´ č'´*	*ž´ š´*		
Laterals		*λ'*	*L λ*	*l*	

Palatals					*j*
Velars	*g*	*k*	*k'*	*ĝ*	*x*
labialised	*g°*	*k°*	*k'°*		*x°*
palatalised	*g´*	*k´*	*k''*		
Uvulars		*q*	*q'*	*γ*	*χ̌*
labialised		*q°*	*q'°*	*γ°*	*χ̌°*
palatalised		*q´*	*q''*	*γ´*	*χ̌´*
Pharyng. uvulars		*ɋ*	*ɋ'*	*ɣ*	*χ̌*
labialised		*ɋ°*	*ɋ'°*	*ɣ°*	*χ̌°*
Pharyngals				*ʕ*	*H*
labialised				*ʕ°*	*H°*

Phonetic developments from Common West Caucasian to Proto- and Modern Ubykh

CWC	>	PUb	MUb
**d° (,*d°´)*		**d°*	*d°*
**t° (,*t°´)*		**t°*	*t°*
**g, *g´*		**g, *g´*	*g´*
**g°´*		**g´*	*g´*
**k, *k´*		**k, *k´*	*k´*
**k°´*		**k´*	*k´*
**k', *k''*		**k', *k''*	*k''*
**k'°´*		**k''*	*k''*
**G*		**q'*	*q'*
**G°*		**q'°*	*q'°*
*(*G°´*		**q''*	*q'')*
**q°*		**q°/*ɋ°/*ɋ*	*q°/ɋ°/ɋ*
**q°; *χ̌´*		**χ̌´*	*χ̌´*
**q'*		**q'/*ɋ'*	*q'/ɋ'*
**q''; *q'°´*		**q''/*ɋ'*	*q''/ɋ'*
**q'°*		**q'°/*ɋ'°*	*q'°/ɋ'°*
**ć'*		**ć', *c', *ć*	*ć', c', ć*
**ʒ, *ǯ°*		**ʒ*	*ʒ*

*ć° (,*ƛ°)	*ć°	ć°
*ʒ́ (,*ƛ́)	*ʒ́	ʒ́
(*ʒ́°)	?*ẑ°	ś°)
*s°, *ŝ°, *š°́	*š°	š°
*č'́ (,*č'°)	*č'́	č'́
*ź, *z°	*ź	ź
*ś, *ƛ	*ś	ś
*ŝ°, *λ°́	*ŝ°	ŝ°
*š́ (,*ƛ́)	*š́	š́
*Ł, *Ĺ	*L	L
*ƛ'́	*ƛ'	ƛ'
*λ, *λ́	*λ	λ
*λ°	*š°	ŝ°
*ĝ	*ĝ	γ/ɣ
*ĝ́	*ĝ́	ź
*x	*x	š́/-x
*x́	*x́	š́
*x°, *x̌°	*x°	x(°)
*x°́	*x(°)	x
*γ	*γ/*ɣ	γ/ɣ
*γ́; *γ°; *ʕ́	*γ́	γ́
*γ°	*γ°/*ɣ°	γ°/ɣ°
*x̌	*x̌/*x̱	x̌/x̱
*x̌́; *H́; *H°́	*x̌́	x̌́
*ʕ	*ʕ	γ/ɣ
*ʕ°	*ʕ°	γ°
*ʕ°́	*ʕ/*γ́	γ/γ́
*H	*H	x̌/x̱
*H°	*x̌°/*x̌/*x̱°/*x̱	x̌°/x̌/x̱°/x̱
*m	*m/*m̲	m/m̲
*l	*l	L

CHAPTER VIII

THE COMMON WEST CAUCASIAN CONSONANTISM

I. CHARACTERISTICS OF THE COMMON WEST CAUCASIAN CONSONANTISM

The Common West Caucasian phonemic system comprised four classes of phonemes: obstruents, resonants, glides, and vowels. Obstruents were stops, affricates and fricatives. Stops and affricates consisted of three series: voiced (C^{v}), voiceless (C) and glottalised (C'); the voiceless obstruents were phonetically (not strongly) aspirated ($C^{[h]}$), glottalised obstruents were voiceless, ejective. Fricative obstruents were voiced or voiceless, never glottalised. Additionally, the plain obstruents had three timbre series: palatalised ($C^{\prime}$), labialised (C°), and labialised-palatalised ($C^{\circ\prime}$). The following scheme illustrates the paradigmatic diversity of the class of obstruents (column III only refers to stops and affricates).

Scheme of the Common West Caucasian obstruent system

I	II	III
C^{v}	$C^{[h]}$	C'
$C^{v\prime}$	$C^{[h]\prime}$	C''
$C^{v\circ}$	$C^{[h]\circ}$	C°
$C^{v\circ\prime}$	$C^{[h]\circ\prime}$	$C^{\circ\prime}$

The Common West Caucasian obstruent system was not perfectly symmetrical, especially with regard to the bilabial stops, which lacked any timbre distinctions, and dental stops, which lacked palatalised correlates.

In contrast to the diversity of obstruents, Common West Caucasian resonants, glides and vowels were characterised by extreme simplicity.

1. THE LOCAL SERIES OF WEST CAUCASIAN OBSTRUENTS

1.1. PALATALISATION

The effect of palatalisation is produced by the raising of the middle part of the

tongue, coupled with the basic articulation. Acoustically this means superimposing onto the main timbre a specific *i*-, or *j*-like colouring. Phonologically significant palatalisation was a specific feature of Common West Caucasian (well preserved, except for Kabardian, in the descendant languages), not shared either by the related East Caucasian, or by other contemporary linguistic families of the area, such as Proto-Kartvelian or Hurrito-Urartian. Though Common Indo-European did have palatalised velars, opposed to their plain and labialised correlates, typologically closer parallels to West Caucasian are to be found in such a distant linguistic family as Common Finno-Ugric.

Common West Caucasian had palatalised correlates of the plain obstruents in the alveolar, velar, lateral, uvular and pharyngeal series. It is noteworthy that palatalised correlates were completely missing in the labial (pace NS 184, who also reconstruct palatalised labials) and dental series. There are no traces of them in the set of labial and dental stops. The original palatalised dental fricatives in Common West Caucasian were transformed into a specific set of dental-alveolar (or middle) sibilants. In the lateral series the plain voiced affricate (**ɬ*) does not seem to have had a palatalised correlate, while the original plain voiced spirant has merged with its palatalised counterpart (PWC **L*, **L´* > CWC **L´*). Palatalised pharyngals are universally rare phonotypes, which explains why they were not preserved in any of the modern West Caucasian dialects.

1.2. LABIALISATION

Labialisation is caused by the additional rounding or protruding of the lips accompanying the basic articulation. Acoustically it expresses itself in the additional *w*- or *u*-like colouring superimposed onto the timbre of the basic consonant. Unlike palatalisation, labialisation is considered to be an old feature inherited from the Common North Caucasian period, as it finds its parallel in East Caucasian.

In Common West Caucasian phonologically relevant labialisation involved all obstruent series except the labials (pace NS 184, where labialised labials are also reconstructed). In the set of dental affricates the original labialised correlates formed pairs not with their plain counterparts, but with the newly formed dental-alveolar affricates (which go back to the older palatalised affricates). The symmetrical picture of distribution of labialised correlates is disturbed in the lateral series, which lacked labialised voiced and labialised glottalised affricates and the labialised voiced spirant, as well as in the fricative velar series, also missing a voiced labialised counterpart (which probably merged with the voiced labialised pharyngal).

1.3. LABIALISATION-PALATALISATION

The necessity of reconstructing a set of labialised-palatalised obstruents, proposed by Nikolayev and Starostin (cf. NS 185, 189, etc.), is dictated by the need to account for two different sets of West Caucasian correspondences, when Common Circassian and Common Abkhaz labialised consonants correspond in one set of cases to analogous Ubykh labialised phonemes, and in another set to Ubykh palatalised phonemes:

(a) CCirc *C° : CAbx *C° : Ub C°
(b) CCirc *C° : CAbx *C° : Ub C'

This scheme primarily reflects correspondences in the velar and uvular series. In other series the Common West Caucasian labialised-palatalised phonemes gave different reflexes and consequently show different types of correspondences (e.g. $C : C^{\circ} : C$; $C' : C\ : C^{\circ}$, etc.).

Though from the point of view of articulation, palatalisation can easily be combined with labialisation (cf. the phonetically labialised-palatalised fricatives in Abkhaz, or the phonetically palatalised dentolabialised consonants in isolects of Lezgi), typologically such a combination represents a rare phenomenon and the instances of phonemic contrast of labialised vs. labialised-palatalised consonants in the languages of the world are quite unique. This rarity may be explained by the insufficient articulatory and acoustical contrast between the simple labialised and the labialised-palatalised phonotypes (cf. Chirikba 1991: 96, 102).

Labialised-palatalised consonants are reconstructed for all Common West Caucasian obstruent series, with the exception of the labial one (pace NS 184, where the labialised-palatalised labials are also reconstructed). The picture of their distribution in concrete series is not quite symmetrical. Thus, I failed to find evidence for a glottalised labialised-palatalised dental stop (*$t^{\circ\prime}$), for labialised-palatalised dental and alveolar affricates (except for *$ʒ^{\circ\prime}$), for labialised-palatalised voiced glottalised lateral affricate and voiced lateral spirant, and for labialised-palatalised voiced velar spirant.

Being phonetically unstable phonotypes, the Common West Caucasian labialised-palatalised consonants were not preserved in any of the descendant languages, leaving different reflexes in different series.

1.4. THE PROBLEM OF PHARYNGEALISED CONSONANTS

The effect of pharyngealisation is produced by the additional shift of the tongue-root backwards, to the pharynx, accompanying the basic articulation.

Acoustically this results in an additional ʕ-like colouring superimposed on the basic timbre. As a phonologically significant feature, pharyngealisation is well-known in East Caucasian languages, where it can be assigned either to consonants, or to vowels, but in the West Caucasian linguistic area it is only found in Ubykh.

As a phonemically relevant additional feature, pharyngealisation is reconstructed by Abdokov and by Nikolayev and Starostin for the Proto-West Caucasian consonantism. However, I abstain from such a reconstruction, firstly because the reconstruction of pharyngealised consonants, added to the already reconstructed plain, palatalised, labialised and labialised-palatalised series, will lead to a substantial increase of the already huge consonantal inventory, which renders it typologically improbable. The second consideration is that the correspondences of the Ubykh pharyngealised consonants to their counterparts in sister-languages do not form a special set, different from correspondences with Ubykh non-pharyngealised consonants.

It is noteworthy that consonants in Ubykh acquire pharyngealisation in quite a number of borrowed words. Sometimes pharyngealisation can appear due to the contraction of a consonant with a pharyngal, as in the case of the correspondences of CAbx **a-m-ʕa* 'handle' (**ma* 'hand') to the Ubykh instrumental suffix *-m̲a* (cf. MS 133), or of CAbx **abʕa* 'thin, skinny' to Ub *abɣa* 'thin, skinny, weak' (cf. CCirc **bɣa* 'barren, dry (of cow)', **na-bɣa* 'near-sighted'). On the other hand, pharyngealisation in Ubykh often has expressive function. Expressive pharyngealisation can probably be seen, for instance, in Ub *m̲ə* 'apple', corresponding to CCirc *mə* 'wild apple'.

Though there are enough reasons to regard the pharyngealised consonants in Ubykh as an innovation, still their existence in Ubykh could in principle indicate their earlier presence as a feature of the vocalic system, which later disappeared in Proto-Circassian and Proto-Abkhaz, but shifted to the consonants in Proto-Ubykh. Some West Caucasian (irregular) correspondences can in fact be interpreted as reflecting the traces of older pharyngealisation. Cf. CCirc **q°/*q̄°* : Ub *x̌°/x̲°* : CAbx **ħ°* (CCirc **tħa-rəq̄°a*, Ub *dax̌°a* 'pigeon, dove', CAbx **laħ°a* 'rook, raven'; CCirc **qʰ°a*, Ub *x̲°a*, CAbx **ħ°a* 'pig, swine'), which can be tentatively derived from **q̲°*, giving irregular reflexes in Ubykh and Abkhaz. The influence of pharyngealisation, as was suggested by Abdokov (ZS 24), can be seen in the irregular correspondence in the word for 'dog', cf. CCirc **ħa*, Ub *w̲a*, CAbx **la*. The phonetic evolution in the case of the Abkhaz form could be, according to Abdokov, **la* < **w̲a* < **x̌°a* (or rather **H̲°a* !), cf. Avar *ħ°e*, Andi *x̌oj*, Tsax *x̲°a* 'dog'.

1.5. THE PROBLEM OF THE OPPOSITION "LAX-TENSE"

Though there is no doubt that the opposition "lax-tense" was present in Common Circassian (cf. Rogava 1943; Kuipers 1963: 80; Smeets 1984: 376; Kerasheva 1986), it is difficult to prove its relevance for the Common West Caucasian period as well (pace Balkarov 1970: 236; FL 40; NS 180). Such a conclusion is based primarily on the analysis of the correspondences between the Common Circassian tense consonants and their counterparts in the sister-languages. In what follows I shall discuss the most important cases in some detail.

1.5.1. In part of the cases when Circassian tense consonants correspond to voiced consonants in one of the sister-languages (usually in Common Abkhaz), we have in fact a regular Circassian reflection of different Common West Caucasian phonemes, which do not go further than the Proto-Circassian level and thus cannot be used to indicate the presence of the lax-tense opposition in Common West Caucasian.

Examples:

(1) CCirc **čʼəLa*, Ub *ʒʼəja*, CAbx **žʷla* 'seed, stone (of fruit)', 'population of village', 'clan' < CWC **ƛʼəla*;

(2) CCirc **ča-qa*, Ub *qʼə*, CAbx **c-ħa* < **cə-ħa* 'to bite' (**ča*, **cə* 'tooth') < CWC **(ca-)Ga*;

(3) CCirc **ĭəžʼənə*, Ub *daśʷanə*, CAbx **raʒənə* 'silver' < CWC **raʒʷʼanə*;

(5) CCirc **qa/ə-*, CAbx **ħa-* preverb 'hither' < CWC **Ga-*;

(6) CCirc **-qa* affirmative suffix, CAbx **ć'ʷa-γʼa* affirmative suffix meaning 'precisely, exactly' < CWC **-Gʼa*;

(7) CCirc **ĭqʷa* 'crocodile' (> Tap *tʼqʷa* 'id.'), CAbx **tʼəħʷa* 'monster eating moon or sun (during the eclipse)' < CWC **tʼəGʷa*;

(8) CCirc **pqə* 'framework, (part of) body', 'bone, stalk', CAbx **bəħʷa/ə* 'bone' (the CCirc form might go back to the earlier **pəqʷə*, or **bəqʷə*) < CWC **bəGʷə*;

(9) CCirc **šʼə*, Ub *śə/a*, CAbx **xə* 'three' < CWC **ƛə*;

(10) CCirc **šʼa*, Ub *śa* 'to sell' < CWC **ƛa*;

(11) CCirc **ĭə-šʼə* (**ĭə/a* 'father'), Ub *tʼə-ś* (*tʼə* 'father') 'relatives of wife' < CWC **tʼə-ƛə*;

(12) CCirc *čʼašʼə*, Ub *śəśə*, CAbx **c(ʼ)əxə* 'night' < CWC **cəƛə*.

Cf. also the regular correspondence CCirc **q̄* : Ub *qʼ* < **G* in Kab *waqʼəj* interjection for driving away calfs or cows (< **waq̄əjə*; Kab *qʼ* < CCirc **q̄*), Ub

wa(n)q'ə 'goat' < CWC **waGə(jə)*.

1.5.2. In certain cases, where Circassian tense consonants correspond to voiced counterparts in the sister-languages, it is possible tentatively to assume devoicing of the Common Circassian initial consonant (cf. Kumaxov 1981: 135-136), with the tense articulation presumably being a trace of the original voiced character of the consonant.

CWC **CV* > CCirc **C̄* : Ub *CV* : CAbx **CV*

Examples:

(1) CCirc **p̄ana* 'prickle, thorn', Ub *bana* 'grass, especially the one used in medicine', CAbx **bana* 'forest' < CWC **bana*;

(2) CCirc **p̄ərа-źə-ja* 'sloe' (Ad),'elder' (Kab), Ub *bərəć°*, CAbx **bərə-ć°ə* 'medlar' < CWC **bərə/a-* (in Ubykh a borrowing from Abkhaz cannot be ruled out);

(3) CCirc **t̄ama* 'wing', 'shoulder', **q°ə-t̄ama* 'twig', CAbx **dəmə* in Abzh *a-va-r-dəm* 'side, rib' (*a-va-ra* 'side'); cf. also probably Ub *dəma* 'chicken' (< 'winged (creature)' ?) < CWC **da/əma*;

(4) CCirc **-k̄°a* privative suffix, Ub *ag°ə* 'little, small', CAbx **-g°ə* privative suffix < CWC **-g°ə*.

1.5.3. Sometimes the irregular character of correspondences do not allow us to make a definite judgement as to the original proto-phoneme.

Examples:

(1) CCirc **tħa-rəq̄°a*, Ub *daxʷ°a* 'pidgin, dove', CAbx **laħ°a* 'rook, raven';

(2) CCirc **c̄əʒa* 'marten', 'otter', 'squirrel', Ub *ćaca* 'beaver', SAbx *a-pšʒa* 'marten', Tap *ʒəʒəc* 'weasel';

(3) CCirc **t̄ə*, Ub *t'ə*, CAbx **aba/ə* 'father'; Ub **t'a*, CAbx **aba* 'male (of animals)'.

Normally CCirc **q̄°* does not correspond to Ub *xʷ°* or CAbx **ħ°*, so that in (1) we have to reconstruct the variation CWC **raq°a//*raH°a*. In the second example all the languages underwent irregular phonetic changes due to assimilations, and in the case of South Abkhaz the influence of the adjective **pšəʒa* 'beautiful' (due to tabooistic reasons ?) cannot be ruled out. The third example is not very reliable, as it presupposes the irregular shift **t'° > *b* in Common Abkhaz.

1.5.4. In other cases we deal with lexical material which is not very reliable from

the point of view of its genuine character. This is especially true when the Ubykh counterpart to the Circassian tense consonant is similar to the Adyghe (Temirgoj and Abadzakh) form, while the Common Abkhaz counterpart, on the contrary, is closer to the (Old) Kabardian one, which makes one suspect that the Ubykh and Abkhaz words were in fact borrowed from, respectively, an Adyghe and a Kabardian source. It is noteworthy that the same pattern is repeated when we are dealing with Ubykh and Abkhaz items undoubtedly borrowed from Circassian (e.g. Bzh *γ°apčă*, Tem *γ°apčă* 'dark-grey', 'yellowish' > Ub *γ°əpč'a* 'to rust' vs. OKab *γ°abžă* (same meaning as in Adyghe) > CAbx **ĥ°abž'a* 'id.').

CCirc **C̄* : Ub *C* : CAbx **Cᵛ*
Examples:
(1) CCirc **k̄°artʰa/ə* > Tem *k°ărtə* 'a certain (solid) number', Kab *g°artă* '(large) herd' vs. CAbx *g°arta* 'herd, flock', 'big quantity of sth/smb';
(2) CCirc **k̄°əpʰə* > Tem *k°əpə*, Kab *g°əp* vs. Ub *k°əp(ə)*, CAbx **g°əpə* 'group';
(3) CCirc **sapa* > Tem *sapă*, Kab *sabă* vs. Ub *sapa*, CAbx **saba* 'dust'.

Though Abaev's proposal to consider the Circassian word in (1) as borrowed from Gothic via Ossetic (cf. Abaev I: 637) does not seem plausible (cf. NS 476), it may well have been borrowed from Kabardian into Abkhaz (which is easy to assume, given the cultural character of the term). The same can be true for the examples in (2) and (3), with Ubykh repeating the phonetic shape of the Adyghe word, and Abkhaz following the Kabardian form. There are some doubts as to the genuine character of the Circassian items as well (cf. ES I: 117-8; Kumaxov 1981: 138). For (2) cf. also Noghaj *küp*, Kumyk *güp* 'id.' (ES I: 118), probably also from Circassian.

1.5.5. In rare cases the Circassian tense consonants irregularly correspond to Abkhaz or Ubykh glottalised counterparts.

CCirc **C̄* : CAbx or Ub *C'*
Examples:
(1) CCirc **k̄'aīə*, CAbx **kʷ°ət'ə* 'chicken';
(2) CCirc **t̄ə-γ°ərəγ°ə*, Ub *tə-γ°ərəγ°* (HV 1876) or *t'ə-γ°rəγ°//t'ə-rγ°rəγ°* (Charachidzé, Esenç 1990-91a: 42), CAbx **t'ə-ĥ°a/ərĥ°a/ərə* 'eagle-owl', cf. also CCirc **ź°ən-t̄əwə* 'owl';
(3) CCirc **q̄°ə-jə* 'hairless, bald', Ub *q̇ʷ°ə* 'hair', 'colour of the hair', CAbx **q°ə* 'hair'.

Comment:
As far as the comparison in (2) is concerned, the Ubykh material is not quite clear, as it was recorded with initial *t-* (as in Temirgoj or Abadzakh Adyghe), and with initial *t'-* (as in Abkhaz), and can represent a borrowing from one of these sources.

1.5.6. The examination of Abkhaz and Ubykh correspondences to the tense consonants contained in Common Circassian clusters, does not clear up the situation either. In one group of cases the Circassian cluster-final tense affricate corresponds to the Ubykh and Abkhaz voiceless fricatives, while in the other group of cases we observe the voiced counterpart in Abkhaz (with an unclear, probably voiceless, correspondence in Ubykh).

CCirc **C̄C̄-* : Ub *CC-* : CAbx **CC-*
Examples:
(1) CCirc **p̄c̄a*, Ub *psa*, CAbx **pśə-ʒə* 'fish';
(2) CCirc **p̄c̄aLə* 'willow', Ub *pśawa-sə* 'name of the sacred tree in the Caucasus' (*sə* 'wood'), CAbx **pślə-šə* 'poplar, willow' (**šə* 'white');
(3) CCirc **na-p̄c̄a* (**na* 'eye'), Ub *bLa-msa* (*bLa* 'eye'), CAbx **ʒ́ə-msa* 'eyebrow', cf. also Ub *λa-msa* 'root' (*λa* 'foot'), *λa-msā-pa* 'moss', CAbx **ka-msa* 'shaggy, fluffy', **ć°a-msa* 'tinder';
(4) CCirc **pq̄°ə//*px̄°ə* 'plum', Ub *pqə* 'a sort of plum with big fruit', CAbx **(p)ħ°a* 'plum'.

It is unclear whether affricate or spirant should be reconstructed here. Generally speaking, in such cases one can suppose weakening of the affricate, rather than strengthening of the fricative, but the presence of spirant correspondences both in Abkhaz and Ubykh (besides the last example) renders the reconstruction of the affricate less likely.

CCirc **C̄C̄-* : Ub *C-* : CAbx **Cᵛ-*
Examples:
(1) CCirc **p̄č́anə*, CAbx **ʒ́ma* 'goat';
(2) CCirc **p̄č́a-jə* 'plane-tree', Sh 'beech-tree', CAbx **ʒ́ə* 'oak'; cf. also Ub *č́ə-nt°a* 'hornbeam' (HV 453) or 'beech-tree' (DA III: 224).

In both examples given here secondary voicing in Abkhaz can be assumed (i.e. CWC **pč́-* > PAbx **bʒ́-*). In the first case the voicing is probably due to the

influence of the following *m*. The absence of the initial bilabial in Abkhaz is explained by the usual simplification in Common Abkhaz of the initial West Caucasian clusters "stop plus affricate" (i.e. **bǯ'-* > **ǯ'-*); cf. the other cases of similar simplification in words for 'onion' and 'to fry' under CWC **ǯ'* in 2.3.2. (10), (11). On the other hand, the Avar-Andi cognate to this word (**čimV* 'kid': NS 334) contains no initial cluster ! A secondary voicing must be assumed for the second example as well.

1.5.7. Contrary to the previously given examples, in the majority of cases representing quite reliable correspondences the Common Circassian tense consonants correspond to the voiceless counterparts in Ubykh and Abkhaz.

CCirc **C̄* : Ub *C* : CAbx **C*

Correspondences between stops:
Examples:

(1) CCirc **wə-t̄a* 'to pound, thresh (seeds), beat (eggs), knead, break off, shake up, whip' (**wə-* verbal prefix), Ub *t°āt°a* 'green woodpecker' (?), *t°at°a-wa* 'arms, weapons', CAbx **t°at°a* 'to husk the grain out of ears';

(2) CCirc **p̄a* 'to be out of breath', Ad *zǎ-g°-ǎ-pə* 'to be angry, Bzh (PC 11) *γǎ-p̄ǎ* 'to irritate, exasperate smb', Ub *pə* 'to grieve, be annoyed' (often in combination with *gʲə* 'heart'), cf. also Tap *g°aqʷə-p-ra* 'trouble, anxiety', *g°aqʷə-r-pə-ga* 'sth/smb causing anxiety, irritation' (*r-* causative, *-ga* agent suffix);

(3) CCirc **wə-q̄°a* 'top part drops down' (*wə-* verbal prefix); cf. also CCirc **q̄°a-pʰa* 'corner, angle', (Sh) 'twig' (**pʰa* 'nose, front'), **wana=q̄°a-pʰa* 'pommel of saddle' (**wana* 'saddle'), **q̄°a-(n)cʰa* 'branch with twigs', 'branchy' (**-cʰa* 'hairy'), **q̄°a-(n)čʰ'a* 'crooked', **q̄°a-γa* 'corner', **q̄°a-γ°ə* 'id.', **bźa-q̄°a* 'horn (of cattle)' (**bźa* 'horn', 'horn material', in compounds also 'nail, hoof'), **q̄°a-ba=bźa-ba* 'crooked log', 'with many boughs' (**ba* 'much', **bźa* 'horn'), Ub *qə-λə* 'corner', CAbx **q°a* 'to bend', 'bent, crooked, curved', **q°a-q°a* 'bent, crooked';

(4) CCirc **pǔa-q̄°a* 'torch' (**pǔa* 'wood'), Ub *mʒa-q°a* 'moonlight' (*mʒa* 'moon'), CAbx **ś°a-q°a* 'ray, beam';

(5) CCirc **ħa-q̄°ə/a* 'to bark, make noise' (**ħa* 'dog'), **q̄°ə-γə* 'to howl (as dog)', Ub *qʲ°ə* 'to bark', CAbx **q°a-ĥ(ĥ)ə* '(to) howl, yell, bellow, shout';

(6) CCirc **aī̆aq̄a*, Ub *taqa* 'cock, rooster';

(7) CCirc **pśa-ī̆əq̄ə* 'back of neck, occiput' (**pśa* 'neck'), Ub *t°əq* 'neck', *λa-t°əq*

'ankle' (*λa* 'foot'), *q'a-t°əq* 'wrist' (*q'a* 'hand') (CCirc **t̄*, **q̄* : Ub *t°*, *q*);

(8) CCirc **q̄ə* 'to be benumbed, dumbfounded, speechless', 'to harden', Ub *qə* 'to congeal, harden, be benumbed';

(9) CCirc **q̄°a*, Ub *q°a* 'son';

(10) CCirc **q̄°a*, Ub *q°a* 'valley, ravine';

(11) CCirc **q̄°aLa* 'raven, crow', Ub *qaLa* 'jackdaw', 'green woodpecker';

(12) CCirc **z-a-q̄°a* 'lonely, one, the only' (**zə* 'one'), Ub *zāqa* 'id.';

(13) CCirc **ma(r)īa* 'quantity, measure', CAbx **mata* 'a piece of land to be hoed or ploughed';

(14) CCirc **wə-īa/ə* 'to pour (a dry substance)', CAbx **t°a* 'to pour (liquid)';

(15) CCirc **k̄°əśa* 'cradle', CAbx **k°aśə-k°aśə* 'to mince, go at a jog-trot';

(16) CCirc **ś°īə* 'to hurl', CAbx **ś°tə* 'to overturn; to rush';

(17) CCirc **k̄'apa* '(lower) side, side (of body, hill, etc.)', CAbx **kada* 'side(s)' (?);

(18) CCirc **λa-q̄°a* 'leg, foot', probably also **q̄°a-psə* 'rhizome, part of the root' (Kab), 'handle, haft, ear (of vessel)' (Ad), CAbx **šʼa-q°a* 'heel' (**λa*, **šʼa* 'leg, foot');

(19) CCirc **q̄°ə* 'to thrash, beat', *q̄°ə-t*a* 'to smash, break up, chop', CAbx **q°a-q°a* 'to beat, strike, thrash', cf. also CAbx **r-q°a* 'to castrate' (**r-* causative prefix);

(20) CCirc **q̄°ə* 'to fill up (e.g. a sack with flour)', **ja-q̄°ə* 'to push, pull' (**ja-* objective prefix), **q̄°ə-za* 'to compress' (**za* 'to turn'), CAbx **q°a* 'to press grapes to prepare wine', 'to felt, full (cloth)';

(21) CCirc **q̄°a/ə* in CCirc **č'a-γa-q̄°a* 'to prop up, support' (**č'a* prev. 'under', **γa-* causative prefix), Kab *xăbză-ś'ă-q** 'one who upholds the tradition' (*xabză* 'tradition', *ś'ă-* prev. 'under'), *k°ə-q** 'crossbeam' (< **k*°ə-q̄°ə*, with **k*°ə* 'middle') (PC 71), CAbx **q°a* 'to help, support';

(22) CCirc **q̄°a* in **q̄°a-γ°ə* 'skinny, lean' (**γ°ə* 'dry'), **q̄°a-č'a* 'flap, tail, skirt (of coat)' (**č'a* 'beneath, bottom'), **q̄°a-p'c'a* 'dark-haired, swarthy', Kab also 'lean' (**p'c'a* < **ś*əc'a* 'black'), CAbx **q°a-mćə* 'trunk, body' (**mćə* 'id.'), **q°a-pšə* 'to look at smb/sth' (**pšə* 'to look'), **q°a-čʼəčʼa* 'to smile to smb'; the general meaning of both CCirc **q̄°a* and CAbx **q°a* seems to be 'body' (?);

(23) CCirc *q̄°ama*, CAbx **maq°ə* 'twig', cf. also CAbx **ma-q°-č'a* 'wrist' (**ma-q°ə* + **č'a* 'mouth, face, front');

(24) CCirc **šəq̄°ə* 'vessels, plates and dishes', CAbx **ašq°a* 'boat' (?);

(25) CCirc **q̄°ə-ħa* 'to go behind sth, disappear' (**ħa* 'to enter'), Kab *dəγă-r q*°ə-ħa-ś* 'the sun disappeared', *q*°ə-ħa-γ°a* 'the time of sunset' (*-γ°a* 'the time of') (KR 242), CAbx **q°ə-la* 'to fall (of night, twilight)', 'getting dark' (**-la* 'to enter').

Correspondences between affricates:
Examples:
(1) CCirc **c̄a*, Ub *ca-k'ə*, CAbx *cə* 'tooth';
(2) CCirc **c̄a-sa* 'spit (for roasting)', Ub *ca* 'hot', 'to burn', CAbx *ca* 'hot';
(3) CCirc **c̄a* 'grain, pellet of grain, grain (of sand, etc.)', Ub *caca* 'small, little' (a reduplication ?), CAbx **cə* 'grain', as a prefix or suffix means also 'one', 'one small piece, a particle';
(4) CCirc **c̄ʷə*, Ub *cʷə*, CAbx **cʷə* 'bull';
(5) CCirc **c̄ʷa-bza* 'ploughshare' (**bza* 'to cut', itr.), CAbx *cʷa-γʷa* 'to plough', Ub *cʷa/ə-χʷə* 'earth', *jə-cʷa* 'land, earth';
(6) CCirc **c̆ə* 'to run', 'to flow (of water)', Ub *ča* 'to fall (of heavy objects)', CAbx **čča* 'to flow (of water)' (with expressive gemination);
(7) CCirc **ćʰʷa/ə* in **bza-gʷə-ra-ćʰʷa/ə* 'tongue-tied, inarticulate' (**bza-gʷə* 'tongue', **-ra-* instrumental affix), **ćʰʷa-x̌ʷa* 'to creep, slide', Ub *bźa-cʷə* (HV 92), *bźā-cʷa* (DA III: 220) 'stuttering, stammering' (*bźa* 'tongue'), *q'ə-ncʷa* 'to make mistakes while speaking' (*q'a* 'to speak'), *λa-ja-ncʷa* 'to slip while walking' (*λa-ja-* 'under the foot');
(8) CCirc **p̄əǯə* 'buckle, clasp', **q'aǯə-p̄əǯə* 'a set of little metallic plates serving as decorations of harness', CAbx **pəǯə* 'id.', **la-pəǯə* 'eyelash' (**la* 'eye');
(9) CCirc **c̄əγʷa* 'mouse', CAbx **c(')əγə* 'marten';
(10) Kab *gʷarcă*, Malka Kab (MS 125) *warcă*, CAbx **wacə* 'dung, manure';
(11) CCirc **c̄ʷəndə* 'rook, raven', cf. also Tem *cʷəndə-p'c'* 'very black, swarthy, raven-black, the colour of the soot' (*p'c'ə* < **śʷəc'a* 'black'), Kab *vənd* 'raven'; 'black', CAbx **cʷəndə-r-śʷśʷə* 'swarthy, blackish' (*-r-* is either connective or causative affix, **śʷśʷə* 'dark', connected with **śʷə* 'to paint');
(12) CCirc **ačča* 'billy-goat', CAbx **ča* 'female deer', **ča-cʷə* 'male deer' (**cʷə* 'bull').

Correspondences between fricatives:
Examples:
(1) CCirc **ma-šča* 'hole, hollow', Ub *ša* 'to dig', *ša-wə* 'pick', CAbx **t'ə-ša* 'deep hole, pit';
(2) CCirc **ja-šča* 'to be after sth, hunt, fish' (**ja-* objective prefix), **ša-kʷa* 'hunter', 'to hunt' (*-kʷa* agent suffix < 'to go'), Ub *śʷa-k'a* 'hunter' (*-k'a* agent suffix < 'to go'), CAbx **śʷa-ra-ća* 'hunting', 'to hunt' (**-ra* abstract suffix, **ća* 'to go');
(3) CCirc **šəšə*, Ub *šəšə* 'to neigh' (if Ubykh is not from Circassian !);
(4) CCirc **pšə* 'to measure (dry substances)', Ub *pšə* 'to measure';

(5) CCirc **šašə* 'to crumble', Ad *šăša-f* 'dust (of rotten wood, of hay)', cf. also Kab *pxa-šă* 'snags taken by the overflow' (*pxa* 'wood'), CAbx **š(a)-qʷa* 'rotten (egg)', 'to become rotten (of egg)', Tap *ša-ħa* 'wormy, mouldering', cf. also CAbx **qʿa-ša* 'crumble';
(6) CCirc **(b)γʿə-(p)šə* 'millet-straw' (cf. **γʿə* 'to dry out'; 'dry'), CAbx **pšə* 'millet';
(7) CCirc **ša* 'to ripen, become soft (as cheese)', CAbx **ša-tʷə* 'full ripening of fruit' (*-tʷə* transformative suffix);
(8) CCirc **šə* 'raw internal fat', CAbx **šəša* 'fat' (n.);
(9) CCirc **pšʲə* 'feudal prince', also 'father-in-law', CAbx **apšʲə* 'big, strong, great, powerful'.

The main conclusions which can be drawn from the examination given above, are as follows:
(1) The correspondences of the Circassian tense or, for that matter, lax consonants to their counterparts in the sister languages do not seem to form a system or a pattern. The Circassian tense consonants can correspond both to voiced and to voiceless phonemes in Abkhaz and Ubykh.
(2) In the overwhelming majority of cases the Circassian tense consonants correspond to voiceless, not voiced, consonants in the sister-languages.
(3) The statistical rarity of voiced correspondences in Ubykh and Abkhaz to Circassian tense consonants is accompanied by the fact that quite often such examples represent etymologically obscure or phonetically controversial cases, which decreases their reliability. In some cases the voiced correspondences in Abkhaz to Circassian tense consonants occur in items presumably borrowed from Circassian. Others can be regarded as a result of a secondary devoicing in Circassian or a secondary voicing in Abkhaz. In contrast, the correspondences of the Common Circassian tense consonants to the voiceless counterparts in the sister languages are numerous and quite reliable.

These arguments make me agree with Kumaxov 1981: 131 that neither Abkhaz or Ubykh preserve any reliable traces of an opposition "lax-tense", similar to that of Circassian, which means that this opposition should be regarded as an internal Circassian development, though, as I mentioned before, there is no doubt (pace Kumaxov, ibid.) that the phonemic contrast between the lax and tense consonants already existed in Common Circassian, at least in stops and affricates.

II. THE ORIGIN OF THE COMMON WEST CAUCASIAN PHONEMIC SYSTEM

The phonological model of Common West Caucasian in essence did not differ substantially from that of its modern descendants. It was a purely "consonantal" language, with a huge qualitative and quantitative diversity of consonants and with a bivocalic, "linear" system of vowels, distinguished only by the degree of openness. This unusual feature of West Caucasian languages intrigued many scholars, some of whom (A.H. Kuipers, W.S. Allen) undertook to substantiate the monovocalic character of the modern West Caucasian languages and, using the West Caucasian material as an example, proposed a monovocalic model for Proto-Indo-European. This resulted in a heated discussion between the proponents and opponents of the monovocalic character or even vowellessness of the modern West Caucasian languages (cf. Genko 1955, Allen 1965, Kuipers 1960; 1976, Halle 1970, Szémerenyi 1967, Kumaxov 1973; 1981: 90, Job 1977).

An analysis of the West Caucasian structural model leads one to the conclusion that the striking quantitative and qualitative disproportion between the class of (obstruent) consonants and the class of vowels in the Abkhazo-Adyghean languages is inherently motivated: the timbre features which in the majority of languages are normally in the property of vowels, in West Caucasian are given to the consonants, thus making the timbre distinction in vowels superfluous (cf. SO 99). This means that the existence of the hypertrophied West Caucasian consonant system can be explained as a result of a shift, whereby vocalic features were attributed to consonants (comparable, for instance, to the process that resulted in the appearance of palatalised consonants in Slavic). This idea, explaining the dramatic expansion of the West Caucasian consonant system and consequent reduction of the originally richer vocalic system, in its clearest form was expressed by Starostin (1978; NS 43, 73, 192) and Abdokov (ZS 26-29), though cf. also Desheriev 1963: 179-180 and Rogava 1986.

The four-fold timbre contrast in consonants (*C* : *C´* : *C°* : *C°´*) can be regarded as a reflection of original vocalic oppositions. Furthermore, the character of the vowel following the consonant (i.e. either *a* or *ə*) can serve as an indication of the quality of the original vowel. Consequently, the CWC sequences **Ca*, **Cə* reflect similar sequences in pre-WC, the sequence **C´a* reflects pre-WC **Ce*, the sequence **C´ə* reflects pre-WC **Ci*, etc. The following scheme shows these concordances in more detail:

pre-WC	>	CWC	>	PCirc	:	PUb	:	PAbx
**Ca*		**Ca*		**Ca*		**Ca*		**Ca*

*Cə	*Cə	*Cə	*Cə	*Cə
*Ce	*C'a	*C'a	*C'a	*C'a
*Ci	*C'ə	*C'ə	*C'ə	*C'ə
*Co	*C°a	*C°a	*C°a	*C°a
*Cu	*C°ə	*C°ə	*C°ə	*C°ə
*Cö	*C°'a	*C°a	*C'a	*C°a
*Cü	*C°'ə	*C°ə	*C'ə	*C°ə

Thus the following pre-West Caucasian vocalic system can be reconstructed: two timbre neutral (*a*, *ə*), four rounded (*o*, *ö*, *u*, *ü*), and two front (*e*, *i*) vowels.

As Common West Caucasian does not seem to have had sequences *Tw*, or *Tj* (i.e. "obstruent plus glide"), one may suppose that combinations of obstruents with (bilabial and palatal) glides, which in this respect behaved as vowels, also took part in the creation of Common West Caucasian labialised and palatalised obstruents:

pre-WC	> CWC	> PCirc	: PUb	: PAbx
*Cwa	*C°a	*C°a	*C°a	*C°a
*Cwə	*C°ə	*C°ə	*C°ə	*C°ə
*Cwu	*C°ə	*C°ə	*C°ə	*C°ə
*Cwo	*C°a	*C°a	*C°a	*C°a
*Cja	*C'a	*C'a	*C'a	*C'a
*Cjə	*C'ə	*C'ə	*C'ə	*C'ə
*Cje	*C'a	*C'a	*C'a	*C'a
*Cji	*C'ə	*C'ə	*C'ə	*C'ə

This table, of course, reflects only theoretically possible sequences, which does not necessarily mean that all of these sequences really existed.

Unlike the additional features of palatalisation and labialisation-palatalisation, which can be regarded as a West Caucasian innovation, the situation with labialisation is different, as labialised consonants exist in the East Caucasian languages as well. This means that they can be reconstructed for the Common North Caucasian period.

Thus we arrive at a rather simplified pre-West Caucasian obstruent inventory, the scheme of paradigmatic variations of which can be depicted in the following scheme (the column III only refers to stops and affricates, as fricatives lacked the glottalised series):

The scheme of pre-West Caucasian obstruent system

I	II	III
C^{v}	$C^{[h]}$	C'
$C^{v\circ}$	$C^{[h]\circ}$	C'°

The core of the pre-West Caucasian vocalic system can be depicted in the following scheme:

	*i	*ü	*u
*e	*ö	*ə	*o
		*a	

It is not yet clear whether the pre-West Caucasian vowels had quantitative contrasts, or whether pharyngealisation played any role (cf. ZS 28).

Pre-West Caucasian, which originally resembled very much the related East Caucasian, was subjected to the following restructuring. In morphology: an extensive role of prefixation (as contrasted to predominant suffixation in East Caucasian). In phonology: an extensive role of consonants, with the number of vocalic contrasts reduced to two. In word structure: in the elision of (probably unstressed) syllables, which resulted in the predominance of monosyllabic roots of the structure (C)CV (with preservation of few relic bisyllabic roots).

The absorption of the vocalic features by consonants led to a situation that is characteristic for the modern Abkhazo-Adyghean languages. Any West Caucasian consonant could form a syllable. The reduction of the number of vowels (from at least eight to only two) led to a substantial increase in the number of homophonous morphemes, which could be distinguished by means of tonal contrasts. The main phonological unit effectively became the (open) syllable, which in many cases became formally equal to the morpheme and the word.

III. THE COMMON WEST CAUCASIAN LINGUISTIC TYPE

A systematic comparison of the material that is common to all three, or at least two of the West Caucasian languages, representing the genuine (not borrowed) part of their lexicon, allows us to reconstruct the Common West Caucasian phonemic system, as well as part of its morphology and lexicon.

Structurally Common West Caucasian resembled very much its modern descendants. It was a predominantly consonantal language, with only an elementary biphonemic vocalic contrast (*a, *ə).

The phonemic system of Common West Caucasian was characterised by a

sharp dichotomy between the obstruents and the rest of the system. The class of obstruent stops, from the point of view of laryngeal features, was characterised by a three-way opposition "voiced ~ voiceless ~ glottalised", while obstruent fricatives were voiced or voiceless, lacking the glottalised series. From the point of view of timbre distinctions obstruents were characterised by a four-way opposition "plain ~ palatalised ~ labialised ~ labialised-palatalised". As to place of articulation, obstruents were bilabial, labiodental, dental, dental-alveolar, alveolar, velar, uvular or pharyngeal. Obstruent laterals were affricates or fricatives. In contrast, resonants, glides and vowels lacked any timbre distinctions. Glides, depending on their position, could have syllabic and nonsyllabic allophones. Vowels, apart from purely vocalic functions (bearing of syllabicity and prosodic features), were also involved in morphologically conditioned alternations. Resonants occupied an intermediate position between the class of obstruents and the classes of glides and vowels: like the latter, they lacked any timbre distinctions, and like obstruents, they were nonsyllabic.

Prosodically, Common West Caucasian was probably a tonal language (which is indicated, in particular, by a high number of homophones), with a positionally conditioned system of dynamic stress.

As to its morphological type, Common West Caucasian was an ergative language, though it is not quite clear which of the modern languages continues the older situation: Abkhaz with its lack of formal case markers and purely morphological ergativity, or Circassian and Ubykh, with their formal markers for nominative and ergative cases. Whatever the answer, the Circassian and Ubykh case suffixes represent heterogeneous material and cannot be used for the reconstruction of a West Caucasian case system.

Common West Caucasian was a polysynthetic agglutinative language, the central part of whose morphology was occupied by the verb. Most grammatical information, like subject-object relations, number, mood and tense, as well as markers of location and direction, was concentrated in the verbal form, and was expressed by affixes, mainly prefixes. It had two causative markers, **yə-* and **rə-*, whose distribution is not quite clear. It was rich in derivational affixes, though sometimes their etymology and divergent distribution in the modern languages (i.e. pre- vs. postposition) suggests that at least part of them go back to independent lexical units. The derivational means were affixation and compounding, the latter being by far the most productive.

There are indications that Common (or rather Proto-) West Caucasian might have had a system of grammatical classes, similar to that found in the East Caucasian languages, but its reconstruction needs further investigation. It has

been argued that the grammatical class system as present in Abkhaz, might be a vestige, or a reflection of this ancient category, preserved only in parts of the morphological system (in personal prefixes, personal pronouns and numerals), cf. Abdokov 1981: 63-65.

Though the West Caucasian simple roots inventory was not exceptionally large, it was characterised by a rather rich lexicon, mainly due to the limitless possibilities of compounding. The poor fixation of Ubykh poses a serious obstacle to the reconstruction of the Common West Caucasian lexicon, but close examination allows us to establish relations between many Circassian and Abkhaz words which have not yet been drawn into comparative research (contrary to the usual view that West Caucasian lexicons are rather heterogeneous).

CHAPTER IX

THE COMMON WEST CAUCASIAN CONSONANT CLUSTERS, THE ROOT MORPHEME AND ACCENTUAL SYSTEM

I. COMMON WEST CAUCASIAN CONSONANT CLUSTERS

The number of consonant clusters in Common West Caucasian was substantially smaller than in any of the modern West Caucasian dialects. The most characteristic features of Common West Caucasian clusters on the level of the morpheme were the following: (a) the number of the elements of the cluster did not exceed two segments; (b) all elements of clusters shared one and the same laryngeal feature (voiced, unvoiced, glottalised, with the exception of fricatives, which could not be glottalised), whereby the first component of a cluster always assimilated to the final one (i.e. only regressive assimilation took place). As a rule, the correspondences of consonants in clusters between the languages are the same as those between single consonants, which makes the clusters comparatively easy to reconstruct. Some correspondences show peculiarities, which need special comments. Such cases arise due to various phonetic processes that took place in individual West Caucasian idioms.

1. THE STRUCTURE OF COMMON WEST CAUCASIAN CONSONANT CLUSTERS

1.1. CWC INITIAL CLUSTERS

Obstruent as the first element

(1) Obstruent stop plus obstruent

The most common initial clusters of this type have a bilabial stop as their first component with a following obstruent stop/affricate (PT) or, more commonly, a fricative (PS).

(a) clusters PT			*(b) clusters PS*	
voiced	voiceless	glottalised	voiced	voiceless

		p'q'	*bz*	*ps*
bG°	*pq°//pH°*		*bz/ź*	*pś*
		p'c'	*bž*	*pš*
		p'ć'	*bž'*	*pš'*
		pč//pš		*pλ*
(b)ǯ'			*bL'*	*pλ'*
	pƛ		*bĝ*	*px*
		p'ƛ''	*bĝ'*	*px'*
			bγ	*pχ*
			bγ'	
			bγ°'	
				pH°//pq°
			bʕ°'	*pH°'*

Other types of clusters are: dental or velar obstruent plus obstruent stop (TT) or fricative (TS). It is noteworthy that, with only one exception, these clusters represent combination of voiceless segments.

(c) clusters TT

voiced	voiceless	glottalised
		(t')k°
		č(')k°
	tq	
dG°	*tq°*	

(d) clusters TS

voiced	voiceless
	t/š'x
	tx°
	č'x°
	tχ
	tχ'
	tχ°
	tH
	tH'
	t°H°

(2) Obstruent stop plus resonant (TR)

The model includes combination of bilabial or dental stop with resonant. The only example of this kind is the complex **bl*.

(3) Spirant plus obstruent

The models are: spirant plus stop (ST) and spirant plus spirant (SS).

(3.1) ST-clusters: **st(')-, *(s)kʷ-, *śʿt-, *šk(')-, *(š)k'-́, *(š)kʷ-.*
(3.2) SS-clusters: **źγ-, *(ž)γʿ-, *šxʿ-, *šxʿ-́.*

Resonant as the first element (RT)
The only example is **m/nć'-.*

Syncope of the initial consonant in initial clusters
Common Circassian as a rule preserved initial consonant groups better than its sister-languages. In Common Abkhaz all clusters of the type "bilabial plus affricate" or "dental plus velar or postvelar" were simplified by deletion of the initial component. In this respect Ubykh on the whole occupies an intermediate position between Circassian and Abkhaz. Here are some examples of simplification of CWC clusters.

(1) *CWC clusters "bilabial stop plus affricate"*

CWC	CCirc	: Ub	: CAbx
**(p')c'*	*c'*	*p'c'*	
**(p')ć'*	*p'c'*	*ć'*	*ć'*
**bǯ́*	*bž́*	*ǯ́*	
**bǯ́*	*pč́*	*č́*	*ǯ́*
**p'č''*	*p'č''*	*p'č''*	*č''*

Examples:
**(p')c'* : CCirc **c'a*, Ub *p'c'a* 'name';
(p')ć'* : CCirc **p'c'a/ə* 'sharp', 'to sharpen', Ub *-ć'a* *'sharp', CAbx **ć'a-ra* 'id.'; CCirc **p'c'a-šxʿa* 'swallow' (šxʿa* 'blue'), Ub *ć'ə-tʿa* 'kind of bird' (tʿa 'motley (colour)'), CAbx **ć'ə-śə* 'bird' (**-śə* diminutive suffix);
bǯ́* : CCirc **bž́ənə*, CAbx **ǯ́əm-pśə* 'onion' (pśə* 'red'), CCirc **bž́ənə-xʿə* (**xʿə* 'white'), CAbx **ǯ́ə-śə* (**śə* 'white') 'garlic'; CCirc **Lə-bž́a* 'to fry (on oil, fat)', **bž́ə-bž́a/ə* 'to burn, smart', **jə/a-bž́a* 'to burn, itch', CAbx **ǯ́ə* 'to fry, grill';
**bǯ́* : CCirc **p̄č́a-jə* 'plane-tree', in Sh 'beech-tree' (*-jə* attributive suffix), CAbx **ǯ́ə* 'oak'; cf. also Ub *č́ə-ntʿa* 'hornbeam' (HV 453) or 'beech-tree' (DA III: 224); CCirc *p̄č́anə*, CAbx **ǯ́ma* 'goat';
**p'č''* : CCirc **p'č''ə-p'č''ə*, Ub *p'č''ə-p'č''ə-da*, CAbx **č'č''a* 'to shine, glitter'; CCirc **p'č''a* 'to weed', Ub *pč́a* 'to cut in mass' (with irregular deglottalisation of **č''*), CAbx **č''a-kʷa* 'to mow', SAbx *a-č''a-kʷa-ga* 'a

kind of scythe'; CCirc **ħa-č'ʼa* (with irregular deletion of the initial bilabial), Ub *p'č'ʼa* 'guest.

(2) *CWC clusters "bilabial stop plus spirant"*

CWC	CCirc	: Ub	: CAbx
**ps*	*s*		*ps*
**pś*	*pś*	*ś*	*?*
**bγ°ʼ*	*bγ°*	*bγʼ*	*ẑ°*
**bγ°ʼ*	*bγ°*	*γʼ*	
**bʃ°ʼ*	*γ°a*	*γʼ*	*bĥ°(ĥ°)*
**mʃ°*	*γ°*	*mγ*	*mĥ°*

Examples:

**ps* : CCirc **səgʼə* 'hump, crest (of bird)', 'anvil', CAbx **psən/rg(ʼ)ə-r/la* 'anvil';

**pś* : CCirc **pśaśa* 'girl', Ub *śasa* 'bride';

**bγ°ʼ* : CCirc **bγ°ə*, Ub *bγʼə*, CAbx **ẑ°ə* 'nine';

**bγ°ʼ* : CCirc **bγ°ə*, Ub *γʼa-kʼʼa* 'side';

**bʃ°ʼ* : CCirc **γ°a* 'to bleat', **γ°a-(r)ĝə* 'to roar (as lion), howl, weep loudly', **γ°a-γ°a* 'to thunder, roar', **γ°a-x̌°a* 'to howl, roar, holler', Ub *γʼa* 'to moo, howl, roar', CAbx **bĥ°ĥ°ə* 'to bellow (as bulls, cows)';

mʃ°* : CCirc **ža-γ°ə* 'chin' (Ad), 'base of lower jaw' (Kab) (ža* 'mouth'), Ub *ʒa-mγa* 'chin', CAbx **ʒa-mĥ°a* 'cheek'.

(3) *CWC clusters "dental stop plus velar or postvelar stop/spirant"*

CWC	CCirc	: Ub	: CAbx
**(tʼ)k"*	*tʼk"*	*k"*	*k"*
**dG°*	*tʼq"*	*tʼq"*	*ĥ°*
**tq*	*tx̌*	*tx̌*	*q*
**tq°*	*tx̌°*	*tx̌°*	*q°*
**tx°*	*tx°*	*šʼx*	*x̌°*
**tx̌*	*x̌*	*tx̌*	*x̌*
**tx̌°*	*tx̌°*	*tx̌°*	*x̌°*

Examples:

**(tʼ)k"* : CCirc **tʼk"a/ə* 'to melt, thaw, drip', Ub *k"ak"a* 'to drip (of water)',

CAbx **k"ək"a* 'to trickle down, drop';

**dG°* : CCirc **t'q"ə*, Ub *t'q"a*, CAbx **ĥ°ə* 'two';

tq* : CCirc **tχa* 'to prosper, live in abundance', 'to eat much and tasty', CAbx **qa-ĥa* 'sweet, delicious, tasty' (-ĥa* suffix); CCirc **k'a-(n)tχə* 'remains, sediment on bottom', CAbx **qə* 'wine sediment'; Ub *tχamə*, CAbx **qamə* 'fur-coat';

tq°* : CCirc **tχ°a* 'to grow grey (of hair)', 'dun, grey (colour of horse)', **č^hə-tχ°a* 'dun, grey(ish) horse' (č^hə* 'horse'), Ub *tχ°a* 'ashes', CAbx **q°a* 'ashes', 'grey' (the colour of ashes), **čə-q°a* 'grey(ish), grey-blue horse' (**čə* 'horse'); CCirc **wə-tχ°aja* 'to get covered with mould' (**wə-* verbal prefix), CAbx **q°a-pa(-jə)* 'mould' (**pa* 'to cover'), **q°ə-t"ə* 'to grow mouldy, musty' (**-t"ə* transformative suffix);

**tx°* : CCirc **wə-tx°a/ə* 'to thrust, stab, prick' (Sh), Ub *š'xa*, CAbx **x°ə* 'to wound';

tχ* : CCirc **χa* 'scant' in **c̄a-χa* 'with wide-spaced teeth' (c̄a* 'tooth'), **za-p^ha-χa* 'thin, sparse' (**za-* reciprocal prefix, **p^ha* 'nose, front'), cf. also **c'ər-χə* 'thin, transparent (fabric)', Ub *tχa* 'thin, sparse, scant, shallow', CAbx **χa-χa* 'scant, thin';

**tχ°* : CCirc **tχ°ə*, Ub *tχ°ə*, CAbx *χ°ə-ša* 'butter'.

(4) *CWC clusters "spirant plus velar or postvelar stop/spirant"*

CWC	CCirc	Ub	CAbx
**(š)k''	*šk''*	*k''*	*k''*
**(s)k"*	*sk"*	*k"*	*k"*
**(š)k"*	*šk"*		*k"*
**šx°'*	*šx°*	*š'x*	*x'*
**(ž)γ°*		*žγ°*	*γ°*

Examples:

**(š)k''* : Kab *šk'amp'əL* 'cork' (Urusov 120), Ub *k'amp'əLa* 'acorn', Ash, Ahch *k'amp'əl* 'small felt ball';

**(s)k"* : CCirc **p'a-sk"ə/a* 'to pinch', Ub *k"ak"ə* 'to pluck (as chicken)', 'to card (as wool)', 'to pull out', CAbx **k"ə-k"ə* 'to scutch, swingle, comb, card (wool)', 'to tear to pieces';

**(š)k"* : CCirc **šk"a/ə* 'to squeeze, crush', **wə-p'ə-šk"ə* 'to crush, crumple, rumple', CAbx **k"a* 'to make light, friable (as earth)', **k"a-k"a* 'id.';

**šx°'* : CCirc **šx°a-mč^hə*, Ub *š'xə*, CAbx **ax'a* 'chestnut';

*(ž)γ° : Ub žγ°a, CAbx *γ°a-γ°a 'to press, squeeze'.

1.2. CWC MEDIAL CLUSTERS

Medial consonant clusters were extremely rare in Common West Caucasian. Most of them are of the type RC, i.e. "resonant plus obstruent". Some of these cases may well represent combinations with non-etymological resonant increments, a phenomenon often observed in the modern West Caucasian languages as well.

Obstruent as cluster onset

The structural models are TS and ST. The examples are few: (a) TS: *-bγ', *-bγ°', *-bʃ- ; (b) ST: *-x°č- .

Resonant as cluster onset

The only structural model here is "resonant plus obstruent stop" (RT).

(a) clusters RT

voiced	voiceless	glottalised
	mp	*mp'*
		m/nć'
nd		*nt'*
		nć'
rd	*rt*	
		rt°
		rk°
	(r)c	
(r)γ'		

Correspondence rC : C in medial clusters

The discrepancy associated with this type of cluster is dealt mainly with the presence in one of the languages (mainly in Circassian) of *r*, which can be treated as a parasitic increment. The few examples are as follows:

(1) *rt' t° *rt°
(2) *rc *c
(3) *rγ γ *γ'

Examples:

(1) CCirc **q^{w}ar/nt'a* 'to bend, distort, turn, wind, be twisted', Ub *qat^{w}ə* 'to turn around', CAbx **q^{w}art^{w}ə* 'joint' (anat.);
(2) CCirc **g$^{\circ}$arc^{h}a*, CAbx **wacə* 'dung';
(3) Ad *c'ərγ-š'ərγ* 'twitter, chirp', Kab *c'ərγă-c'ərγă* 'rattle', Ub *c'əγγ* 'squeak (of the door)' (Dumézil, Esenç 1973: 34), Tap *c'əγ'γ'ə* '(to) squeal, screech'.

Syncope of vowels between consonants with subsequent assimilation process

(1) **məH'a* > CCirc **pǩa*, CAbx **mħa*, cf. Ub **məx'a* 'wood(en)';
(2) **bəć'a* > CCirc **p'c'a* 'to ferment, curdle, turn sour (of milk)', 'to thicken, become a jellylike mass', 'to coagulate (of blood)', 'massive, thick', cf. Ub **baćə* 'to become thick, fat, swollen', 'be abundant, numerous', CAbx **qa-bəćə* 'to fly round, stay in swarm, crowds (of birds, insects, people)' (**qa-* prev. 'head');
(3) **məć'a* > CCirc **p'c'ə*, cf. Ub *məća*, CAbx **məćə* 'lie, falsehood';
(4) **p'əq^{w}ə* > CCirc **p'q^{w}ə*, Ub *p'q'ə* 'to grow (as children)', cf. CAbx **p'əq^{w}ə* '(leaf)butt';
(5) **məH$^{\circ}$ə* > CCirc **(p)x̌$^{\circ}$a* 'to cover (e.g. by tablecloth)', CAbx **pḥ$^{\circ}$ə* 'millet straw', cf. Ub *məxə* 'maize stalk';
(6) **bək'ə* > CCirc **p'k'ə* 'to cut dough', 'to trample down, beat (a road)', cf. CAbx **bək'ə* 'to pinch', 'to pinch the edge of patties, cookies', Ub *bak'ə* 'to press, squeeze, pinch';
(7) **t'əG$^{\circ}$a* > CCirc **tq̄$^{\circ}$a* 'crocodile', cf. CAbx **t'əḥ$^{\circ}$a* 'monster eating moon or sun (during eclipse)';
(8) **bəG$^{\circ}$ə/a* > CCirc *pq̄ə* 'framework, (part of) body, stone of fruit', in compounds: 'bone, stalk', cf. Ub *məq* in *məx-məq* 'sheaf, bundle, bunch', CAbx **bəḥ$^{\circ}$a* 'bone';
(9) **bǯ'anə* > CAbx **ǯ'ma*, cf. CCirc **pč'anə* 'goat';
(10) **məć'ə* > CAbx **g$^{\circ}$-a-mć'ə* (**g$^{\circ}$ə* 'heart') 'to be worried, troubled', cf. Ub *məć'ə* 'narrow'.

Variation in laryngeal features: voced vs. voiceless

(a) CCirc **ps* : Ub *ps* : CAbx **bz*
(b) CCirc **bź* : Ub *mś* : CAbx **mś*

Examples:

**pəzə* CCirc **bzə*, Ub *abza* (DA III: 217), sometimes *-bzə* (cf. HV 698), CAbx **psə* 'female (of animals)';

bəźa* CCirc **bźa* 'horn', 'drinking vessel', in compounds also 'nail, hoof', **bźa-pʰa* 'precipice', **bźa-q̄ʷa* 'horn (as of cow)', **q'a-/λa-bźa-na* 'finger-/toenail (q'a* 'hand', **λa* 'foot', **na* 'eye', 'opening'), **pʰa-bźa* 'bush, shrub', **c'ə-bźa* 'to swell', **λa-bźa* 'hoof, claw' (Ad), 'root, foundation' (Kab) (**λa* 'foot'), Ub *mśa* in *ša-mśa* 'foot of the mountain', *ša-mśa-q'a* 'small hill' (*ša* 'head', 'top'; cf. HV 1721; according to DA III: 243, Ubykh had only *ša-mśa-q'a* in the meaning 'slope, descent'), CAbx **mśa* 'corn, callosity, horn substance', **šʷ-qə-mśa* 'threshold of the door' (**aššʷə* 'door', **qa* 'head'); Tap *šźa-mza* 'hoof' can preserve the original voiced **ź*.

Discrepancies in articulation type

(1) Affricate vs. spirant

(a) CCirc **p̄c̄* : Ub *ps* : CAbx **pś*
(b) CCirc **p̄c̄* : Ub *pś* : CAbx **pś*
(c) CCirc **p̄c̄* : Ub *ms* : CAbx **ms*
(d) CCirc **čx́* : Ub *šx́* : CAbx **čx̌ʷ*
(e) CCirc **pq̄ʷ//*pχ̌ʷ* : Ub *pq* : CAbx **(p)ħʷ*
(f) CCirc **pčʰ* : Ub *pš* : CAbx **pš*

Examples:

**pśa* CCirc **p̄c̄a* '(big) fish', Ub *psa*, CAbx **pśə-ʒə* 'fish';

pśalə* CCirc **p̄c̄aLə* 'willow', Ub *pśawa-sə* 'name of a sacred tree in the Caucasus' (*sə* 'wood'), CAbx **pślə-šə* 'poplar, willow' (šə* 'white'), cf. Kab dial. *ʒălə-xʷ* 'kind of willow' (with *xʷə* 'white');

psa* CCirc **na-p̄c̄a* (na* 'eye'), Ub *bLa-msa* (*bLa* 'eye'), CAbx **ʒ́ə-msa* 'eyebrow', cf. also Ub *λa-msa* 'root' (*λa* 'foot'), *λa-msā-pa* 'moss', CAbx **ka-msa* 'shaggy, fluffy', **cʷa-msa* 'tinder';

čx́ʷə* CCirc **čx́a/ə* 'to rain' (used with preverbs), **wa-čx́ə* 'rain' (wa* 'sky, weather'), Ub *tʷa-šx́* 'hail', CAbx **čx̌ʷə* 'to urinate';

pqʷə//*pHʷə* CCirc **pq̄ʷə//*pχ̌ʷə* 'plum', cf. also **pχ̌a-gʷə-λə* 'plum', 'alycha (kind of damson)' (gʷə* 'heart', **λə* 'to lie', 'to contain'), Ub *pqə* 'a sort of plum with big fruit', CAbx **(p)ħʷa* 'plum';

pč/šaHʷa* CCircpčʰaχ̌ʷa*, Ub *pšaxʷa* 'sand', CAbx **pšaħʷa* 'river-/seashore.

(2) Stop vs. affricate or spirant

(a) CCirc **tx̌ʷ* : Ub *tx̌ʷ* : CAbx **čqʷ*
(b) CCirc **tx* : Ub *šx́*

Examples:

**tqˀa* CCirc **ɕʰə-txˀə* 'to praise, flatter', Ub *ša-txˀa* 'praise', CAbx **čqˀa* 'to boast';

**t/šχa/ə* CCirc **wə-ʑˀə-(n)txa* 'to spit', **wə-txa/ə* 'to splash, splatter', Ub *cˀa-šχə* 'to spit'.

II. THE STRUCTURE OF THE COMMON WEST CAUCASIAN ROOT MORPHEME

The main structural models of unanalysable roots in Common West Caucasian are as follows: *VC(C)V, C(C)V, C(C)VC(C)V.*

Examples:

aCa : **(a)ga* 'bad', 'silly', **(a)ča* 'goat; deer', **aγˀa* 'fresh, brave', **(a)ʃa* 'ribbon, strap', **aʃˀa* 'den, hollow';

aCCa : **(a)bʃa* 'barren; thin', **(a)bʃa* 'fortress', **abγˀa* 'nest';

aCə : **aʃˀə* 'companion', 'beside', **(a)wə* 'to find, get';

Ca : **gˀa* 'to fill, push', **qa* 'grave', **qˀa* 'hand', **ca* 'tooth', **ʒˀa* 'to block up', 'to vomit', **ćˀa* 'to know', *čˀa* 'new, young', **za* 'one', **ʑˀa* 'to boil', **śˀa* 'you (pl.)';

CCa : **tqˀa* 'ashes', **pˀčˀa* 'naked, clean', **pˀčˀa* 'to weed, mow', **psa* 'soul', **bĝa* 'to curse', **pxˊa* 'back, behind', **bγˊa* 'breast', **txˇa* 'scant, thin';

Cə : **gˀə* 'heart', **qˀə* 'to cut', **cˀə* 'bull', **ʒˀə* 'salt', **čə* 'horse', **sə* 'wood', **śˀə* 'to rot', **λə* 'three', **xə* 'to reap, mow', **γˀə* 'board, plank';

CCə : **bLə* 'seven', **śˀtə* 'to hurl, overturn', **tqə* '(wine) sediment', **dGˀə* 'two', **bzə* 'willow; linden', **bžˊə* 'spoiled', **pxə* 'to tie up; to thread', **txˀə* 'five';

CaCa : **pˀapˀa* 'to mould, flatten', **baga* 'fox', **maǰ(ˀ)ča* 'camel', **źaźa* 'slow', **Hakˊa* 'to puff, pant', **baHa* 'to be angry', **maćˀa* 'fire', **mala* 'hunger';

CCaCa : **tHara* 'to break, beat';

CaCCa : **nabγˀa* 'quail';

CaCə : **baʒə* 'to fall; press', **kˀačˀə* 'short', **gˀaśˀə* 'axe', **λaśˀə* 'god of smiths', **γarə* 'prisoner', **baγˊə* 'to open', **Haλˀˊə* 'scoop, spade', **laHˀˊə* 'fig';

CCaCə : **tqamə* 'fur-coat';

CəCa : **qˀʷəna* 'nail, clasp', **tˀəGˀa* 'monster, dragon', **məʒa* 'lamp, candle', **məćˀa* 'lie', **čˀəčˀa* 'to crackle', **məλˀˊa* 'day', **γəba* 'ship', **ʃˀəna*

'house';

CəCə : **pərə* 'to fly', **bək'ə* 'to cut dough, pinch', **k'ə́jə* 'to howl, miaow', **kʷərə* 'to slip, slide', **c'əc'ə* 'to crumple, gnaw', **məć'ə* 'narrow', **pəǯ́ə* 'buckle, clasp', **məč'ə* 'wood'.

There are two Common West Caucasian roots consisting of three syllables (*CVCVCV*): **raǯ̊ə́nə* 'silver', **mayəyə* 'prickle'. In the first case the comparison with the related forms in East Caucasian languages shows that here we might deal with the combination of a root **raǯ̊ə́* with a suffix **-nə*. In the second case a reduplication of the syllable *yə* is supposed, cf. CWC **məyə* 'prickle'.

*Roots with initial *a- (VCV)*

Any West Caucasian language has a certain number of roots beginning with the vowel *a*. They are quite numerous in Common Abkhaz, less frequent in Common Circassian and rather few in Ubykh. It is not quite clear, however, whether a vocalic anlaut should be reconstructed for Common West Caucasian. Below I give examples illustrating the situation concerning the presence or absence of the initial vowel in the West Caucasian languages.

(1) CCirc **#aC* : Ub *#C*

Example:

CCirc **aāqa* vs. Ub *taqa* 'rooster'.

(2) CCirc **#aC* : CAbx **#C*

Examples:

(a) CCirc **ačʰa* 'kind of millet', **ačʰa-məxa* 'shepherd's purse' (kind of grass) vs. CAbx **ča-ĥ̊ə-ra* 'harvest', in Tap also 'grain harvest', 'bread';

(b) CCirc **ača* 'billy-goat', CAbx **ča* 'female deer', **ča-ć̊ə* 'male deer' (**ć̊ə* 'bull').

(3) CCirc **#aC* : CAbx **#aC*

Example:

Kuban Kab *ajă* (Ocherki 43), Kab *aħăj* 'yes, certainly' (Urusov 187), CAbx **ajə(-ajə)*, **aja-wə* 'yes'.

(4) Ub *#aC* : CCirc **#CaC*

Example:

Ub *ant'a* 'snake' vs. Sh *ħant'a-r-q̊aq̊ă*, Tem *ħant'a-r-q̊ə*, Kab *ħandə-r-qʷaqʷă* 'frog' (< CCirc **ħant'/da-r-q̄̊aq̄̊a*).

(5) Ub *#aC* : CCirc **#C*
Example:
Ub *aź-q'a* (< **aźə-q'a*) vs. CCirc *žə/a* 'right (side)'.

(6) Ub *#aC* : CAbx **#C*
Example:
Ub *ac°(ə)* 'bad, evil', 'damage' vs. CAbx **ja-c°a* 'worse', **c°ə-gʼa* 'bad, evil'.

(7) CAbx **#aC* : CCirc **#C*
Examples:
(a) CAbx **apšʼə* 'big, strong, great, powerful' vs. CCirc **pšʼə* 'prince';
(b) CAbx **aʃa-šʼa* 'lazy, idle', **aʃa/ə-la* 'hardly' (**-la* instrumental suffix) vs. CCirc **za-γə* 'to become rest, calm' (**za-* reciprocal prefix).

(8) CAbx **#aC* : Ub *#aC*
Examples:
(a) CAbx **aqa* 'night', Ub *ž°-aqa* 'late (time)' (*ž°ə* 'old');
(b) CAbx **aγʼa-ħ°ə* 'brave' (**-ħ°ə* agent suffix), Ub *d-aγʼa* 'fresh, young, new, brave';
(c) CAbx **m-arγʼa*, Ub *bLa-m-āγʼa* 'squint-eyed' (Ub *bLa* 'eye', *m* negation);
(d) CAbx **abʃa* 'fortress', 'stone fence', 'stone palace', Ub *abγa* in *c°ābγa* 'hut'.

(9) CAbx **#aC* : Ub *#C*
Examples:
(a) CAbx **aʒə* 'hoar-frost', Ub *ʒə* 'to fall (of snow, hoar-frost, hail)';
(b) CAbx **ažʼa* vs. Ub *La* 'hare';
(c) CAbx **aχa* 'time' vs. CAbx **-χa*, Ub *xa* 'time for doing sth';
(d) CAbx **aʃa-(n)da* 'fence', 'edge' vs. Ub *g°a-γa* 'fenced part of land, yard';
(e) CAbx **awə* vs. Ub *γ°a-wə* 'to find, get'.

(10) CCirc **#(a)C* : CAbx **#aC* : Ub *#C*
Example:
CCirc **nə*, **(j-)ana*, CAbx **anə* (cf. also CAbx **jənə* 'mother (of animals)') vs. Ub *na* 'mother'.

(11) CAbx **#aC* : Ub *#aC* : CCirc **#C*
Examples:
(a) CAbx **aga* 'silly, stupid', Ub *agʼa* 'bad, evil' vs. CCirc **-gʼa* 'bad, insufficient,

lacking'; but cf. also CAbx **gə*, Ub *g'a* 'to lack, be deficient';
(b) CAbx **abʃa* 'thin, skinny', Ub *abɣa* 'thin, skinny, weak' vs. CCirc **bya* 'barren, dry (of cow)', **na-bya* 'near-sighted' (**na* 'eye');
(c) CAbx **aʃ°a*, Ub *aγ°a* 'den, hole, lair' vs. CCirc **γ°a* 'burrow, den, hole'
(d) CAbx **q'-at'a* 'slushy, diluted (by water)', **q'-at'a* 'soft, mild', Ub *at'ə* 'soft, slightly overripe' vs. CCirc **ja-t'a* 'clay, earth, mud', **La-nt'a* 'elastic, supple'.

(12) CAbx **#aC* : CCirc **#C* : Ub *#C*
Examples:
(a) CAbx **r-aʒa* (**r-* causative prefix) vs. CCirc **zə*, Ub *za* 'to decant, filter';
(b) CAbx **aś°a* 'song' vs. CCirc **ś°a* in **waradə-ś°a* 'melody' (**waradə* 'song'), Ub *waś°a* 'malignant gossip, anathema' (*wa+(a)ś°a* ?);
(c) CAbx **ažа* 'ash-tree' vs. CCirc **ža* 'sleigh, sledge', Ub *ža* 'block, log, billet';
(d) CAbx **až°ə* vs. CCirc **ʑə*, Ub *ž°ə* 'old';
(e) CAbx **apšə* vs. CCirc **pλə*, Ub *pλə* 'red';
(f) CAbx **aγ'a* 'seed', 'male animal or bird left for reproduction' vs. CCirc **ĝa* 'scrotum', 'testicle', Ub *-ʑa* 'male';
(g) CAbx **aħə* 'prince', 'king' vs. Ub *x̌ə* 'prince', 'chief of the tribe', 'king', 'father-in-law';
(h) CAbx **awə* 'long, tall' vs. CCirc **wə/a* 'long', 'deep', Ub *wa* 'long, tall'.

(13) Ub *#aC* : CCirc **#C* : CAbx **#C*
Examples:
(a) Ub *ag°ə* vs. CCirc **-g°a/ə*, CAbx **-g°ə* 'short, small';
(b) Ub *aʑ-q'a* (**aʑə-q'a*) 'fat, corpulent' vs. CCirc **-ʑə* in **qʰ°ə-ʑə* 'pear' (?), CAbx **-ʑə* suffix 'awkwardly excessive'; but cf. also Ub *ʑə* 'to become fat, put on flesh'.

As the presented material shows, there is not a single case where all three languages demonstrate preservation of the initial vowel. Common Circassian shares 3 roots with initial vowel with Common Abkhaz and not a single one with Ubykh. Common Abkhaz, in its turn, shares with Ubykh as many as 8 roots with initial **a-*. It is probable that initial **a-* represents heterogeneous material. In some cases it may be a fossilised deictic **a-*, while in other cases it may be due to the loss of an initial consonant. It is noteworthy that initial **a-* is often found in adjectives.

Distribution of consonants in root morphemes

In principle, any Common West Caucasian consonant could occupy either morpheme-initial or morpheme-medial position, but the low number of disyllabic roots conditioned the absence of many consonants from medial position. No consonant occurred in morpheme-final position: only roots with open final syllables are reconstructed for Common West Caucasian.

III. THE COMMON WEST CAUCASIAN ACCENTUAL SYSTEM

Common Abkhaz had a combination of dynamic stress, similar to that of the modern Abkhaz dialects, and a parallel system of three phonologically relevant tones (high, middle, and low) (cf. Chapter 3, paragraph 7). In disyllabic words stress could fall either on the initial or on the final syllable. Its concrete position both in simplexes and compounds was determined by the consecutive order of dominant and recessive syllables (cf. Dybo 1989: 10-12).

In Common Circassian disyllabic words stress could also fall on either syllable. This original situation was preserved in Adyghe (in predicative forms), while Kabardian fixed stress on the penultimate syllable.

An accentual paradigm similar to that of Common Circassian, but especially close to that of Common Abkhaz, is observed in Ubykh.

In all three languages certain affixes had the power to retract the stress from the stem onto themselves, which possibly was characteristic of Common West Caucasian as well.

The examination of correspondences in stress position in the related West Caucasian material allows us to reconstruct the following West Caucasian stress patterns:

**CV́CV* : **CáCa, *CáCə* (?), **CəCa, *CəCə*
**CVCV́* : **CaCá, *CaCə́, *CəCá, *CəCə́*

Though in the examples given below the correspondences in vowels between the languages sometimes show discrepancies, I nevertheless included these examples assuming that these discrepancies might be due to later developments.

*Reconstruction of CWC stress on the penultimate syllable (*CV́CV)*

(1) CWC **CáCa* > CCirc **CáCa* : Ub *CáCa* : CAbx **CáCa*

Examples:

**dáda* > CCirc **ɫ̄áɫ̄a*, Ub *dád*, CAbx **dáda* '(grand)father';

**nána* > CCirc **nána*, Ub *nán(a)*, CAbx **nána* '(grand)mother';
**wán/wa* > CCirc **wána*, Ub *wắwa* 'saddle';
γáγa* > CCirc **q̄a-γáγa* 'flower' (q̄a-* prev. 'hither'), CAbx **γáγa* 'spread, branchy, spacious'.

Comment:
The correspondence CCirc **n* : Ub *w* in the third example ('saddle') is irregular.

In the following cases we observe the discrepancy between the place of stress in Circassian, on the one hand, and Ubykh and Abkhaz, on the other. Here a secondary development in Circassian could take place. Cf. CCirc **maǩ(°)čʰá* vs. Ub *máǩ°ča*, CAbx **máǩča/ə* 'camel', CCirc **t'at'á* 'to get soft' 'to thaw', 'to become unstable', 'to drip' vs. Ub *t'át'a-q'a* 'soft, overripe', CAbx **t'át'a* 'soft, mild, not solid', CCirc **t'q°azá* vs. Ub *t'q°áza*, CAbx **ĥ°áza* 'twins'.

(2) CWC **CáCə* (?)
I failed to find good correspondences between the three languages which would reflect this accentual model, but the fact that **CáCə* is safely reconstructed for Common Circassian (cf. Chapter IV, in paragraph 7 *(2)*) and for Common Abkhaz, and is present in Ubykh, allows us to tentatively reconstruct this model for the Common West Caucasian period.

(3) CWC **CəCa* > CCirc **CəCa* : Ub *CəCa* : CAbx **CəCa*
Examples:
**mə́śa/ə* > Ub *mə́śa* 'to call', 'to read', CAbx **mə́śə* 'to swear';
**ś°ə-CV* > CCirc **ś°əzə*, Ub **ś°əmc'a* 'woman, wife'.

(4) CWC **CəCə* > CCirc **CəCə* : Ub *CəCə* : CAbx **CəCə*
Examples:
**ś°ə́jə* > CCirc > Kab *č'ă-fə́j* 'whistle' (RK 998), Ub *ś°ə́jə* 'to whistle', cf. HV 1663 *sə-ś°ə́jə-n* 'I whistle', imper. *wə-ś°ə́j* 'whistle !', Bz *a-ś°əj-ś°ə́j* 'turkey' (though cf. Ash (AD 2) *də-ś°əj-ś°əj-wá* 'he is whistling');
**q°ə́-q°ə* > Ub *q°ə́q°ə*, CAbx **q°ə́q°ə* 'to huddle oneself up,' 'to squat'.

In general, the stress on the penultimate syllable seems to have been a more rare phenomenon in Common West Caucasian than the stress on the final syllable, which is, in particular, demonstrated by the meagre number of examples which I could find for the first case, as compared with more numerous examples for the

final stressed syllable (see below).

*Reconstruction of CWC stress on the final syllable (*CVCV́)*

(1) CWC **CaCá* > CCirc **CaCá* : Ub *CaCá* : CAbx *CaCá*

Examples:

**bagá* > CCirc **bagʼá* (?) 'fox', Ub *bagʼá-šʷ* 'jackal', CAbx **bagá* 'fox, jackal';

**(p)śasá* > CCirc **pśaśá* 'girl', Ub *śasá* 'bride';

**(n)abʃʷá* > CCirc **(n)abγʷá*, Ub *abγʼá* 'nest';

λʼa-qʷá* > CCirc **λa-q̄ʷá* 'leg, foot', CAbx **šʼ-qʷá* (< **šʼa-qʷá*) 'heel' (šʼa* 'foot');

**λʼa-χʷá* > CCirc **λa-χʷá-(m)ba* 'toe', CAbx **šʼa-χʷá* 'metatarsus', 'shinbone', 'foot/feet' (CWC **λʼa* 'foot');

**λʼa-cʷá* > Ub *λa-cʷá*, CAbx **šʼa-cʷá* 'toe';

**šʷa-kʷʼá* > CCirc **ša-kʷʼá*, Ub *šʷa-kʼá* '(to) hunt', 'hunter';

**qʼaqʼá* > Ub *qʼaqʼə* 'to chew', CAbx *qʼaqʼá* 'to chew, gnaw, crush (by teeth)';

**(tʼ)kʷʼakʷʼá* > Ub *kʷʼakʷʼá*, CAbx **kʷʼəkʷʼá* (< **kʷʼakʷʼá*) 'to trickle down, drip', cf. CCirc **tʼkʷʼa/ə* 'to melt, thaw, drip';

**raHʷá* > CCirc **tħa-rəq̄ʷá*, Ub *daχʷá* 'pidgin, dove', CAbx **laħʷá* 'rook, raven';

**ca-Gá* > CCirc **c̄a-q̄á*, CAbx **c-ħá* (< **c-ĥá* < **cə-ĥá*) 'to bite' (CWC **ca* 'tooth').

Comment:

CCirc **bagʼá* 'fox' in the first example is reconstructed on the basis of Sh *băgʼă-wəc* 'sort of grass used in popular medicine' (cf. ShD 93), etymologically 'fox's grass'. CCirc **baǯʼá* 'fox', though not quite a cognate to Abkhaz and Ubykh, shows the same accentual picture as Ubykh and Abkhaz items.

In some cases the place of stress in Circassian differs from that of Abkhaz and Ubykh cognates, cf. CCirc **wása* 'price' vs. CAbx *wasá* 'sheep', CCirc **p̄ána* 'bush' vs. Ub *baná* 'grass (used as remedy)', CAbx *baná* 'forest, wood'. In such cases (cf. especially the second example) we can probably speak about the secondary development in Circassian.

(2) CWC **CaCə́* > CCirc **CaCə́* : Ub *CaCə́* : CAbx **CaCə́*

Examples:

**tqamə́* > Ub *tχamə́*, CAbx **qamə́* 'fur-coat';

zazə́* > CCirc **kʼa-zazə́* 'to tremble' (kʼa* 'tip, tail'), CAbx **zazə́* > Bz *-zazə́-maz-wa* '(to go) waddling';

**(b)l/na-śʷə́* > CCirc **na-śʷə́*, Ub *bLa-śʷá*, CAbx **la-śʷə́* 'blind';

laH°ə́ > CCirc **aχ°ə́*, Ub *laχ́ə́*, CAbx **laħá* 'fig' (< **laħə́*);
maH°ə́ > CCirc **maχ°-λá*, Ub *məχ́ə́*, CAbx **maħ°ə́* 'son-/brother-in-law'.

(3) CWC **CəCá* > CCirc **CəCá* : Ub *CəCá* : CAbx **CəCá*
Examples:
**ʃ°aná* > CCirc **wəná*, CAbx **ħ°aná* 'house';
**məš°ə́á* > CCirc **məšá*, Ub *məš°á*, CAbx **m(ə)šʷ°ə́* 'bear';
**dəγá* > CCirc **t̄əγá*, Ub *d(ə)γá* 'sun';
**məʃ°ə́á* > Ub *məγ́á*, CAbx **m(ə)ħ°á* 'road, way';
**məʒá* > CCirc **mazá*, CAbx **m(ə)ʒá*, Ub *məʒá* 'moon';
**məć°á* > CCirc **maśʷ°á*, CAbx *mcá* (< **məcá*), Ub *məʒ́á* 'fire';
**məλ°á* > CCirc **max°á*, Ub *məś°á*, CAbx **m(ə)šə́* (< **məšá*) 'day';
**λ°əlá* > CCirc **čəLá* 'village', Ub *ʒ́əjə́* 'seeds', CAbx **ẑ°lá* 'seed, grain', 'family (name)' (< **ẑ°əlá*).

(4) CWC **CəCə́* > CCirc **Ca/əCə́* : Ub *CəCə́* : CAbx **CəCə́*
Examples:
**kʷ°ərə* > CCirc **kʷ°ə́/arə́/á* 'to fall', Ub *kʷ°arə́* 'to slip, slide', CAbx **kʷ°arə́* 'to roll (of small objects), slide, crawl';
**š°əš°ə* > Ub *š°əš°ə́* 'to darken, blacken', 'to paint in black', CAbx **š°əšʷ°ə́* 'to paint', 'to become dark', 'dark (colour)';
**šəšə* > Ub *šəšə́* 'to caress, stroke', CAbx **šʲ(ə)šə́* 'to caress, stroke (by hand)', '(to do sth) carefully, cautiously';
**bəbə́* > CCirc **bəbə́* 'to fly', CAbx **bəbə́* 'to wreath, roll (of smoke, dust)'.
**məʒə* > CCirc **mazə́* 'wood', Ub *məʒ́ə́* 'prick(le)', CAbx **mzə́* 'pine-tree';
**k(')°a/ət(')ə́* > CCirc **k̄aīə́*, CAbx **kʷ°ət'ə́* 'chicken, hen';
**d°əd°ə́* > CCirc **dədə́*, CAbx **ʒaʒə́* 'awl'.

The material given above clearly illustrates a genetic affinity of Common Abkhaz, Ubykh and Common Circassian stress patterns, which allows us to project a similar system for Common West Caucasian. It was suggested that Common West Caucasian was a tonal language (cf. Dybo 1989: 41-44). Though further research in this field is still to be carried out to properly substantiate this assertion (in particular, an analysis of the Adyghe accentual system, similar to that undertaken by Dybo and Spruit for Abkhaz, and by Dybo for Ubykh, is needed), this seems to be a rather likely hypothesis. The discovery of a relic tonal system in Tapanta isolects can serve as an important proof for this idea. Comparison with the related East Caucasian languages shows that the majority

of Abkhazo-Adyghean roots, descending from longer words, were phonetically simplified and became monosyllabic, which led to the creation of many homonyms. The existence in Common West Caucasian of a large number of homonyms makes their semantic distinction by means of tonal contrasts quite likely.

The existence of tonal systems in some Daghestanian languages allows us to assume that tonal systems were characteristic for the North Caucasian linguistic area as a whole, though it is not clear whether we are dealing with genetic or only areal affinity.

CHAPTER X

THE COMMON WEST CAUCASIAN AFFIXES, MORPHOPHONOLOGY AND LEXICON

I. THE COMMON WEST CAUCASIAN AFFIXES

Below I present a list of Common West Caucasian affixes reconstructed on the basis of comparison of at least two languages. Affixes are subdivided into nominal and verbal, and further into inflectional and derivational. The position of affixes may coincide in all three languages (i.e. being either a prefix or a suffix), can differ in different languages (i.e. prefix in one language vs. suffix in the other), or can be used both as a prefix and a suffix in all three idioms (as, for example, the negative morpheme **mə*). Sometimes one and the same affix can be employed in both verbal and nominal functions. The problem of relative chronology of the affixes will not be discussed here. It must be said, though, that the presence of a certain affix in Abkhaz and Circassian indicates with more certainty that the corresponding affix is to be assumed for the Common West Caucasian chronological level, while the affixes common only to Abkhaz and Ubykh, or only to Circassian and Ubykh are more likely (though not necessarily) to be the product of later contact or parallel development.

1. CWC NOMINAL INFLECTIONAL AFFIXES

(1) **a-* Ub *a-*, CAbx **a-* definite article;

(2) **a-* CCirc **a-* plural affix in **j+a-* possessive prefix of 3d. p.pl. (e.g. **j-a-čʰə* 'their horse' vs. **jə-čʰə* 'his horse'), Ub *a-* plural prefix (e.g. *a-γa-čʼə* 'their horse' vs. *γa-čʼə* 'his horse');

(3) **a-* PUb **a-*, CAbx **a-* possessive prefix of 3d p.sg. (in CAbx only for the class of humans);

(4) **-jə* CCirc **-jə*, CAbx **-jə* coordination suffix; cf. also CWC **-jə ... -jə*: CCirc **-jə ... -jə*, CAbx **-jə ... -jə* 'id.';

(5) **-gʷə* CCirc **-jə+kʼə*, Ub *-gʷa*, *gʷə*, CAbx **-gʷə* clitic 'and'; also CWC **-gʷə ... -gʷə* as coordination suffixes: CCirc **-jə+kʼə ... jə+kʼə*, Ub *-gʷə ...*

-*gʲə*, CAbx *-*gʲə* ... -*gʲə* 'and ... and';

(6) **kʲ'a* cf. below, in paragraph 1.3. no. (12);

(7) **sə-* CCirc **sə-*, Ub *sə-*, CAbx **sə-* possessive prefix of 1st p.sg.;

(8) **śʲə-* CCirc **śʲə-*, Ub *śʲə-*, CAbx **śʲə-* possessive prefix of 2d p.pl.;

(9) **-la ... -la* coordination suffix: Ub *-a+La//-La* (e.g. *sə-nāLa sə-tʲ-a+La* 'my mother and my father'), CAbx > Tap *-la* (e.g. *bəzšʲa-la lit'erat'ura-la* 'language and literature'); represents a repetition of the affix given below in the paragraph 1.3 in no. (30);

(10) **wə-* CCirc **wə-*, Ub *wə-*, CAbx **wə-* possessive prefix of 2d p.sg.;

(11) **jə-* CCirc **jə-*, CAbx **jə-* possessive prefix of 3d. p.sg. (in Abkhaz: male/hum);

(12) **-jə* CCirc **-jə/a*, CAbx **-jə* possessive/attributive suffix.

Comments to the items in no.:

(1) Examples: Ub *cʲə́*, CAbx **cʲə́* 'bull', def. Ub *á-cʲ*, CAbx **á-cʲ*, Ub *čə́*, CAbx **čə* 'horse', def. Ub *a-čə́*, CAbx **a-čə́*, etc. The Abkhaz-Ubykh article is connected with the CCirc demonstrative pronoun **a*.

(3) In Ubykh the prefix **a-* is preserved, according to Dumézil (cf. Notes 8-10: 27), in certain names of the days of the week, cf. *a-t'qʷ-a-mśʲa* 'Tuesday', lit. 'the second day' (cf. CAbx **ĥʲ-a-ša* 'id.'), *a-šχ-a(-mśʲa)* 'Friday', lit. 'the fifth day' (cf. CAbx **χʲ-a-ša* 'id.'). Abkhaz: **a-la* 'its (nonhum) eye', **a-gʲə* 'its (nonhum) heart', etc. Cf. also **a* in CCirc **j-a-pʰa* 'the first', Ub *a+fa* 'advantage, profit' (etym. 'the front one' ?), CAbx **a-pə-* prev. 'the first' (CCirc **pʰa*, Ub *fa*, CAbx **pə* 'nose' > 'front').

(4) Examples for CWC **-jə*: Ad *tă-rə-j tă-Laž'ă*, Kab *dă-rə-j d-ăw-Laźă* 'and we (also) work' (Urusov 291), CAbx **žʲa-j-za* 'eleven' (lit. 'ten-and-one'), Tap *χ̌rə-j-χ̌əc* 'bow' (lit. "arrow-and-bow"); examples for CWC **-jə ... *-jə*: Ad *txə+λə-j txə+λə-p'ə-j* '(and) book and paper', *Răž'ăb-əj Ajub-əj* '(and) Radzhab and Ajub', Kab *qʷərš-xă-r-əj măz-xă-r-əj* '(and) mountains and woods', SAbx *wa-ra-j sa-ra-j*, Tap *wa-rə-j sa-rə-j* '(and) you and me'.

(5) The Common Circassian conjunctive suffix **-jə+k'ʲə* is found only in Kabardian and Shapsygh Adyghe, cf. Sh *q'ʲəmγan-rə-j+k'ʲ* 'and the jar' (ShD 87), Sh *tă-rə-j+k'ʲ*, Kab *dă-rə-j+k'ʲ* 'and we', Sh, Kab *să-rə-j+k'ʲ* 'and me' (Urusov 292). It represents in fact the combination of two conjunctions: **-jə* and **-k'ʲə* (< **-gʲə*). Adyghe and Kabardian also have an independent conjunction *ə+č'ʲə* (Ad), *jə+č'ʲə* (Kab) (< CCirc **jə+k'ʲə* < **jə+gʲə*) 'and', which finds its direct parallel in the Tapanta conjunction *jə+gʲə* 'and'. Cf. also Ub *sə-γʲa-gʲə*, CAbx **sa-r(a)-gʲə* 'and me'. Examples for the conjunction in Circassian are: Sh *čə+w-xă-rə-j+k'ʲ*

λă+s-xă-rə-j+k'´ 'horsemen and footfolk' (ShD 87), Ad (Sh ?)-Kab *c'ək^{w}ə-j+k'´ jənə-j+k'´* 'small and big' (Morf 250), Ub *a-najnš$^{°}$-g'ə a-pχ'adək^{w}-g'ə* 'young man and young woman', SAbx *sa-r-g'ə war-g'ə* 'me and you'.

(7) Examples: CCirc **sə-na* 'my eye', Ub *sə-t$^{°}$* 'my father', CAbx **sə-la* 'my eye'.

(8) Examples: CCirc **ś$^{°}$ə-na* 'your(pl.) eye', Ub *ś$^{°}$ə-t$^{°}$ə-na* 'your(pl.) father', *ś$^{°}$-aw-č'ə-na* 'your(pl.) horses', CAbx **ś$^{°}$ə-la* 'your(pl.) eyes'.

(10) Examples: CCirc **wə-č^{h}ə*, Ub *wə-č'ə*, CAbx **wə-čə* 'your horse'.

(11) Examples: CCirc **jə-na* 'his/her/its eye', CAbx **jə-la* 'his (male/hum) eye'.

(12) Examples: Ad *să-sə-j*, Kab *sə-să-j* 'my' (*să-/sə-* 'I/me'), Ad *tă-tə-j*, Kab *də-dă-j* 'ours' (*tă/ə-*, *də/a-* 'we/us'), Kab *jə+ǯə-ră-j* 'present' (*jə+ǯə* 'now'); in the names of the trees: Ad *pč'a-jə*, Kab *bžă-j* 'plane-tree', Ad *da-jă*, Kab *dă-j* 'nut-tree' (**da* 'nut'), etc. In Abkhaz this suffix is preserved in the compound attributive-possessive suffix *-(n+)t^{w}ə+j*, cf. SAbx *d-a+ba-t^{w}ə-j* 'from where is (s)he?/where does (s)he belong to?' (*d-* '(s)he', *a+ba* 'where/which place?'), *a-təpa-n+t^{w}ə+j* 'local' (*a-təp* 'place'). In both languages the suffix is connected with the second p.sg. possessive prefix **jə-* in (11).

2. CWC NOMINAL DERIVATIONAL AFFIXES

(1) **-a* CCirc **-a*, Ub *-a*, CAbx **-a* suffix of divisible numbers;

(2) **-a* CCirc > Sh *-a*, CAbx **-a* vocative particle (also used to express affection, endearment);

(3) **-a-* CCirc **-a-*, Ub *-a-* connective affix;

(4) **-a+x̌'a/ə* Ub suf. *-a+x̌'a* 'place of' in: *č'āx̌'a* 'stable' (*č'ə* 'horse'), *dəmāx̌'a* 'hen-coop' (*dəma* 'hen'), *g$^{°}$əmāx̌'a* 'cow-shed' (*g$^{°}$əma* 'cow'), *Laq'āx̌'a* 'calf-herd' (*Laq'ə* 'calf'), CAbx **a+x̌ə* directional postposition 'toward, to', **na-x̌ə* 'there' (**na* 'there'), **la-x̌ə* 'down there' (**la* 'down'), **q-a-x̌ə* 'up there' (**qa* 'head', 'top'); in Abx is also used as a locative/directional prefix: LAbx *s-a+x̌'(*ə)-ca-wa* 'to where I go';

(5) **a+ʕ$^{°}$ə* CCirc **-a+γ$^{°}$ə* 'companion, partner', e.g. **γ$^{°}$ən-a+γ$^{°}$ə* 'neighbour' (**γ$^{°}$əna* 'border'), **γ$^{°}$a-g$^{°}$-a+γ$^{°}$ə* 'companion' (**γ$^{°}$a-g$^{°}$ə* 'road'), Ub *-γ* comitative suffix (pl. *-γ´*), cf. *k'a-γ* 'companion, comrade' (*k'a* 'to go'), *nk^{w}a-γ* 'neighbour' (*nk^{w}a* 'hearth'), CAbx **afi$^{°}$ə-* preverb 'by, beside', cf. Tap *afi$^{°}$-ga-ra* 'to carry sth by passing by' (*ga* 'to carry'), SAbx *aj$^{°}$-s-ra* 'to pass by' (**sə* 'to pass');

(6) **-a+na* CCirc **-a+na* suffix of fractional numbers: **š'-a+na* 'one third', **p'λ'-a+na* 'one fourth', **tx$^{°}$-a+na* 'one fifth', CAbx **-a+na* suffix of divisible numbers > Tap *wadər-ħ$^{°}$-a+na* 'the second time', 'then,

afterwards' (*wadər-* 'the other', *ɦ°* 'two'), *wadər-x̌-a+na* 'the third time' (*x̌* 'three');

(7) **bza* CCirc **-bza*, Ub *-bza-bza-q'a* 'intensive, bright' (suffix with colour names); in Ubykh reduplication;

(8) **-psə* CCirc **-psə*, Ub *-(p)sə-psə*, CAbx **-psə* intensity suffix; in Ubykh reduplication;

(9) **-pxə/a* CCirc **-(p)xə*, Ub *-pš'a* suffix 'inclined to';

(10) **-t* CCirc **-tʰa/ə* in the compound suffixes: Ad *-ta-γ(ă)*, Kab *-tə-ʔă* (cf. Ad *čəʔă-ta+γă*, Kab *ś'əʔă-tə+ʔă* 'cool', with *čəʔă//ś'əʔă* 'cold', Kab also *năx̌ ś'əʔă-ta* 'cooler'), Ub gerundial suf. *-ta*: *məś°a-ta* 'of the day', *zak'a-tā-La* 'at once' (cf. Notes 12-14: 16-18), CAbx adverbial suf. **-ta* in **q-a-ta* 'himself' (**qa* 'head'), **j-a-ta* 'again', **x̌'ə-ta* 'cold' (**x̌'ə* 'cold');

(11) **-ta* CCirc **-tʰa*, Ub **-ta* (fossilised) locative suffix (?), CAbx **-ta* locative suffix;

(12) **-t'a* CCirc **-t'a* suffix in the names of colours: **šx̌°a-(n)t'a* 'blue, green', **γ°a-t'a* 'dark-reddish', CAbx **š°ə-t'a* 'spot, bruise' (**š°ə* 'to paint', cf. also **š°š°ə* 'dark'), **š°ə-t'a-x̌a* 'to become dark, with dark spots';

(13) **g°ə* CCirc **-g°a/ə*, CAbx **-g°ə* suf. 'short, small'; Ubykh also has the independent word *ag°ə* with the same meaning;

(14) **-k'a* CCirc **-k'a+ja* suffix of superlative degree, CAbx **-k'a-k'a-ra* intensity suffix in adjectives (especially with the words for colours);

(15) **-k'a/ə* Ub *-k'(ə)*, CAbx **-k'ə* suffix denoting singleness;

(16) **q"a* CCirc **-q"a*, Ub *-q"a* suffix denoting small quantity or intensity of sth, cf. also CAbx **q"a-* in **q"a-n-da* 'a bit warm (of liquids)', with the verb **nə-da* 'to cool (warm water or air)';

(17) **-ǯ'ə* CCirc **-ǯ'ə* suffix adding up to the comparative degree of the adjectives the meaning of domination of the quality (cf. Kab *năx̌ λaśə-ž* 'even stronger', *năx̌ bədă-ž* 'id.'), Ub *-ǯ'ə* in *za-ǯ'ə* 'unique' (*za* 'one'), *a-za-ǯ'ə-x̌°əraj* 'completely round' (*x̌°əraj* 'round'), CAbx **-ǯ'ə* suffix intensifying the meaning of the word: SAbx *a-kaɦpə-ǯ'* 'prostitute' (*a-kaɦpə* 'prostitute' < Tu), Bz *a-x̌°də-ǯ'* 'with thick neck' (*a-x̌°da* 'neck'), *a-kdə-ǯ'* 'very heavy' (*a-kdə* 'log');

(18) **-čə* CCirc **-n(ə)-čʰa*, Ub *-čə* privative suffix, CAbx *-čə* in **psə-čə* 'weak' (**psə* 'soul'), **q-čə* 'to become weak', 'to abate' (**qa* 'head'), **š'a-čə* 'to have pins and needles in one's leg' (**š'a* 'foot, leg');

(19) **-s°ə* Ub *-š°*, CAbx **-śə* diminutive suffix;

(20) **-ž°ə* CCirc **-źə*, Ub *-ž°ə*, CAbx **-až°ə* pejorative/augmentative suffix;

(21) *-š́(a) Ub -š́, CAbx *-š́a suffix of abstract nouns, e.g. Ub č'a-š́ 'goodness' (č'a 'good'), tətə-š́ 'man's quality' (tət 'man'), CAbx *wa-ħ°ə-š́a 'humanness' (*wa-ħ°ə 'man');

(22) *-λ́a CCirc *-λa suffix in *č'ə-λa '(dry) land' (*č'ə 'land, earth'), Ub -λa in məγ́a-λa 'path' (məγ́a 'road'), jəc°a-λa '(dry) land' (jəc°a 'land, earth'), Tap -š́ in məħ°a-š́ 'path' (məħ°a 'road');

(23) *-λ́a CCirc *p^{h}a-λa 'as if, standing for, similar, same as' (*p^{h}a 'nose'), Ub -λa, CAbx *-š́a suffix meaning 'manner of (action or behaviour)' (e.g. Ub k'́a-λa, LAbx a-ca-š́a 'the manner of going', Ub fə-λa, SAbx a-fa-š́a 'the manner of eating', etc.);

(24) *-x°́a Ub -xa, CAbx suffix *-x̌a 'time for doing sth'; cf. CAbx *ax̌a 'time';

(25) *-ʃa CCirc *-γa, CAbx *-ħa suffix of abstract nouns, cf. CCirc *λ'ə-γa 'manness' (*λ'ə 'man'), *x°aba-γa 'warmness' (*x°aba 'warm'), CAbx *x̌́ə-ħa 'pain' (*x̌́ə 'to ache), *c'-ħa 'ice'; in Abkhaz also used as one of the plural suffixes of the class of humans: *wa-ħa 'people' (*wa-ħ°ə 'man, human'), SAbx Ləx̌-aa 'inhabitants of the village of Lykhny', etc.;

(26) *-ʃə/a CCirc *-γə in *q̄°a-γə 'corner, space behind sth' (Kab), *śħa-γə 'over' (*śħa 'head') (Ad), *p'q°a-śħa-γə 'head of the bed' (*p'q°a 'place', *śħa 'head'), *č'a-γə 'bottom', 'under' (*č'a 'beneath, bottom'), Ub -γa local suffix in: ana-γa 'thereby', La-γa 'here' (a-na-, La- deictic pronouns), CAbx *-ħa local suffix in *a-na-ħa 'there', *a-ra-ħa 'here', *a-ba-ra-ħa 'here', etc (*a-na-, *a-ra-, *a-ba-ra- deictic pronouns);

(27) *-ʃ°a CCirc *jə-γ°a 'time of' (*jə- 3d p.sg. possessive), *-γ°a suffix of abstract nouns, CAbx *-mħ°a suffix 'time for doing sth', 'possibility of doing sth' (< *m+ħ°a ?);

(28) *ʃ°ə CCirc *-wə, CAbx *-ħ°ə agentive suffix;

(29) *-H́aH́a Ub -x̌́ax̌́a, CAbx *-ħaħa suffix denoting intensity of colours;

(30) *-na CCirc *-na, CAbx *-na diminutive suffix;

(31) *na/ə Ub *-nə oblique case suffix, often with local semantics (cf. za-š°abLa-n 'in one country'), CAbx *-nə locative suffix, 'country/land of'; both are connected with CCirc *na 'to stay, remain, be stuck' (used with local preverbs), CAbx *nə 'to be on sth';

(32) *-rə- CCirc *-rə-, Ub -rə-, CAbx *-rə- connective affix;

(33) *-ra/ə CCirc *-rə, CAbx *-ra suf. in the personal pronouns: CCirc *sa-rə 'I', *wa-rə 'you', CAbx *sa-ra 'I', *wa-ra 'you (male/hum; nonhum), *ba-ra 'you (fem/hum), *ja-ra 'he (male/hum; nonhum), *la-ra 'she

(fem/hum), **ħa-ra* 'we', **da-ra* 'they';

(34) **-ra-ja/ə* CCirc **-rə-ja*, CAbx **-ra-jə* suffix giving the idea of excessive inclination to doing sth;

(35) **wa* CCirc **wa* vocative particle > Kuban Kab *-wă*, e.g. *dadă-wă* vocative for grandfather (*dadă*), *nəsă-wă* vocative for daughter-/sister-in-law (*nəsă*), etc. (cf. Ocherki 39), Kab *wă*, Sh *wă*, Ub *wā*, CAbx **wa* > SAbx *wa//wáa*, Tap *wa*, Ash *wo* vocative (prepositional) particle;

(36) **-wa* CCirc suf. **-a+wa* in **ś-a+wa* 'youth', 'bridegroom' (Tem also 'son'), **nə/-a+wa* 'old woman, granny' (**nə* 'mother'), **pk'ˊ-a+wa* 'grasshopper' (**pk'a* 'to jump'), **čʰ-a+wa* 'horse-driver', 'teamster' (**čʰə* 'horse'), CAbx **-wa* ethnic suffix derived from CAbx **wa* 'relative, friend, comrade', 'belonging to sth/smb, analogical, similar, alike';

(37) **wə* CCirc **-wə-jə*, CAbx **awə-* (**a+wə-* ?) emphatic-interrogative affix (in Circassian suffix, in Abkhaz prefix);

(38) **ja* Sh *jă*, Ub *ja*, SAbx *ja* emphatic emotive interjection;

(39) **-jə/a* CCirc **-ja* suffix with negative meaning giving the idea of excessiveness, CAbx **-jə* suffix used in adjectives to express the intensity of the feature;

(40) **-jə* CCirc **-jə*, CAbx **jə-* diminutive suffix.

Comments to the items in no.:

(1) Examples: CCirc **šˊə* 'three' vs. **šˊ-a* 'thrice', **tx°ə* 'five' vs. **tx°-a* 'five times', **p'śˊə* 'ten' vs. **p'śˊ-a* 'ten times', etc. In Ubykh this suffix was used in combination with the (now obsolete) possessive prefix **a-*: Ub *šˊxə* 'five' vs. *á-šˊx-a* 'the fifth', 'Friday' (cf. Notes 8-10: 27). In Abkhaz this now unproductive model is preserved in such fossilised forms as names of the week's days, cf. CAbx **ħ°-a-ša* 'Tuesday', lit. 'the second day' (cf. **ħ°ə-* 'two'), **x̌-a-ša* 'Wednesday', lit. 'the third day' (cf. **x̌ə-* 'three'), **pšˊ-a-ša* 'Thursday', lit. 'the fourth day' (cf. **pšˊə-* 'four'), **x̌°-a-ša* 'Friday', lit. 'the fifth day' (cf. **x̌°ə-* 'five'). Cf. also SAbx *adər-j°-a-č-nə* 'the next (= second) day', (Bz) *adər-x̌-a-wə-x̱a* 'the third night' (*adər-* 'the other', *j°* 'two', *a-č-nə* 'on the day', *a-wə-x̱a* 'that night'), Tap *wadər-ħ°-a+na* 'then, the second time', *wadər-x̌-a+na* 'the third time' (*wadər-* 'the other', *ħ°* 'two', *x̌* 'three', *-na* suffix of divisible numbers).

Another model for the formation of divisible numbers in Common Abkhaz is "numeral + divisible affix *a* + adverbial suffix *-nə*", cf. CAbx **za-nə* (= **za-a-nə* ?) 'once', **ħ°-a-nə* 'twice'. This model is preserved in Tapanta, while in South Abkhaz it was augmented by the attributive suffix *-t°ə/a*, cf. SAbx *j°ə-n-t°*, Sa,

Ahch *j°-a-n-t‿a* 'twice'.

In Common Circassian ordinal numbers were formed in accordance with the model "3d. p.pl. possessive prefix + numeral + divisible (or possessive ?) suffix *a* + fractional suffix *na*", cf. **j+a-š'-a-na* 'the third', **j+a-tx°-a-na* 'the fifth', etc. The Abkhaz model of forming the divisible numbers with the use of the compound suffix **-(a-)nə-t‿ə/a* (combination of the divisible numbers affix **a* plus the adverbial suffix **-nə* plus the attributive suffix **-t‿ə/a*), mentioned above, finds its parallel in the Circassian compound suffix of divisible numbers **-a-(wə-)na-jə* (the suffix of the divisible numbers **-a*, plus the unclear element *wə*, regarded in Morf 226 as epenthetic, plus another suffix of divisible numbers **-na*, plus the attributive suffix **-jə*). Cf. Ad *š'-ă-wə-na-j*, Kab *ś-ă-nă-j* 'three times, thrice', Ad *tf-ă-w-na-j*, Kab *tx°-ă-nă-j* 'five times', etc.

The nasal suffix in CAbx **-a-nə*, SAbx *-n-t‿*, Sa, Ahch *-a-n-t‿a* given above can be analysed as the adverbial suffix (CAbx **-nə*), though it is not excluded that its final vowel *-ə* might be a secondary reduction of the original **-a*, which will allow us to reconstruct **-na*, identical to the suffix preserved in Tap *wadər-ĥ°-a+na* 'then, the second time', *wadər-x̌-a+na* 'the third time' and to the Circassian suffix of fractional numbers **-na*. The CWC suffix of divisible and fractional numbers **-na* can probably be etymologically connected with the homophonic diminutive suffix **-na*, cf. (30).

(2) The vocative particle is preserved as a suffix, as it seems, in Shapsygh, South Abkhaz and Ashkharywa, being augmented to the vocative word ending in a consonant. Cf. Sh *Təšxan-a* 'hey, Tyshkhan !' (personal name), *tătă+ź-a* 'grandfather !' (ShD), *t-a* 'father!', *n-a* 'mother!' (NM). According to Kerasheva (ShD 86), if the vocative word ends in a vowel, this final vowel receives stress, cf. *č'aLắ, šə-zaγ* 'hey boy, stop it!' (ShD 86). In other Circassian dialects the vocative *a* is used in preposition to the vocative word, cf. Tem *a č'aL, ză zaγă* 'hey boy, stop it !' (ShD 86), *a, Wəcă* 'hey Wytsa !' (personal name) (Morf 257). The presence of the vocative suffix *-ă* can probably be seen in Circassian interjections used as call-words for domestic animals, cf. Kab *məźă-məźă* 'call-word for cows' as opposed to *məź*, used to drive away the cows, *k'ăcă-k'ăcă* 'call-word for goats' as opposed to *k'ăc*, used to drive away goats, *g°əră-g°əră* 'call-word for turkeys', as opposed to *g°ər*, used to drive away turkeys, etc. (cf. Morf 259). In Abkhaz cf. SAbx, Ash *Zurab-a* 'Zurab !' (personal name), SAbx *k'aǯ'-a* affectionate vocative for a small boy (< *a-k'aǯ'* 'penis pueri', a baby talk form from *a-q‿aǯ'* 'penis'), *s-ab-a* 'daddy!' (cf. *s-ab* 'my father').

(3) Examples: Kab *măz-a-k‿ă* 'the one who brings firewood' (*măz* 'forest', *-a+k‿ă* agentive suffix), *fəz-a-pλă* 'bride-show' (*fəz* 'woman', *pλă* 'look'), Ad *măq°-a+wă*,

Kab *măqʷ-a+wă* 'mower' (*măqˤ/măqʷ* 'hay', *wă* 'to beat, strike'), Ad *măL-a+xˤă* 'shepherd' (*măLə* 'sheep', suf. *-xˤă* < *xˤə* 'to pasture'). In Ubykh: *gˤəmāx́a* 'cow-shed' (< *gˤəma* 'cow', *x́a* 'stable'), *čātˤa* 'spotted horse' (*čə* 'horse', *tˤa* 'spotted'), cf. HV, p. 27, fn (1);

(7) This suffix is connected with CCirc **bza-bza* 'to intermix, interplay (of sounds)', **bzə-jə* 'ray of light', **qa-bza* '(to) clean', **ča-bza* 'to become transparent by settling (of fluids)', Ub *bza-bza* 'to tremble', CAbx **bza* in SAbx *aj-lə-bz-aa-ra* 'to shine, glitter' (*aj-lə-* prev. 'together from a mass', *-aa-* VRE), **bza-rə=bza-rə* 'to shine, glitter, play (of colours)'.

(8) Examples: Kab *śxˤant'ă-ps* 'very green' (*śxˤant'ă* 'green'), *ś'a-rə-ps*, Ad *č'ă-psə* 'completely new' (*ś'a/č'ă* 'new'), Kab *dəγă-ps* 'sunny' (*dəγă* 'sun'), SAbx *ħˤant'a-ps-ʒa* 'completely naked', *ǵalda-ps-ʒa* 'very tall' (*-ʒa* intensity suffix).

(10) Dumézil (Notes 12-14: 16-18) compares Ub *-ta* with Tapanta participial suffix *-ta*, but this latter comes from **-šʼ+ta*, meaning 'trace' (> Ash participial suffix *-šʼa*).

(11) The locative suffix **-ta* is well-preserved in the Abkhaz subgroup, cf. SAbx *a-pxʼa-r+ta* 'library' (*a-pxʼa-ra* 'to read', *-r-* connective suffix), *a-gˤ-ta* 'centre' (*a-gˤə* 'heart'), *a-cˤa-r+ta* 'mattress' (*a-cˤa-ra* 'to sleep', *-r-* connective suffix), etc. In other languages its presence can be found only in fossilised forms, cf. CCirc **śħa-(n)tʰa* 'cushion' (**śħa* 'head'), Ub *cˤə-nta* 'furrow' (cf. Ub *cˤa-γˤa* 'to plough'). The nasal element in Circassian and Ubykh can be an increment (cf. Sh *śħat* 'id.'). This suffix is connected with the Circassian preverb **tʰ-* 'on the surface', with the verb **tə* 'to stand, be somewhere' and with CAbx **ta* 'to be inside', prev. **ta-* 'inside', **ta* 'stand, place' (cf. ES I: 147).

(14) Examples: CCirc **daγˤə/a-k'a+ja* 'the most beautiful', **pλə-žˤə-k'a+ja* 'very red', Abzh *a-xˤašʼ-k'ak'a-ra* 'very dirty, turbid' (*a-xˤašʼə* 'dirty, turbid'). The final element in the Circassian suffix is another emphatic suffix **-ja* 'very', coming from the adjective **ja* 'bad'.

(15) The original meaning of the Ubykh suffix to express singleness was nearly lost and at the latest stage it became just a part of the stem, cf. *žˤa-(n)k'ə* 'flea', *cʼʷa-(n)k'ʼ* 'star', *cʼʷəpšʼə-k'ʼ* 'spark', *xˤa-nk'ʼ* 'grain (of wheat)', *xa-nk'ə* 'worm', *ca-k'ə* 'tooth; seed of grapes', *ʏa-cʼə-k'ʼ* 'spark', etc. Its etymological connection with CCirc **k'ʼaā-k'a* 'egg' (e.g. in CCirc **k̄ʼaāə-k'a* 'egg', with **k̄ʼaāə* 'hen', **c'a-k'a* 'nit', with **c'a* 'louse') is probably more clearly seen in such examples as Ub *t'a-k'ʼ* 'louse', *acʼə-k'ʼ* 'the stone/seed of fruit'. In Abkhaz this suffix still plays an important role in expressing singleness and indefiniteness, e.g. *a-lá* 'dog' (generic), *la-k'* 'a/one dog', *áps-wa* 'Abkhazian' (generic), *apsə́-wa-k'* 'an/one Abkhazian', etc. It is also present in the numeral 'one': Tap *za-k'ə*, SAbx

ak'ə.

(19) Note that CAbx **-śə* is not related to the other diminutive suffix, **-śa//*-śa-śa* 'small, little'. The latter is connected with CAbx **a-śa* 'dwarfish, undersized', **r-śa-śa* 'to make small' (**r-* causative), and probably with CCirc **śa-śa* (redupl.) 'to crumble, fall apart'.

(20) Examples: CCirc **śħa-xə-na-źə* 'lazybones' (**śħa-xə-nə* 'lazy'), **jənə-źə* 'mythological giant' (**jənə* 'big'), Ub *maśa-ž°ə* 'legend' (*maśa* 'word, story'), *tətə-ž°* 'old man' (*tətə* 'man'), SAbx *a-š'ap'-až°* 'big-footed', Tap *mg°a-ž°* 'potbellied', etc. It is derived from the CWC adjective **ž°'ə* 'old'.

(24) See Ch. **5**, under CWC **x°'* in (2).

(28) Examples: CCirc **γ°a-wə* 'town crier' (**γ°a* 'to bleat'), **źə-wə* 'master', **č^{h}ə-wə* 'horseman' (**č^{h}ə* 'horse'); in Abkhaz this suffix is still very productive: *a-c'a-j°ə* 'pupil' (cf. *a-c'a-ra* 'to learn'), *ajbaš'-j°ə* 'warrior' (cf. *ajbaš'-ra* 'to fight'), etc.

(30) The diminutive suffix **-na* can be tentatively seen in the following Circassian material: Ad *-na-w* (< **-na-wa*), Kab *-nə-j-t'ă* diminutive suffix (e.g. Ad *c'ək^{w}ə-na+w*, Kab *c'ək^{w}ə-nə+j+t'a* 'minuscule, very little/small', with *c'ək^{w}ə* 'little, small'). In Kabardian this morpheme is found also in such compound suffixes as *-nə+j+vă, nə+j-žă, -nə+j+ź-γă, -nə+j+š+t'ă* (cf. the examples in Urusov 271). It is possible that we should see the same morpheme *-nă* in CCirc **śħa-xə-na* 'lazybones' (**śħa-xə* 'lazy'), in the compound suffix Ad *-rə+nă*, Kab *-rə+j+nă*, cf. CCirc **γə-rə(+j)+na* 'whining' (**γə* 'to weep'), Kab *pă-t'ə+j+nă* 'snub-nosed' (*pă* 'nose'), **śə-na* 'lamb' (cf. CAbx **śə-śə* 'lamb', with diminutive suffix **-śə*). In modern Abkhaz this suffix is not very productive, cf. *a-č'k^{w}ə-n* (< **č'ə-k^{w}ə-na*) 'boy, young', *k°ac°ə-na* 'little hut' (*a-k°ac°* 'hut'), *tak^{w}až°ə-na* 'little old woman' (*a-tak^{w}až°* 'old woman'), etc. A direct parallel to Kab *-j+nă* is SAbx *-j+n-ʒa* in *x°əč'ə-j+n-ʒa* 'tiny, a little bit'.

(32) Examples: CCirc **psənč'a-rə-k^{w}ă* 'high-speed, fast' (**psənč'a* 'light, quick', **k^{w}ă* 'to go'), Kab *psənś'ă-rə-plă* 'quick-eyed' (*plă* 'to look'), CCirc **śaba-rə-k^{w}a* 'the one who trades lightly' (**śaba* 'mild, soft'), Kab *x°abźə-rə-Laźă* 'the one who works quickly' (*x°abźə* 'quick', *Laźă* 'to work'), etc. (cf. Morf 117) In Ubykh: *daγ'ə-rə-məʒə* 'kind of prickly tree' (*məʒə* 'prickle'), *g'-ā-r(ə)-γ°a* 'hollow' (*g'ə-* 'surface', *aγ°a* 'hole'), maybe also in *bz-a-rə-x°a* 'big pool' (*bzə* 'water', *a* ?, *-x°a* suf. 'big'). In Abkhaz: CAbx **bγa-rə-bəħ°ə/a* 'vertebra' (**bγa* 'backbone', **bəħ°ə/a* 'bone'), Abzh *a-šx̌a-r-pə* 'the mountainous area' (*a-šx̌a* 'mountain', *-pə* 'front'), SAbx *a-č'ə-r-g°ə* 'udder' (**č'ə* 'udder', **g°ə* 'core, centre'), etc. The Circassian instrumental affix, found in *ʔă-rə-tx* 'manuscript' (*ʔă* 'hand', *txə* 'to write'), *p'ś'ə-rə-p'ś'* 'by ten' (*p'ś'ə* 'ten'), etc., is probably derived from the same connective

affix (as in Abkhaz conjunctive *-*la* is used also in comitative and instrumental functions).

(34) Examples: Kab *Lăźă-ră+j* 'very industrious' (*Lăźă* 'to work'), *səmăžă-ră/ə+j* 'ailing, sickly' (*səmăžă* 'sick, ill'), Ad *g°əšʼəʔă-rə+j* 'talkative' (*g°əšʼəʔă* 'to talk'), etc. In Abkhaz: Bz (Zw) *a-ǧančʼačʼa-ra+j* 'very small (of size)', (Dzh) *a-mačʼa-rə+ja* '(biting) midges', etc.

(37) Examples: Ad *śəpqă-wə+j*, Kab *păž-wə+j* 'really true?/is that true ?' (Ad *śəpqă*, Kab *păž* 'true, truth') (cf. Urusov 275), SAbx (Bz) *j-awə-j-m-dər-x̌-wa-z* 'didn't he know ?//he couldn't possibly be unaware of this !'.

(38) Examples: Sh *jă dăy°ăw* 'how good !', *jă səmək"ăn* 'I won't go!' (cf. ShD 86), Ub *ja sə-q°a* 'oh, my son', SAbx *ja, jəšpa bzəjaw* 'how good !'. In all idioms this particle can be used as a part of the vocative, cf. Sh *jă sjəčʼaL* 'oh, my boy!', Abx *ja-a, Zurab* 'oh, Zurab' (in Abkhaz with a hint of protesting emotion); cf. also the Ubykh example given above.

(39) Examples: Ad *bzăžʼa-j*, Kab *bzăžă-j* 'extremely sly, cunning, harmful' (*bzažʼă/bzăžă* 'sly, evil'), Ad *ža-jă*, Kab *źă-j* 'slanderous' (*žă/źă* 'mouth'), Ad *maqa-j*, Kab *maqʼă-j* 'hoarse voice' (*maq/maqʼ* 'voice'). Cf. also Ad *-γa+j(ă)*, Kab *-γă-j*, compound suffix meaning excessiveness of the feature (R. Smeets, pers.comm., analyses *-γa-* here as perfective suffix), cf. Ad *jă-śʼa-γa+j*, Kab *jă-fa-γă+j* 'completely drunk', Ad *g°əbžə-γa+j(ă)*, Kab *g°əbźa-γă+j* 'very angry', Ad *γă-La-γa+j(ă)* 'intensively painted', etc. (cf. Morf 131, 132). In Circassian this suffix is supposed to be connected with *-*ja* in CCirc **qʼa-ja* 'bad' > 'very' (cf. Morf 131). In Abkhaz this now unproductive suffix is to be found in many reduplicated adjectives, used obviously to express the intensity of the feature, cf. CAbx **ša-jə=ša-jə* 'to shine brightly' (cf. **ša-ša* 'bright'), **pxa-jə=pxa-jə* '(to be) transparent', 'to play (of colours)' (cf. **pxa* 'warm', 'to shine'), **ca-jə=ca-jə* 'glittering, shining' (cf. **ca* 'hot'), etc.

(40) The supposed CWC diminutive suffix *-*jə* can be tentatively seen in such forms as: Ad *-tʼə+j*, Kab *-tʼă+j//-tʼə+j+nă* (in Ad *pă-tʼəj*, Kab *pă-tʼă+j//pă-tʼə+j+nă* 'snub-nosed', with *pă* 'nose'; cf. Urusov 244), Kab *-rə+j+nă* (e.g. in *γə-rə+j+na* 'whining', from **γə* 'to weep'), *-nə-j-tʼă* diminutive suffix (in *cʼək"ə-nə+j+tʼa* 'minuscule, very little/small', with *cʼək"ə* 'little, small'). In Kabardian this morpheme is found also in such (compounded) diminutive suffixes as *-nə+j+vă, nə+j-žă, -nə+j+ź-γă, -nə+j+š+tʼă* (cf. Urusov 271). In the Abkhaz group: Tap *cʼə-j-s* 'bird', SAbx *cʼə-j-s* 'birdy' (cf. *a-cʼə-s* 'bird'), SAbx *a-tə-j-c* 'straw' (cf. *a-tʼa* 'straw', *-cə* 'single'), *a-k"ə-j-c* 'sparkle', *x̌"əčʼə-j+n-ʒa* 'tiny, a little bit'.

3. CWC VERBAL INFLECTIONAL AFFIXES

(1) **a* Ub *a-* 3d p. prefix indicating subject, agent, indirect or direct object in sg. and pl. (HV 2), CAbx **a-* 3d. p.sg./nonhum prefix;

(2) **a* CCirc **a-* 3d p.pl. prefix of subject and indirect object, Ub *-a* plural suffix in presence and imperfect;

(3) **-a* CCirc **-a*, CAbx **-j+a* interrogative suffix;

(4) **ba* CCirc **-ba* affirmative-interrogative suffix (e.g. Ad *ma-kʷă-ba* 'but he goes, doesn't he?', *kʷa-γă-ba* 'but he did go, didn't he?'), Ub *-ba* suffix of hypothesis, condition (e.g. *sə-j-k'a-ba* 'if I go'), CAbx **-ba* interrogative particle (e.g. *sara-ba* '(did you say) "me" ?';

(5) **-da* Ub *-da* suffix expressing hypothesis, supposition or condition, 'if', CAbx **-(n-)da* desiderative suffix;

(6) **-tə* Bzh *-tʰ* suffix of the second future tense (cf. Kumaxov 1971: 214), in other Adyghe dialects *-šʼtə* (< **-šʼ+tʰə ?)*, Ub *-t* (< **-tə*) suffix of the future tense;

(7) **-t'ə* Ub *-awə-jt'* suffix of the singular past future, *-aj+t'* suffix of Aorist and plu-perfect, CAbx **-wa+j+t'ə* suffix of the present tense (**-wa-* present tense marker, **-t'ə* suf. of finite dynamic forms), **-j+t'ə* Aorist suffix, **-x̌ʼa+j+t'ə* Perfect suffix;

(8) **-gʼa* CCirc **-gʼa/*-k'ʼa*, CAbx **-ga* instrumental suffix;

(9) **gʼa* Ub *-gʼa* emphatic particle in imperative (e.g. *a-w-ǯə-qʼa-gʼa* 'do speak !', *zak'ʼa wə-m-gˠāqʼa-gʼa* 'don't be in such a hurry !', rarely as a proclitic: *wə-k'ʼa-ba gʼa wə-k'ʼa* 'if you want to go there, do go !', cf. HV 686), SAbx *-gʼą* suffix of endearment in vocatives (e.g. *dad-gʼa* 'daddy !')

(10) **-gˠa* CCirc **-gˠa*, Ub *-gʼa* suffix of habitual actions;

(11) **-gˠa* CCirc **-gˠa* adverbial suffix, Ub *-gʼə* (Charachidzé 1989: 405), *-gʼa* (DA III: 118; Kumaxov 1971: 167) gerundial suffix;

(12) **-kˠa* Ub *-kʼa* plural suffix in the verb *qʷa* 'to take, catch' (pl. *qʷa-kʼa*; HV 797), and the plural prefix, replacing the prefix *wə-* in a number of verbs (cf. HV 797), CAbx **-kˠa* nominal and (more rarely) verbal plural suffix. Both can be compared with CCirc **kʰˠa(n)də* 'much, many';

(13) **-Gʼa* CCirc **-q̄a* affirmative suffix, CAbx **-ćʷa-γʼa* affirmative suffix meaning 'precisely, exactly' (**-ćʷa* emphatic particle);

(14) **ćˠə-* Ub *ćˠə-*, CAbx **ćˠə-* prefix, expressing the action committed against the will of the person;

(15) **za-* CCirc **za-*, Ub *za-* reciprocal prefix;

(16) **zə-* CCirc **zə-* relational prefix used to form participial forms, e.g. Ad *zə-šˇă-ră-r*, Kab *zə-šă-r* 'the one who leads', Ad *zə-fă-s-ħə-yă-r*, Kab *zə-xˇă-s-ħa-r* 'the one for whom I carried', CAbx **zə-* relational prefix used to form participial forms: *jə-z-ca-wa* 'the one who goes';

(17) **sə-* CCirc **sə-*, Ub *sə-*, CAbx **sə-* personal prefix of 1st p.sg.;

(18) **-śa* Ub *-śa* gerundial suffix (e.g. *a-j-k'a-śa* '(the one) who is coming', HV 1593), CAbx **-śa* adverbial/transformative suffix, 'as' (e.g. CAbx **qaćˇa-śa* 'as a man', **laba-śa* 'as a log');

(19) **śˇə-* CCirc **śˇə-*, Ub *śˇə-*, CAbx **śˇə-* personal prefix of 2st p.pl.;

(20) **-šˇ(a)* Ub *-šˇa-j* suffix of emphatic imperative (*-j* 'and'), CAbx **-jə-šˇə* 'id.', also expresses a mild request (**-jə* 'and');

(21) **-xˇa* CCirc **-xa* suffix meaning 'completely', CAbx **-xˇa* Perfect suffix;

(22) **ma* CCirc **-ma* instrumental suffix (cf. ES II: 96), Ub *-ma* 'id.'; cf. CAbx **a-m-ħa* 'handle', **ma* 'hand', **ma* 'to have';

(23) **-ma* CCirc **-ma* conditional suffix, CAbx **-ma* interrogative suffix;

(24) **mə* CCirc **mə*, Ub *mə*, CAbx *mə* negative affix;

(25) **-mə-jə* CCirc **-mə-jə* suffix with conceding meaning, CAbx **-mə-jə* interrogative suffix meaning 'isn't it ?';

(26) **na-* Ub *nə-* (sg.), *na-* (pl.), CAbx **na-* (sg./nonhum) prefix used as a subject in a) transitive verbs containing a preverb, and in b) trivalent verbs;

(27) **-nə* Ub *-nə*, CAbx **-nə* gerundial-participial suffix;

(28) **-nə-ʒa* Ub suf. *-aw-n-ʒa*, CAbx suf. **-nə-ʒa* 'till, up to';

(29) **-la* Ub *-La* conjunctive suffix 'and', instrumental suffix, CAbx **-la* comitative suffix 'with', instrumental suffix (in Abx in the latter function can also be used as a prefix);

(30) **-wa* gerundial suffix: CCirc **-wa* (e.g. CCirc **čˇa-wa* 'running'), CAbx **-wa* (e.g. SAbx *sə-jˇ-wa* 'I running', *sə-pa-wa* 'I jumping');

(31) **wa* CCirc **wa-* present/dynamic prefix, CAbx **-wa/ə* present tense suffix;

(32) **wə-* CCirc **wə-* the verbalising prefix (e.g. **wə-bza* 'to fawn, cringe', from **bza* 'tongue'), Ub verbal prefix *wə-* (e.g. *wə-tˇa* 'to go out'; cf. HV 2050);

(33) **-wə* CCirc **-(a+)wə* marker of transformative case (e.g. Kab *txəλə-w*, Ad *txəλ-ăw* 'book', transform. case), adverbial suffix (e.g. *daxa-w* 'nicely, beautifully'), Ub *-w* adverbial suffix (e.g. *də-xăxa-w* 'surprising', with the relative prefix *də-* and *xăxa* 'to be surprised'), CAbx **-wə*

adverbial suffix (e.g. Bz *fa-w*, *ʒ°ə-w* 'sth to eat, sth to drink', *jə-bzəja-w* 'that which is good');

(34) **wə-* CCirc **wə-*, Ub *wə-*, CAbx **wə-* personal prefix of 2d p.sg.;

(35) **jə-* CCirc **jə-*, Ub *jə-* personal prefix of 3d p. pl., CAbx **jə-* personal prefix of 3d p. sg. (nonhum) and 3d p.pl.;

(36) **-jə* CCirc **-jə*, Ub *-j*, CAbx **-jə* interrogative suffix;

(37) **-jə* CCirc **-jə*, CAbx **-jə* categorical/affirmative suffix, in Ubykh in the complex suffix *-šʼa-j* of emphatic imperative.

Comments to the items in no.:

(1) Examples: Ub *a-j-n-šʼ-qʼa* "it-hither-he-made", *a-kʷə-n* 'it rains', etc.; Abx *j-a-ga-wa-jt'* "it(nonhum)/them-it-carry-pres-dyn/fin" = 'it carries it/them'.

(2) Examples: CCirc **j-a-čʰʼa* "him-they-lead" = 'they lead him', Ad *ø-a-t+jă-pλ-a+γ*, Kab *j-a-t+jă-pλ-a+ś* "he-them-above-look-perf" = 'he looked at them' (Urusov 287), Ub *šʼə-šʼ-a-n* "we-become-pl.-pres" = 'we become' (cf. *sə-šʼə-n* 'I become'), *šʼə-šʼ-a-na-j+λ* 'we became' (cf. *sə-šʼə-na-j+t'* 'I became'). Cf. also the plural **a* in the Circassian and Ubykh relative suffixes: Ad *cʼəfə-m*, Ub *a-tətə-n* 'man' (erg./sg.) vs. Ad *cʼəf-m-ă*, Ub *a-tət-n-a* 'people' (erg./pl.) (cf. Kumaxov 1981: 231).

(3) Examples: Ad *ma-kʷ-a* 'does he go ?', *śʷə-kʷa-γ-a* 'did you go ?', CAbx **-j+a* > Tap *-ja*, cf. *j-a-l-b-dər-ħa-ja* 'how do you (fem/hum) know this ?'. Though one can suspect that the Tapanta suffix *-ja* could have been borrowed from Circassian (as it is not found in other dialects of the Abkhaz subgroup), the fact that it is used in the geographically distant Adyghe, not in the neighbouring Kabardian, can testify to its genuine character in Tapanta.

(5) Examples: Ub *waba-n qʼa-qʼa-da* 'if God decides', *γʷa wə-kʼʼa-w-tə-da-n* 'if you have to depart'; SAbx *jə-z-dər-wa-n-da* 'if I knew !', *s-tʷa-nda-z* 'if I could sit !'.

(14) Examples: Ub *sə-cʷə-gʼəgʼa-n*, SAbx *sə-j-cʷ-śʷa-wa-jt'* 'I am afraid of him', Ub *a-s-cʷə-λaqʼa* 'it is dear for me', SAbx *jə-s-cʷə-wadajʷə-w+p'* 'it is difficult for me'. The prefix is etymologically connected with Abx-Ub *cʷə* 'bad, evil'. Though it is tempting to compare with this common Abkhaz-Ubykh prefix the CCirc version prefix **śʷa-* (cf. FL 32; Notes 5: 28), the glottalisation in Circassian points to a different morpheme.

(16) The prefix *zə-* can be used in Abkhaz as a relative possessive prefix 'whose', cf. *z(ə)-nap'ə* 'whose hand'. Historically it goes back to the CWC numeral **za* 'one'.

(23) Examples: Circ *kʷă-mă* 'if he goes', *wə-dă-mă* 'if you sew', SAbx *də-w-ga-wa-ma* 'do you take him?', *wə-tʷa-w-ma* 'are you sitting?'.

(25) Examples: Ad *kʷa-γă-mə+j*, Kab *kʷa-mə+j* 'even though he has gone', Ad *ə-txə-šʲtə-γă-mə+j*, Kab *jə-tx-a-mə+j* 'even though he has written', SAbx *jara jəpa j-a-wə-mə-j* 'isn't he his son?/he is his son, isn't he?', *jə-wə-ma-mə+j* 'don't you have it?'. The Circassian suffix is analysed by Urusov 280 as combination of the conditional suffix **-ma* plus the conjunctive suffix **-jə* 'and', but in this case we would have expected the form **-ma+jə*, not **mə-jə*. That is why I prefer to analyse both Circassian and Abkhaz suffixes as combination of the negative affix **mə* with the interrogative suffix **-jə*.

(26) Examples: a) Ub *ø-čʲ+a+bγʲa-nə-w-s-q'a* "him-prev.(horse-dir-upper part)-(s)he/it-enter-sit-perf" = '(s)he/it has put him/her/it on the horse', *ø-čʲ+a+bγʲa- n+ā-w-s-q'a* "him/her/it-prev.-they-enter-sit-perf" = 'they have put him/her/it on the horse', SAbx *jə-dᵊə-l-na-ga-wa-jt'* "it-prev.(field+down)-it-carry-pres-dyn/fin" = 'it carries it out' (cf. *jə-dᵊə-lə-r-ga-wa-jt'* 'they carry it out'); b) Ub *a-sə-n-γa-bəjā-n* "it-me-(s)he/it-caus-see-pres" = 'he shows them to me', *a-sə-n+ā-γa-bəjā-n* "it-me- they-caus-see-pres" = 'they show them to me', SAbx *jə-s-na-r-ba-wa-jt* "it(nonhum)/ them-me-it-caus-see-pres-dyn/fin" = 'it shows it/ them to me' (cf. *jə-s-də-r-ba-wa-jt* "it-me-they-caus-see-pres-dyn/fin" = 'they show it to me').

(27) Examples: Ub *a-La-sə-nə*, SAbx *d-tʷa-nə* '(s)he having sat', Ub *a-čʲ-a-bγʲa-wə-sə-n*, Abzh *d-čə-žᵊ-la-nə* '(s)he having sat on the horse'.

(28) CWC **-ʒa* is probably connected with *ʒa* in CCirc **pʰə-ʒa* 'to add to, attach, continue' (**pʰa* 'nose'). Cf. also Ub *q'a-ʒə* 'to approach' (*q'a-* 'place'), *gʲə-ʒa* 'great', CAbx **ʒa* 'to reach', intensity suffix **-ʒ(ʒ)a* (e.g. in **də-wə-ʒʒa* 'great').

(29) See examples and comments to this affix in Chapter. 5, under CWC **l* in 3 (11).

(31) Examples: Kab *s-ăw-tx* 'I am writing', *s-ăw-kʷă* 'I am going'. In the Abkhaz dialects the presence suffix has two forms: *-wa-* and *-wə-*, cf. Bz */s-ć-wa-j+t'/ = {sə-ća-wa-j+t'} = [scʷojt']*, Abzh */s-c-wa-j+t'/ = [scwejt']*, Sa */s-c-wə-j+t'/ = {sə-ca-wə-j+t'} = [scujt']* 'I go'. Unlike other Abkhaz dialects, Tapanta does not use *w-* in the presence forms, cf. *s-ca-d* 'I go' vs. *s-cə-j+d* 'I went'. In Adyghe the dynamic marker **awə* developed into *ă*, cf. *s-ă-txə* 'I am writing'. The same prefix is used also in Kabardian in the form of 3d p.sg. of the transitive verbs, cf. Ad *j-ă-txə*, Kab *j-ă-tx* 'he is writing', Ad *j-ă-ʔə-γə*, Kab *j-ă-ʔə-γ* 'he holds it' (opposed to Ad *ə-ʔə-γ*, Kab *jə-ʔə-γ-ś* 'he holds it' ?; cf. Urusov 266).

On the basis of Circassian examples it is possible to assume that Common Abkhaz might probably also have had two markers of presence/dynamic, similar to that of Circassian, namely **wə* and **a* (perhaps originally with a different distribution). Different Abkhaz-Abaza dialects demonstrate various examples of

their use. Sadz Abkhaz employs **wə*, hence the form */s-c-wə-j+t'/* = *{sə-ca-wə-j+t'} = [scujt']* 'I go', **a* is used in Tapanta, hence the form */s-ca-d/* = *{sə-ca-a-d}* 'id.' (as opposed to */s-cə-j+d/* = *{sə-ca-jə+d}* 'I went'), and the combination of the two, **wə+*a* —> **w+a* was generalised in South Abkhaz (Bz */s-ć-wa-j+t'/*, Abzh */s-c-wa-j+t'/*). Cf. also SAbx *jə-s-fa-wa-n*, Tap *jə-s-f-wa-n* 'I was eating it'. In Circassian we observe either the use of one of these prefixes (namely, *ă*) in Adyghe, or both of them, *ă* (< **a*) and *wă* (< **wə+*a*), in Kabardian. This hypothesis seems even more likely in the light of a quite plausible connection of the Common West Caucasian dynamic prefix **w-* with the CWC verb **wə* 'to do', preserved as such in Abkhaz, and as a verbal derivational prefix with the meaning 'to do, make become' in Circassian and Ubykh, cf. CCirc **wə-šx̌ʷant'ə* 'to become blue' (CCirc **šx̌ʷant'a* 'blue'), **wə-p'c'anə* 'to undress' (CCirc **p'c'ana* 'bare, naked'), Ub *-wə-tʷə-* 'to pull out', 'make come out' (*tʷə* 'to come out') (cf. Morf 158; MS 113-114).

(36) Examples: Ad *n-jă-p-əj*, Kab *n-wă-b-jə* 'today ?', Ad, Kab *să-r-əj* 'me ?' (Urusov 275), Ub *šʼə-j* 'who ?', *wana sākʼa-j* 'what is it ?', SAbx (Bz) *wə-ź-ć-wa-j*, (Abzh) *wə-z-c-wa-j* 'why do you go ?', Tap *sa-rə-j* 'me ?'. In Circassian this suffix is supposed to be derived from the conjunctive suffix **-jə* 'and' (cf. Urusov 292), and the same can be assumed for the corresponding suffix in the sister-languages.

(37) Examples: Ad *wă zə-j qa-pʼ-ʔʼă-ră+pə-j*, Kab *zə-rə-j žə-pʼ-ʔă-r-qʼə+mə-j* 'but you don't say anything, do you ?', Ad *wăs q-jă-sə-γə-j*, Kab *wăs qʼ-jă-sa-j* 'it turns out that it has already been snowing !', Ad *năf śə-γ-əj*, Kab *năxʼ ś-a-j* 'it is already dawn!', etc. (cf. Urusov 275), Abzh *wə-ca-j* 'do go !', *jə-sə-wə-mə-r-ba-nə-j* 'don't you dare to show it to me !', *d-ca-j+tʼə-j* 'but he has gone !'. This emphatic particle is supposed to be derived from the conjunctive suffix **-jə* 'and'.

4. CWC VERBAL DERIVATIONAL AFFIXES

(1) **a* — CCirc **a*, Ub *a*, CAbx **a* directional affix 'toward';

(2) **-qʼa* — CCirc **-qʼa* affirmative suffix in **śʼ-qʼa* 'to know' (tr.), 'to perform (itr.), CAbx **-ćʷa-qʼa* affirmative suffix, 'precise, accurate';

(3) **ć°a/ə* — CCirc **ć°ʰʷə-* verbal prefix adding the meaning of intensity to the action, cf. Ad *tx̌ə* 'to scratch, tear (off)', *ć°ə-(n)tx̌ă* 'to tear apart', *ć°ə-(n)tx̌a-kʷă* 'predator, robber', Ad *zăxă-ć°ə-(n)tx̌ă*, Kab *zăxă-fə-tx̌ă* 'to tear out, apart, scratch all over' (*zə-* reciprocal prefix, *-xă-* 'mass'), Ub *-ć°a* verbal and nominal suffix of excessiveness (e.g. *a-s-fə-ć°a-n* 'I eat too much'), CAbx **-ć°a* verbal suffix of excessiveness (e.g. *jə-s-fa-ć°a-wa-jt'* 'I eat too much'), 3d

p.pl./hum suf. (e.g. *aba-ć°a* 'fathers');

(4) **ć‴a* Ad *ś‴a* emphatic particle (Rus же, что же, как же; cf. Morf 253), Kab *-f'ă* adjectival suffix denoting a big quantity of sth: *g°aś'a-f'ă* 'strong, energetic' (*g°aś'ă* 'strong'), CAbx **ć‴a-q'a* particle 'precise, just', **-ć‴a* emphatic particle (SAbx *d-g°ərγ'a-ć‴a* '(s)he (being) very happy'); cf. also comparison no. (5) under CWC **ć‴*;

(5) **γa/ə-* CCirc **γa-*, Ub *γə-* causative prefix;

(6) **x̌'a/ə-* Ub *x̌'a-* prefix 'towards, by, at, for', the benefactive prefix, CAbx **a-x̌'ə-* adverbal prefix of reason;

(7) **-la* CCirc **-La/ə* durative/excessive suffix, CAbx **-la* durative suffix;

(8) **rə-* Ub *də-*, CAbx **rə-* causative prefix;

(9) **-jə* CCirc **-jə*, Ub *-jə*, CAbx **-jə* verbal suffix.

Comments to the items in no.:

(1) Examples: Ub *sə-w-ā-La-n* 'I arrive by you' ("I-you-dir-arrive-pres"), *ø-s-ā-La-n* 'he arrives by me' ("he-me-dir-arrive-pres"). In Abkhaz this affix is found in compound postpositions like **a+x̌'ə* 'towards', **a+q'a* 'id.', etc. It is possible to see the same affix in the vowel *a*, expressing centripetal verbal meaning (opposed to the vowel *ə* expressing centrifugal semantics). Cf. CCirc **jə-č^{h}'a* 'to lead somewhere' (**jə-* prev. 'inside'), **t^{h}+ja-č^{h}'a* 'to lead upward' (**t^{h}+ja-* prev. 'above') vs. **jə-č^{h}'ə* 'to lead from somewhere', **t^{h}+ja-č^{h}'ə* 'to lead from above' (cf. Morf 147-148), CAbx **ta-c'a* 'to put inside' vs. **tə-c'ə* 'to come out of sth' (**ta-* prev. 'inside'). The same affix can probably be seen in such preverbs as CAbx **g°-a-* 'inside' (**g°-a-la-ś°a* 'to remember'), **q-a-* 'upward' (**q-a-la* 'to climb'), Ub *g'-a-* (*g'-ā-γa* 'to hope'), etc. For Ubykh such an analysis is suggested by Dumézil (cf. Notes 21: 13).

(7) See comments to this suffix in Chapter V, under CWC **l* in 3 (10). In Circassian the same suffix is used in nominal derivation, cf. CCirc **wəzə-La* 'sickly, ailing' (**wəzə* 'sick'), **wa-čʼxə-La* 'rainy' (**wa-čʼxə* 'rain'), Ad *g°əš'ə?ă-L* 'talkative' (*g°əš'ə?ă* 'to talk'), etc.

(9) Examples: CCirc **k'ə-jə* 'to shriek, howl', CAbx **k'ə-jə* 'to miaow', 'to caw (of some birds, e.g. raven)', CCirc **ś‴ə-jə* 'to squeak, cheep', CCirc **ś°ə-jə*, Ub *ś°əjə*, CAbx **ś°ə-jə=ś°ə-jə* 'to whistle' (cf. CAbx **ś°ə-ś°ə*, **ś°ərə-ś°ərə* 'id.'), CCirc **wə-śə-jə/a* 'to admonish, exhort', Kab *wə-śə-j-a+k‴ă* 'teacher, instructor' (*wə-* verbal prefix, *-a+k‴ă* agentive suffix), CAbx **š°ə-jə* 'to damn, curse', CCirc **ĝə-ja/ə* 'to reproach, chide' (cf. CAbx **γ'ə* 'to scold, rail, abuse, quarrel, raise voice on smb').

5. CWC PREVERBS

(1) **bL'a-* CCirc **bLa-* prev. 'by side, bypassing', Ub *bLa-*, CAbx **bž'a-* prev. 'in, between, among'. Abkhaz preserves also the independent preposition **bž'a* 'between, among';

(3) **da/ə* CCirc **da-* comitative prefix (e.g. **da-kʷa* 'to go together', **kʷa* 'to go'), CAbx **də-* prev. 'beside, by' (e.g. *a-d-tʷa-la-ra* 'to sit by', *a-tʷa-ra* 'to sit', *la* VRE); cf. probably also Ub *-da* in *k'a-da* 'to accompany' (*k'a* 'to go') (?);

(4) **dˤə-* CCirc **də-* prev. 'in (a plane, flat space)', CAbx **dˤə-* prev. '(to) out side'; cf. also Ad (Tem) *adə-č'ă* 'outside' (*-č'ă* < **-k'a* instrumental suffix), SAbx *a-dˤ-a+x̌ə* 'outside' (*-a+x̌ə* directional-locative suffix); the original noun is preserved in Abkhaz and Ubykh (CAbx **dˤə*, Ub *dˤə* 'field, plane');

(5) **ta/ə-* CCirc **tə+ja-* prev. 'on, in', CAbx **ta-* prev. 'in, inside';

(6) **tʷa/ə-* CCirc **t'ə-sə*, Ub *tʷa-sə*, CAbx **tʷa* 'to sit down', CCirc **t'ə-λə* 'to lie down' (**λə* 'to lie');

(7) **gˤ(ə)-a-* Ub *g'-a-*, CAbx **gˤ-a-* preverb in emotive verbs (deriving from **gˤə* 'heart');

(8) **gˤə-* Circ **gˤə-*, Ub *gˤə-*, CAbx **gˤə-* preverb in emotive verbs (deriving from **gˤə* 'heart');

(9) **gˤə-* CCirc **gˤə-*, Ub *gˤə-*, CAbx **gˤə-* prev. 'on, on the surface'; may be etymologically identical with the preceding item;

(10) **gˤəgˤə-* Ub *gˤəgˤə-* preverb in: *gˤəgˤə-s* 'to stay, remain' (*sə* 'to sit'), *gˤəgˤə-tˤ* 'to stay, sojourn' (*tˤ* 'to be somewhere'), SAbx *a-gˤəgˤ-ta-ž'-ra* 'to leave smb/sth without attention' (*a-ta-ž'-ra* 'to put, throw inside'), *a-gˤəgˤ-ta-x̌a-ra* 'to become an orphan, to stay without attention or care' (*a-ta-x̌a-ra* 'to stay, be stuck inside'). Abkhaz preserves this morpheme as an independent verb and noun, cf. CAbx **gˤəgˤə* 'to crowd, throng', 'den, lair', AT 19: 'to lie down (of swine)';

(11) **k'a-* CCirc **k'a-rə-* prev. 'on the a vertical surface', CAbx **k'a-* prev. 'on the flat (vertical or horizontal) surface';

(12) **Ga-* CCirc **q̄a-*, CAbx **ħa-* pref. 'hither';

(13) **qˤə-* CCirc **q̄ˤə-ħa* 'to go behind sth, disappear' (**ħa* 'to enter'), i.e. Kab *dəγă-r qʷə-ħ-a-ś* 'the sun disappeared', *qʷə-ħa-γˤa* 'the time of sunset' (*-γˤa* 'the time of) (KR 242), CAbx **qˤə-la* 'to fall (of night, twilight)', 'getting dark' (**-la* 'to enter');

(14) **q'a/ə* CCirc **q'ə-* local preverb, CAbx **-q'a* directional suffix 'to/in the

place', cf. also locative prefix *q'a-* in Tap *q'a-ć^{w}aǎ-ra* 'to hide';

(15) **q^{w}ə-* CCirc **q^{w}ə-*, CAbx **q^{w}ə-* prev. 'by, at'; the preverb is derived from the noun preserved in CCirc **q^{w}ə* 'mouth';

(16) **č'a-* Ub prev. *č'a-* 'before, in front of', CAbx **č'a-* prev. 'on the surface', 'in/out of the mouth', suffix 'in, at'; the preverb is derived from CWC **č'a* 'mouth' (> Ub *č'a*, CAbx **č'a* 'mouth', 'face');

(17) **ś^{ə}ə-* CCirc **ś^{ə}ə-č'ə* 'to rob', 'to pluck (a bird)', CAbx **ś^{ə}ə-* prev. 'clothes on/off (the body)';

(18) **šʻa/ə-* CCirc **š^{h}ʻə-* locative prefix, cf. Ub *šʻ-* in *šʻ-a+xʻa* 'until';

(19) **na-* CCirc **na-*, CAbx **na-* prev. 'there' (e.g. CCirc **na-sə*, CAbx **na-ʒa* 'to reach', Kab *sə-nă-pλ-a-ś*, SAbx *s-na-pšə-j+t'* 'I looked there');

(20) **la-* Ub *La-* local preverb (e.g. *ø-La-t^{ə}-qʻa* "(s)he-prev.-stay-perf."), CAbx **la-* 'down(wards)' (e.g. *s-la-pšə-j+t'* 'I looked down');

(21) **rə-* CCirc **p^{h}a-rə-*, CAbx **pə-rə/a-* prev. 'through the front part' (**pa* 'nose', **rə* 'through, across');

(22) **ja/ə* Ub *jə-* preverb meaning 'in the direction of the speaker' (*wə-j-kʻa-n* 'you go hither'), CAbx **ja-* prev. 'over sth' (e.g. SAbx *a-ja-s-ra* 'to go over sth'); in CCirc **-ja/ə* suffix 'up, upwards' (e.g. Ad *dă-k^{w}ă-jă*, Kab *dă-k^{w}ă-jə* 'to climb').

Comments to the items in no.:

(5) It is noteworthy that in some Circassian dialects the preverb **tə-ja-* preserves perhaps its older meaning, corresponding to Abkhaz, i.e. 'in, inside', cf. Mozdok Kab *tək^{ə}ănə-m t-jă-λə* 'to lie in the shop', Sh *t-jă-t* 'he stands (inside)' (cf. Morf 171).

(6) CWC **t^{w}a/ə* is the old preverb, probably with the original meaning 'down'. Abkhaz did not preserve the root **sə* 'to sit'.

(7) Examples: Ub *gʻ+ā-γa* 'to hope', CAbx **g^{ə}+a-pxa* 'to like', **g^{ə}+a-q^{ə}ə/a* 'to think, suppose', etc. Etymologically this preverb presents a combination of **g^{ə}ʻə-* 'heart' with the directional affix **a*.

(14) See comments to the preverb **q'a/ə* under CWC **q'*.

(21) Kumaxov (Morf 174, 177) regards the element *-rə-* in the Circassian preverbs **p^{h}a-rə-* 'before, beside' (**p^{h}a* 'nose'), **k^{w}ac'ə-rə-* 'through, across the inside' (**k^{w}ac'ə* 'inside'), **p̄q̄ə-rə-* 'through the body' (**p̄q̄ə* 'body, carcass'), etc. as a phonetic increment, which is difficult to accept given its close Abkhaz parallel. The translative preverb **rə/a-* 'across' is likely to be connected with the Common West Caucasian root preserved in CAbx **rə* with the specialised meaning 'to cross water (sea, river)'.

I. COMMON WEST CAUCASIAN MORPHOPHONOLOGY: ABLAUT

1. THE ALTERNATION *-ə ~ *-ø AS A MEANS OF CONTRASTING NOMINATIVE AND ERGATIVE FORMS

One of the features shared by all West Caucasian languages is the voicing of the underlyingly voiceless consonants of the ergative prefixes in the position before the voiced consonantal onset of transitive verbs.

Nominative prefixes:
(a) before the voiceless root onset of intransitive verbs: Ad *sə-kʷa-γ*, Kab *sə-kʷa-ś* 'I went', Ad *sə-pχa-ś'(ă)*, Kab *sə-pχa-ś'ă-ś* 'I am a carpenter', Ub *sə-k'a-n* 'I go', *sə-pərə-n* 'I fly', LAbx *s-ca-wa-j+t'* 'I am going', *s-pər-wa-j+t'* 'I am flying'.
(b) before the voiced root onset of intransitive verbs: Ad *sə-Lăž'aγ*, Kab *sə-Lăźaś* 'I worked', Kab *sə-briĝadirś* 'I am a team-leader', Ub *sə-γən* 'I dry', LAbx *s-gəla-wa-j+t'* 'I stand up'.

Ergative prefixes:
(a) before the voiceless root onset of transitive verbs: Ad *wə-s-λăγ°ə-γ*, Kab *wə-s-λăγ°-a-ś* 'I saw you', Ad *ø-ś°-ś'ə-γă*, Kab *ø-f'-ś'-a-ś* 'you (pl.) have made it', Ub *a-s-fə-n* 'I eat it', *a-s-kʷə-n* 'I kill it', LAbx *jə-s-fa-wa-j+t'* 'I eat it', *jə-ś°-c'a-wa-j+t'* 'you learn it'.
(b) before the voiced root onset of transitive verbs: Ad *ø-z-ź°a-γă*, Kab *ø-z-v-a-ś* 'I ploughed it', Ad *ø-ź°-də-γă*, Kab *ø-v-d-a-ś* 'you (pl.) have sewn it', Ub *a-z-žə-n* 'I support it', *a-z-La-n* 'I cheat him', SAbx *jə-z-ga-wa-j+t'* 'I take it', *də-z-ž'a-j+t'* 'I cheated him'.

According to Rogava 1959: 505-506, originally Circassian had two forms of personal prefixes (from the point of view of their vocalisation): **Cə-* as markers of subject in intransitive verbs and of direct object in transitive verbs (see Circassian examples in (aa), (ab)), and **C-* as markers of subject in transitive verbs and of preverb object in both transitive and intransitive verbs (cf. Ad *s-š'a-γă*, Kab *s-ša-ś* 'I led him'; Ad *s-f-əj-š'a-γ*, Kab *s-x°-əj-ša-ś* 'he led him for me'); cf. also Kumaxov 1971: 244-246. Other West Caucasian languages show a similar picture, cf. the vocalisation of the direct object in such examples as Ad *wə-s-ă-λăγ°ə*, Kab *wə-z-ăw-λaγ°*, Ub *wə-z-bja-n*, SAbx *wə-z-ba-wa-j+t'* 'I see you'. Though in some cases the West Caucasian languages display some discrepancies in the vocalisation of personal prefixes caused by later developments, in general

we find here a very similar picture.

It is important, however, to connect the character of vocalisation of the personal markers with their voicing before the voiced root onset of transitive verbs. According to phonotactic rules of modern West Caucasian languages, the voicing of underlyingly voiceless consonants occurs normally only in the position before the following voiced consonant (*C* —> *C*^{v}___*C*^{v}), i.e. the assimilation is always regressive. Combinations *C*^{v}*C* always result in *CC* (*C*^{v} —> *C*___*C*). In cases when the original word of the structure *C*^{v}*VCV* loses the vowel of the first syllable, the output is *CCV* (in Abkhaz it can also be *C*^{v}*CV*), rather than *C*^{v}*C*^{v}, cf. such examples as CWC **bək'ə* 'to cut, trample, pinch' > CCirc **p'k'ə*, Ub *bak'ə*, CAbx **bk'ə//pk'ə*; Ub *bəč'ə* vs. SAbx, Ash *a-bč'ə//a-p'č'ə*, Tap *p'č'ə* 'measles'; Ub *bəc'ə* vs. Bz *a-r-bć'-ra*, Abzh *a-r-bəc'-ra*, Tap *r-bc'-ra//r-pc'-ra//r-p'c'-ra* 'to crumble, crumple, rumple', etc. Voicing of voiceless consonants in the West Caucasian languages does not occur in intervocalic position either (the Kabardian intervocalic voicing involves only personal markers, and it is a purely Kabardian phenomenon).

We are thus confronted with the following facts: (a) in West Caucasian languages voicing of underlyingly voiceless consonants only occurs in direct contact with a following voiced consonant, (b) voiceless personal markers regularly become voiced before the voiced onset of a transitive verb and remain voiceless before the voiced onset of an intransitive verb, (c) both transitive and intransitive verbs can have either a voiced or a voiceless onset. The analysis of these facts explains why the West Caucasian voiceless personal prefixes become voiced before the voiced onset of a transitive verb and remain voiceless before the voiced onset of intransitive verbs. One can assume that originally the personal markers of intransitive verbs were vocalised (**Cə-*), contrary to the non-vocalised personal markers of transitive verbs (**C-*), i.e.:

(a) pers. pref. **Cə-* —> **Cə-*___ intransitive verbs (hence **Cə+C*^{v}... —> **CəC*^{v}...)
(b) pers. pref. **Cə-* —> **C-* ___ transitive verbs (hence **C+C*^{v}... —> **C*^{v}*C*^{v}...)

In Common West Caucasian the unstressed syllables were in weak position, which resulted in the elision of their vowels, leading to the appearance of consonant clusters. The fact that underlyingly vocalised ergative markers *{*^{erg}*Cə-}* were used in their reduced, non-vocalised forms */*^{erg}*C-/*, makes it possible to assume that the original reason accounting for the elision of the vowel of the ergative marker was in fact its unstressed character. This consequently could mean that the nominative case prefixes were stressed and thus preserved their

vocalisation. The ergative case prefixes, on the contrary, were unstressed, which caused the elision of the ergative prefix's vowel and the subsequent voicing of its consonant in the position before the voiced onset of the transitive verb.

Thus the older scheme of the processes involving nominative and ergative prefixes would be as follows:

(c) pers. pref. **Cə-* —> **Cə́-*____ intransitive verbs (hence **Cə́+Cᵛ...* —> **Cə́Cᵛ...*)
(d) pers. pref. **Cə-* —> **Cə-*____ transitive verbs (hence **Cə+Cᵛ...* —> **CᵛCᵛ...*)

That nominative markers received, or rather retracted stress onto themselves, whereas ergative markers remained unstressed, can be accounted for by the rules governing the paradigmatic stress system in Abkhaz (and Ubykh), discovered by Dybo 1989 and further elaborated by Spruit 1986 and Trigo 1992 (cf. Chapter II).

We can assume that the nominative case markers in Common West Caucasian were + dominant, and thus retracted the stress onto themselves, while the corresponding ergative prefixes were - dominant (= recessive), which explains why they were unstressed. Thus:

(e) + dominant nominative prefix **Cə-* plus verbal root *CV(...)* —> **Cə́-CV(...)*
(f) - dominant (recessive) ergative prefix **Cə-* plus verbal root *CV(...)* —> **C-CV́*

If, consequently, the initial consonant of the verb was voiced in (f), it caused voicing of the non-vocalised ergative marker: **ergCə+CᵛV* —> **[Cᵛ-CᵛV́]*.

The pattern in (e) explains perfectly well the accentuation of the nominative marker in the following sequences of dominant (D) and recessive (R) syllables according to the rules given above: *nomCə*+R —> *nomCə́*-R, *nomCə*+R+D —> *nomCə́*-RD. It is not clear, though, what happened in the sequences *nomCə*+D and *nomCə*+D+D, where the last, not the first syllable must have been accented according to the rule. At the same time the pattern (f) fully accounts for the accentuation of the ergative marker in the sequences *ergCə*+D (—> *ergC*-D́) and *ergCə*+RD (—> *ergC*-RD́). Though the accentuation of the sequences RR cannot in general be predicted by the paradigmatic stress rules (cf. Spruit 1986: 38), in the case of the recessive ergative prefix the outcome will be the same as in combination with dominant syllables, i.e. *ergCə*+R —> *ergC*-Ŕ.

Later the concomitant and nonfunctional feature of voicing was grammaticalised and began to serve as the main formal distinctive feature of the ergative markers in the position before the verbal root voiced onset, as opposed

to the voicelessness of the nominative markers in the same position. Voicing becoming the main morphophonological device, the older opposition of (the stressed) vocalised and (the unstressed) non-vocalised personal markers became superfluous. Later this made possible the vocalisation of the original ergative *C-prefixes, which led to the modern situation, where the nominative marker is *C-//Cə-*, and the ergative marker is *Cᵛ-//Cə-*. Cf. for instance, Ub *a-sə-m-bəja-n* 'I don't see it', SAbx *jə-sə-m-ba-jt'* 'I did not see it', where the ergative marker in both languages is represented in the negative form of the transitive verb by its vocalised (unvoiced) forms (note that the Abkhaz negative form in the present tense contains the negative suffix, not the prefix as in Ubykh, and obeys the regular "voicing rule" of the ergative prefix, cf. *jə-z-ba-wa-m* 'I don't see it', cf. parallel Kab *ø-z-ǯə-r-q'ə+m* 'I don't learn it'). This fact might represent an Abkhaz-Ubykh innovation. Cf. also the imperative forms: LAbx *jə-ś°ə-m-ź°ə-n* 'do not drink it !' vs. Ad *ø-ś°-mə-də* 'do not sew it!'.

2. THE ALTERNATION *-*a* ~ *-*ə* : CENTRIPETAL VERSUS CENTRIFUGAL

Another morphophonological device common to the West Caucasian languages is the distinction between centripetal and centrifugal verb forms by means of a different vocalisation of the auslaut of the verbal root or of the preverb. This archaic feature is well-preserved in Abkhaz and Circassian, and vestiges can be found in Ubykh as well.

In modern Circassian dialects the verbal auslaut alternation *-ă# ~ -ə#* serves to distinguish between one-person and two-person verbs, cf. Ad, Kab *dă* 'to sew' (itr.) vs. *də* 'to sew sth' (tr.), *k°ă* (itr.) 'to go' vs. *k°ə* 'to go some distance' (tr.), *tă* 'to give' (itr.) vs. *tə* 'to give sth', *txă* 'to write' vs. *txə* 'to write sth', etc.

In Ubykh the alternation *ə ~ a* serves as a means of expressing number in verbal forms (cf. *sə-šʼə-n* 'I become' vs. *šʼə-šʼ-a-n* 'we become'). The same alternation serves to distinguish between singular and plural forms of the personal prefixes in Circassian (cf. Ad *ə-šʼa-γ* 'he led him', *a-šʼă* 'they are leading him').

In Abkhaz the ablaut *ə ~ a* is used to express the distinction between centripetal and centrifugal verbal forms. This alternation mostly involves the vocalisation of preverbs and, in few cases, also the vocalisation of the verbal roots themselves.

Examples:

(a) Ablaut involving only preverbs: SAbx *a-ta-šʼ°a-ra* 'to throw inside' ~ *a-t-šʼ°a-ra*

'to throw from inside', *a-m+p'ə+c'a-šʷa-ra* 'to fall into hands' ~ *a-m+p'ə+c'-šʷa-ra* 'to fall out of hands', *a-la-ga-ra* 'to begin' ~ *a-l-ga-ra* 'to end, finish'.
(b) Ablaut involving both preverb and verbal root: SAbx *a-č'a-c'a-ra* 'to put into mouth' ~ *a-č'ə-c'-ra* 'to get out of mouth'.
(c) Ablaut involving preverbs plus a lexical change of the verb: SAbx *a-gara-c'a-ra* 'to put (the child) in the cradle' ~ *a-gar-x̌-ra* 'to take (the child) out of the cradle' (*a-gara* 'cradle'), *a-k'+na-ħa-ra* 'to hang on a vertical surface' ~ *a-k'+nə-x̌-ra* 'to take off a vertical surface', Tap *a-č'a-la-ra* 'to climb (the slope of a mountain, hill)' ~ *a-č'ə-c'-ra* 'to descend (from the slope of a mountain, hill)' (*č'a* 'mouth').

Circassian preserves ablaut forms directly corresponding to Abkhaz, where the centripetal meaning is expressed by the vowel *-ă*, and centrifugal by the vowel *-ə*, cf. Ad *jə-šʼă*, Kab *jə-šă* 'to introduce' (*jə-* prev. 'inside') ~ Ad *jə-šʼə*, Kab *jə-šə* 'to lead out', Ad *jə-s-ă-ʒă*, Kab *jə-z-ăw-ʒă* 'I throw inside' ~ Ad *jə-s-ă-ʒə*, Kab *jə-z-ăw-ʒ* 'I throw outside' (Kumaxov 1981: 238, 241), Ad *wənă-m jə-pλ-a-γ* 'he looked into the room' ~ *wənă-m jə-pλ-ə-γ* 'he looked out of the room' (RA 1085). It is possible to draw a functional parallel between the vocalisation *-ă*, expressing centripetal meaning, with the homophonic vocalisation of intransitive verbs and, consequently, the vocalisation *-ə*, expressing the centrifugal meaning, with the homophonic vocalisation of transitive verbs (cf. Kuipers 1960: 69; Kumaxov 1981: 238).

Remnants of the same *a* ~ *ə* ablaut, expressing different direction, are preserved also in Ubykh. Cf. Ub *sə-gʼə-tʷə-n* 'I come out (of an enclosure)' ~ *a-tʷa-n* 'it (milk) curdles', *sə-can s-čʼa-γ* 'my sword hangs on my side' ~ *sə-can s-čʼa-sə-γa-n* 'I hang my sword on my side' (Dumézil 1975: 32-33, 35). Here the vocalisation *-ə* expresses centrifugal meaning, while the vocalisation *-a* carries centripetal semantics, in the same way as in Abkhaz and residually in Circassian.

These facts allow us to reconstruct a Common West Caucasian root- or preverb-final alternation **-a* ~ **-ə*, which served to express the opposition between the centrifugal (ablaut grade **-a*) and centripetal (ablaut grade **-ə*) verb forms.

According to Kumaxov 1981: 255, the mechanism of ablaut alternations common to the West Caucasian languages can be explained by the tendency to a recessive shift of stress caused by the preposition of syllable-forming morphemes (preverbs), which results in the reduction of the root-final vowel. This old West Caucasian tendency could cause the appearance of the *a* ~ *ə* ablaut, used for an establishment of the morphological opposition of transitive vs. intransitive, and centripetal vs. centrifugal stems.

Such an approach, explaining the origin of the *a* ~ *ə* ablaut as a result of the phonetic processes within Common West Caucasian, seems rather plausible. From the point of view of relative chronology, the ablaut which serves to distinguish between centripetal and centrifugal stems, characteristic of all Abkhazo-Adyghean languages, must be referred to the period of Common West Caucasian, while the ablaut distinguishing between two-place vs. one-place stems must be of much more recent, Proto-Circassian, origin. It is interesting to see whether any parallels to the Abkhazo-Adyghean *a* ~ *ə* ablaut can be found in East Caucasian, which could show whether we are dealing with an internal West Caucasian process or with a phenomenon which could be traced back to a more distant past.

III. COMMON WEST CAUCASIAN LEXICON

1. A 200-BASIC WORDLIST FOR COMMON WEST CAUCASIAN

In order to demonstrate the relative distance between the West Caucasian languages I use a slightly adapted Swadesh's 200-basic wordlist. The number of morphemes in this list, shared by all three languages, is 66, which implies a rather high level of correspondence. The number of exclusive correspondences between Circassian and Ubykh, not shared by Abkhaz, is approximately 20, between Abkhaz and Ubykh, not shared by Circassian, is 24, and between Circassian and Abkhaz, not shared by Ubykh, is 25. The lexical evidence thus indicates a nearly similar closeness of Abkhaz both to Circassian and to Ubykh, while there are more isoglosses connecting Circassian with Abkhaz than with Ubykh. All this is not, however, enough to make conclusive judgements as to the relative place of Ubykh within the West Caucasian group, specifically because in many cases the seeming absence of a cognate in one or another language according to this list does not necessarily mean that this cognate is really absent. Often it does exist but with a somewhat different semantics, which does not allow us to put it into the given semantic set. In fact, the majority of the morphemes given in this list do have cognates in the sister-languages, which is noted in the comments to the wordlist. The sources of loanwords are put between brackets.

№	meaning	CCirc	Ubykh	CAbx	CWC
1.	hand	**q'a*	*q'a-p'a*		**q'a*
				**ma*	**ma*

2.	left side	*sama-gʷə	*arma* (Abx ?)	*arə-ma	
3.	right side	*žʼa/ə	*aźʼ-qʼa*		*zʷə
				*a(r)ə-γʼa(-ma)	
4.	leg/foot	*λa	*λa-pʼa*	*šʼa-pʷə	*λʼa
5.	walk/go	*kʷa/ə	*kʼa*		*kʷʼa
				*ća	*ćʼa
6.	road, path	*γʷa-gʷə	*məγʼa*	*məħʷa	*məɬʷʼa
7.	come	*qa-kʷa	*j-kʼa*	*ħa; *ħa-jə	
8.	turn (v)	*za	*brā-za*	*ħʷa-za 'to crawl'	*za
9.	swim	*sə	*ʒaśa* (Abx)	*ʒə-śa	*sʷa/ə
10.	dirty	*śʷa-jə	*qʼə-ćʷ-qʼa*	*ħʷən-ćʷə 'dirt'	*ćʷə
11.	dust	*saꝑa	*sapa* (Circ)	*bəbə; *saba (Kab)	
12.	skin	*śʷa	*ćʷa*	*ćʷa	*ćʷʼa
13.	back	*pxa	*pšʼa*	*(p)xʼa	*pxʼa
14.	belly	*nəba	*nəkʷə*	*mgʷa	*nəkʷa//nəgʷa
15.	bone	*pāqə	*pqə* (Circ)	*ba/əħʷə	*bəGʷə
16.	guts	*kʼa-tʼə/ajə	*La*	*kʼatʼə/ajə (Circ)	
17.	liver	*śʷə	*ćʷa*	*(gʷ-a-)ćʷa	*ćʷa
18.	heart	*gʷə	*gʼə*	*gʷə	*gʷʼə
19.	shoulder	*ī̆ama	*txə* (Circ)	*ʐʷ-ħʷa	
20.	know	*śʼ-qʼa	*ćʼa*	*ćʼa 'to learn'	*ćʼa
				*dərə	
21.	think	*gʷə-ps/šə-sa		*qʷəćə	
22.	be afraid	*čʰʼəna	*gʼə-gʼa*	*šʷa	
23.	blood	*λə	*λa*	*šʼa	*λʼa
24.	head	*śħa	*ša*	*qa	*š-qa ?
25.	neck	*pśa	*tʷəqə*	*qʷəda	
26.	hair	*cʰə	*qʷə*	*qʷə	*q(ʼ)ʷə
27.	nose	*pʰa	*fa*	*pə	*pa
28.	breathe	*bawa// *žʼə qa-čʰʼa	*pśax̆ʷə*	*a-psəp la-ga=jʷa-ga-ra	
29.	sniff, smell	*pʰa-ma// *fa-ma	*fə-mə*	*fə-ħʷə	*fə-
30.	mouth	*ža	*čʼa*	*čʼa	*čʼa
31.	tooth	*ca	*ca-kʼə*	*cə	*ca

32.	tongue	**bza*	*bźa*	**bzə*	**bza*
33.	laugh (v)	**č'-xə*	*š°a-č'a*	**č'ə-č'a*	**č'a*
34.	cry (v)	**γə*	*ć‴a*	**ć‴ə-wa*	**ć‴a*
35.	vomit (v)	**q̄a-žə*	*ǯə*		**ǯə*
36.	spit	**wə-ẑ°ə-ntxa*	*ć°a-š'xə*	**ž'ə-ć°a*	**ć°a*
37.	defecate	**c'ə*	*ćə*	**ccə*	**c'ə*
38.	eat	**č'xə*	*fə*	**fa*	**fa/ə*
39.	chew	**na/əšk‴ə*	*q̓'aq̓'ə*	**q'aq'a*	**q'aq'a*
40.	cook/boil	**ẑ°a*	*ẑ°a*	**ẑ°ə*	**ẑ°a*
41.	drink (v)	**ś°a/ə*	*ǯ°a*	**ẑ°ə*	**ǯ°a/ə*
42.	bite	**ča-q̄a*	*q̓'ə*	**c-ɦa*	**(ca-)Ga*
43.	suck	**ć°ə-λə; *ś°ə*	*t°əλə*	**ć°(ć°)a; *ś°a*	**ć°a; *ś°a/ə*
44.	ear	**tɦa-k‴əma*	*La-k‴əma*	**lə-mɦa*	**Ła*
45.	hear	**za-xa-xə*	*q‴ə*	**aɦa*	
46.	eye	**na*	*(b)La*	**(b)la*	**b-la*
47.	see	**pλə/a*	*pλa*	**pšə*	**pλə/a*
48.	yawn	**x°əśɦa*	*č'a-γa*	**č'a-ɦa-śə*	
49.	sleep (v)	**čə-ja*	*ć°a*	**ć°a*	**λ°a*
50.	lie down	**γ°a-λə*	*-sə*	**š'-t'a-la*	
51.	sit	**t'ə-sə*	*t‴a-sə*	**t‴a*	**t‴a-sə*
52.	stand	**tʰa-g'ə*		**gə-la*	**gə*
53.	human being	**c'əx°ə*	*təta*	**waɦ°ə*	
54.	male	**x̌°ə*	*t°a*	**aba*	**(a)t°a//*(a)ba*
55.	female	**bzə*	*abza*	**psə*	**pəzə*
56.	child	**č'a-La*	*məzə*	**x̌°ə-č'ə*	
57.	man/ husband	**λ'ə*	*k°abž'a*	**qać'a*	
58.	woman/ wife	**ś°əzə*	*px̌'a-š°* *ś°əmc'a*	**pɦ°ə-śə*	**pH°'a/ə-s°ə* **ś°ə-*
59.	mother	**nə//(j)ana*	*na*	**anə*	**(a)na/ə*

60.	father	*t̄ə/a	*t°ə	*abə	*(a)t°ə
61.	son	*q̄°a	*q°a		*q°a
				*pa	
62.	daughter	*px̄°ə	*px̌'a	*pha	*pH°'a/ə
63.	house	*wəna		*ħ°ana	*ʕ°ana
			*ć°əja		
64.	name	*c'a	*p'c'a		*(p')c'a
				*x̌'əʒə	
65.	say	*q°a	*q'a	*ħ°a	
66.	rope		*nd°a-ša	*ša	*ša
		*k'a-psa			
67.	tie up/ fasten	*pxa	*bźa	*č'a-ħ°a	
68.	sew	*px̌ə	*px̌a		*px̌a/ə
		*-sa		*psa	*(p)sa
69.	needle	*masīa	*d°a	*g°ərə	
70.	hunt (v)	*ja-šа	*š°a	*š°a	*š°a
71.	shoot (arrow)	*č^h'a-bza ʒə		*x̌ə-śə	
72.	stab	*p^hə-g'a/ə	*-š°ə	*r-śə	
73.	hit, slap	*wa	*ja	*śə	
74.	steal	*t̄əγ°ə	*wəćə	*γ(')əč'ə	
75.	kill	*λ'ə		*š'ə	*λ'ə
			*k°ə		
76.	die, be dead	*λ'ə	*dəwa	*pśə	
77.	live	*psa-wə	*psa wa-λ	*bza	
78.	scratch (an itch)	*bž'ə-bž'ə/a		*bəzə-bəzə	
79.	cut, hack	*wə-q'a	*-q'ə	*-q'ə	*q'ə
80.	stick (wood)	*bač^h'a	*k'ārda	*bəća	
81.	sharp	*p^ha-p'c'a	*(n)dan	*ć'arə	
82.	dull, blunt	*ca-k̄°a	*cag°a (Circ)	*cag°ə (Circ)	
83.	work	*Laž'a	*psa-š'ə	*wə	
84.	plant (v)	*xa-sa		*la-c'a	
85.	choose	*-xə		*aj-lə-x̌ə	*xə
86.	grow	*xa-x̌°a	*ja-x̌'a-x̌'ə	*źə-ħa	*H°'a
87.	swell (abscess)	*q̄a-č^h'ə-nə	*pśa	*č'ə	*č'ə

88.	squeeze	*q̄ʷə-za/ə	γa-zə		*zə
89.	hold (in fists)	*q'ə-γə	q'a-γə		*q'a-γə
				*k'ə	
90.	dig	*t'a/ə	tʷə		*tʷə
				*ža	
91.	buy	*šʼa-xʷa			
			x̌ʷa-da	*ħa-x̌ʷa	*x̌ʷa
92.	give	*tʰə/a	t(ʷ)ə/a	*ta/ə	*ta/ə
93.	open, uncover	*-xə	čʼa-tʷə	*t'ə	*tʷə
94.	pound, beat	*śə-bə	śa-śə	*śə	*śə
95.	throw	*ʒə	ʒa-da		*ʒa/ə
				*-ž´	
96.	fall	*-xʷa/ə	-x̌´a	*ħa	*H´a
97.	dog	*ħa	wa	*la	*Hʷa (?)
98.	bird	*bzə-wə	γʷəndʷə	*ćʼə-śə	
99.	egg	*k'a(n)k'a	dəma-ćʼa	*kʷət'a-γ´ə	
100.	feather	*q̄a-bzəjə		*x̌zə	
101.	wing	*ťama	bzāpa	*mcʼ(ʷ)ə-ẑʷ-ĥʷa	
102.	fly (v)	*pʰərə 'sound of flying' *bəbə	pərə	*pərə	*pərə
103.	rat, mouse	*śʷaja	qʷənə	*ħʷən-apə	*qʷənə//*Hʷənə
104.	meat, flesh	*Lə	γ´a	*ž´ə	*Lə
105.	fat, grease	*ša		*šəša	*ša
			śʷəqʼa		
106.	tail	*k'a	kʷač´a	*cʼə-qʷa	
107.	snake	*bLa	ant'a	*matə	
108.	worm	*xʷə-psə 'larva, grub' *ħambəLəwə	xa	*x̌ʷa	*xʷa
109.	louse	*cʼa		*ćʼa	*ćʼa
			ẑʷa-(n)k'ə		
110.	flea	*bžə-ʒa	ba-(n)ʒə 'fly'	*ʒə	*ʒə
111.	mosquito		kʷəməj	*kʷəbərə	*kʷəm/bərə

	*arγ°ajə			
112. fish	*p̄ča	psa	*pśə-ʒə	*pśa
113. rotten	*ś°ə		*ś°ə	*ś°ə
		śa		
114. branch	*q̄°ama		*maq°ə(-ta)	*maq°ə//*q̄°ama
		qap'ə		
115. leaf	*tħaphᵃ	p'ć'a-pa	*baγ'ə	
116. root	*λa-psa	λa-msa (Circ ?)	*da-cə	
117. flower	*q̄a-γaγa		*ś°tə	
118. fruit	*pχ°a-śha-mə-śha	(n)ć'°aẑ°a	*ś°ərə	
119. grass	*wəčə	šχ°a	*š'a-ća	
120. earth, soil	*č'ə-g°ə	jəć°a	*nəš°ə	
121. stone	*məẑ°a	Laq'a	*ħa-q°ə	
122. sand	*pčʰaχ°a	pšaχ°a	*pšaħ°a 'shore'	*pč/šaH°a
			*pśləmʒə	
123. water	*psə	bzə	*ʒə	
124. flow	*ča		*ća	
125. sea	*xə	š°a	*mašəna	*λ°ə
126. salt	*čʰə-γ°ə	ǯ'ə	*ǯ'ə-k'a	*ǯ'ə
127. lake	*psə-χ°ərajə	bzə ś°əja	*ʒə-ja	
128. woods, forest	*mazə	λaxa	*bana	
129. sky	*ẑ°a-γ°a 'star'	ẑ°a	*ẑ°ə-ħ°a-n(d)ə	*ẑ°a(-ʃ°a)
	*wa-ś°a			
130. sun	*ĩəγa	(n)dəγa		*dəγa
			*mara	
131. moon	*maza	məʒa	*məʒə	*məʒa
132. star		ć'°a-(n)k''	*jać'°a	*ć'°a
	*ẑ°a-γ°a			
133. cloud	*pčʰ'a	šawəda	*psta	
134. fog	*pčʰ'a-γ°a	nāḇa	*naq'°ə	
135. rain		k°ə	*k°a	*k°a/ə
	*wa-č'χə			
136. snow	*wa-sə		*śə	*s°ə
		ẑ°a-ʒə		
137. thunder (n)	*šʰə-bLa		*č'°ə	*č'°ə (?)
thunder (v)		d°əd°ə	*dədə	*d°əd°ə
	*γ°aγ°a			

138. lightning	*pčˊə-kʼˊa	waššˊa (Circ)	*macˊə-śə	
139. wind	*žˊə	tʼapsa	*pša	
140. blow	*ja-pšˊa	pśaxˊə	*tˊħˊa	
141. warm	*xˊaba	pśə	*pχa	
142. cold	*čʼə-qʼa	čˊə	*čʼə-χˊə	*čʼə
			*χˊə	
143. dry	*γˊə	γə	*ħˊa	*ʕˊə
144. wet	*cʼə-na	ćʼə-(n)ʒa		*ćʼə
		bə-ʒa-qʼa	*aʒa	*ʒa
145. heavy	*wanīaγˊə	gˊə-(n)tʼqʷa	*χˊanta	
146. fire	*maśʷa	məʒˊa	*mca	*məćʷa
147. burn	*sīə	ca	*ca 'hot'	*ca
	*bLa		*blə	*bla/ə
148. smoke	*qʷə-γˊa	γˊa	*ləħˊa	*ʕˊa
149. ash	*tχˊa 'grey'	tχˊa	*qˊa 'ash', 'grey'	*tqˊa
	*jažˊa			
150. black	*śʷəcʼa		*ajkˊa-ćʷa	*ćʷa
		ʒˊa		
151. white	*xˊə-žˊə	śˊa	*šə	*λˊə
152. red	*pλə-žˊə	pλə	*apšˊə	*pλˊə
153. yellow	*γˊa-žˊə	γˊa	*ħˊažˊə (Circ)	*ʕˊa
154. green	*šχˊantʼa	χa-qʼa	*ja-ćʷa	
155. small	*mačʼˊa	mačʼˊ	*mačʼˊə	*mačʼˊə
156. big	*čxˊa	gˊəza	*dəwə	
157. short	*kʼˊačʼˊə		*kʼˊačʼə	*kʼˊačʼə
		akʷə		
158. long		wa	*awə	*wa/ə
	*kʼˊa-ħə			
159. thin	*pʼqʷa-čʼˊa	ačʼˊa 'wide, flat'	*čʷa	*čʷa
		pʼcʼa		
160. thick	*γˊəmə	bəqʷə	*šˊ-pʼa	
161. narrow	*za-žˊə	məćʼə	*tśˊa	
162. wide	*bγˊa	bγˊə	*tə-bħa	*bʕˊa
163. ill, sick	*səma-gˊa	aba	*čˊə-ma-za	
164. old	*źə	žˊə	*ažˊə	*žˊə
165. new	*čʼˊa		*čʼa	*čʼa
		ćʼa		
166. good	*śʷə/a	čʼa	*bzəja	

167. bad, evil	**q'aja*	*ag'a*	**ć°əg'ə*	
168. true	**śə-pāqa*	*zak°a* (Circ ?)	**ć'a*	
169. night	**č'əš'ə*	*śəśə*	**c(')əxə*	**cəλə*
170. day	**max°a*	*məś°a*	**məša*	**məλ°'a*
171. year		*š°a*	**śə-k°ə-ša*	**s°a/ə*
	**jəλasə*			
172. when?	Tem *səd-jə-γ°a*	*śa-γ'a*	**an-ba*	
	Kab *sət śə-γ°a*			
173. hide	**γa-bə-λə*	*qarda*	**ć°axə*	
174. climb	**da-k°a-ja*	*-γ°a*	**qa-la*	
175. inside	**da-//*jə-*	*śa-*	**ta-*	
176. on (top of)	**t^h-ja-*	*bγ'a-*	**k°ə-*	
177. below		*La-γ°a*	**la-da*	**la*
	**jə-č'a-γə*		**-c'a-q'a*	
178. this	**mə*	*jə-na*	**a-rə-jə*	
179. that	**a*	*ajda*	**a-nə-jə*	
180. near	**bLa-γa*	*-laq; -q'a-ʒ*	**aj-g°a*	
181. far	**č'əž'a*	*λa-wa*	**qara*	
182. where?	Tem *tədă*	*mā-k'a*	**a-ba*	
	Kab *dănă*			
183. I	**sa*	*sə-γ°a*	**sa(-ra)*	**sa*
184. you (sg.)	**wa*	*wə-γ°a*	**wa(-ra)*	**wa*
185. (s)he	**a-rə*	*wa-na//jə-na*	**ja(-ra)* 'he'	
			**la(-ra)* 'she'	
186. we	**t̄a*	*š'ə-γ°a*	**ħa(-ra)*	
187. you (pl.)	**ś°a*	*ś°ə-γ°a*	**ś°a(-ra)*	**ś°a*
188. they	**a-xa-rə*	*wa-λa*	**da(-ra)*	
189. what?	**sə-t^{h}ə*	*sa*	**z-ak°ə-ja*	
	**śə-da*			
190. who?	**xa-t^{h}ə*	*š'ə(-j)*		**xa/ə*
			**d-z-ak°ə-da*	
191. other	**a-d-ra*	*ajda//g'aša*	**(d-)ača//*adərə*	**a-də-ra*
192. all	**za-k'a*		**za-g'ə*	**za-g'ə*
		za-w-žə		
193. and	**jə-k'ə-jə*	*-g'a*	**-jə(-g'ə)*	**(-jə-)g'ə*
194. how?	**sə-t^{h}ə*	*d(γ)an(ə)*		
	**śə-da*		**jə-ś-ba*	**śə-*
195. not	**mə*	*-mā//mə-*	**mə*	**mə*

no	*ħawa		*ma-wə=ma-wə	
196. count (v)	*p̄čа/ə	pλaqʷa	*pxʹa-ʒa	
197. one	*zə	za	*za	*za
198. two	*tʹqʷə	tʹqʷa	*ħʿə	*dGʿə
199. three	*šʹə	śə/a	*xə	*ɬə
200. four	*pʹλʹə	pʹɬʹə	*pšʹə	*pʹɬʹə

Comments to the items in no.:

(1) An Abkhaz counterpart is probably **qʹa* in **qʹa-cʹa* 'to do, make' (**cʹa* 'to put'); see comment in Chapter V, under CWC **qʹ* in 1.4.11. (1).

(2) The Circassian word for 'left' contains the element **-gʿə* 'surface', while its first part is tentatively connected by Kuipers (PC 23) with **səma-gʹa* 'ill, sick' (**-gʹa* 'bad, evil'). If the morpheme **sama* is historically a compound, the part *-ma* can be compared with *ma* in CAbx **arə-ma* 'left', which can best be analysed as CAbx **ma* 'hand', cf. CAbx **a(-rə)-γʲə-ma* 'right side' with same **ma* 'hand', Ub *aźʹ-qʹa* 'right side' with *qʹa* 'hand'. The difference in the Abkhaz and Circassian words can be explained by a tabooistic change of the original West Caucasian name for 'left'. In this case either Abkhaz or Circassian have preserved the old name for 'left', or both languages replaced it. Note that Ubykh substituted its original word for 'left' by the Abkhaz lone (if it is not the preservation of the old West Caucasian word !). On the other hand, the comparison of CCirc **səma-gʹa* 'ill, sick' (**-gʹa* 'bad, evil') with CAbx **čʹə-ma-za* 'id.' reveals the same common morpheme **ma*, now in the sense 'to have' (etymologically 'to be in hand', cf. CCirc **qʹa-γa*, Ub *qʹa-γə* 'id.', with **qʹa* 'hand'), thus 'to have **sə* ' in Circassian, or 'to have **čʹə* ' in Abkhaz. CAbx **čʹə* is 'swelling, tumour, sickness'.

(3) The Abkhaz word for 'right' is likely to be etymologically connected with **aj-γʲa* 'good, excellent, right', thus meaning 'the right, good hand'. See further its connection with the Ubykh material in Chapter V, under CWC **γʲ*. It is not quite clear whether the element **rə* belonged here originally, or whether it was just added in South Abkhaz by analogy with **arə-ma* 'left side', cf. Tap *aγʲma* vs. SAbx *arγʲa* 'right side'.

(4) The second part of the Ubykh and Abkhaz words for 'foot' can be tentatively connected with CCirc **pʹqʷa* 'place'.

(5) The first part of CAbx **kʷa-ša* 'to dance' (**ša* 'to wind, twine (about)') probably is a cognate to the Circassian and Ubykh items.

(6) The second element in Circassian word for 'road' is **gʿə* 'surface'. It can be assumed that the initial part **ma-*, preserved in the sister-languages, was lost in Circassian. Cf. in Chapter V, under CWC **ʕʿʲ* in 7.4. (1).

(7) The first elements in Circassian **q̄a-kʷa* and in CAbx **ħa-jə* are preverbs **q̄a-*, **ħa-* 'hither'. The Ubykh word contains the preverb *j()-* 'toward'.
(9) The first element in Abx *ʒə-śa* is **ʒə* 'water'; cf. comments in Chapter V, under CWC **sʲ* in 3.3.6. (6).
(11) The Abkhaz word for 'dust' is connected with CCirc **bəbə* 'fluffy, downy'.
(12) Because of the irregular character of correspondence, it is unlikely that CCirc **śʲa* 'skin' is connected with CAbx-Ub **cʲa* 'id.', as is assumed by some authors (cf. MP 344; ES II: 100; ZS 76; NS 28-9).
(14) It is quite possible that the designations of 'belly' in all three languages are genuinely related. The Abkhaz form comes from **məgʲa*, which is close to Ub *nək'ʷə*, through which it is possible to connect the Abkhaz word with CCirc **nəba*. It can be assumed that the word for 'belly' currently in use in Circassian comes from baby talk, which explains why the original labialised guttural (**gʲ* or **kʲʷ*), preserved in sister-languages, was replaced by **-ba*, which is a usual Circassian baby talk suffix, especially with the names of body-parts (cf. a similar derivation of the English baby word *tummy* 'belly' from *stomach*). Other examples of the Circassian baby talk suffix *-bă* are: Ad *bəbə* 'mother's breast' < *bəʒə* 'id.', Kab *ħă-bă* 'head' < *śħă* 'id.', Kab *ʔă-bă*, Ad *ʔă-b* 'hand' < **q'a* 'id.', etc.
(25) Cf. the Circassian cognate to the Ubykh item is **t̄əq̄ə* (in **pśa-t̄əq̄ə*) in Chapter V, under CWC **tʲ* in 1.2.6. (7).
(28) CCirc **ž'ə q̄a-čʰ'a* means literally 'to lead the wind hither', and its Abkhaz counterpart means 'to carry breath down and up'.
(34) The Circassian cognate to the Abkhaz and Ubykh verb 'to cry' is **śʲʷə-jə* 'to squeak, cheep', while the cognates to CCirc **γə* are Ub *χə/a* 'to bellow' and **ħa* in CAbx **q'a-ħa* 'to cry'.
(37) The irregular character of correspondences in all three languages can be explained on expressive grounds (cf. for instance the expressive gemination in the Abkhaz form).
(56) Ub *məzə* 'child' can contain the negative affix **mə* 'not'; for the second part *zə* cf. Ub **ʒa* 'to reach' (?). Cf. Abx *a-na-m-ʒa* 'not completed', *aa-ʒa-ra* 'to bring up' (*na-* 'thither', *aa-* 'hither'), Tap *na-m-ʒa=ħa-m-ʒa* 'ill-bred'.
(58) The probable cognate to the Circassian word for 'woman' is Ub *śʲəmc'a* 'woman, wife'. The Abkhaz and Ubykh words given here contain the diminutive suffix.
(59) It is possible to analyse the initial **ja-* in CCirc **jana* as historical possessive prefix, which can explain also the Abkhaz form with the vocalic anlaut: **anə* < **ja-nə*. The same explanation can be applied for CAbx **abə* 'father' < **ja-bə* (cf. no. 60).

(71) The Circassian verb means 'to throw bow's arrow', while the Abkhaz equivalent means 'to hit arrow'.
(77) CCirc **psa-wə* represents an adverbial form of the noun **psa* 'soul', while the Ubykh correspondence is analysed as *psa* 'soul' and the verb **wa-λ* 'to be (contained) in the mass' (**wa-* prev. 'in the mass', **λə* 'to lie').
(82) CCirc **c̄a-k̄°a* is analysed as **c̄a* 'tooth' and the privative suffix **-k̄°a*.
(97) Though the names for 'dog' in all three languages might be related, their irregularly corresponding forms can be explained only as a result of very specific developments. Cf. ES II: 115; ZS 24; NS 1073-1074.
(101) The cognate to CCirc **bəbə* is probably CAbx **bəbə* 'to roll (as smoke, dust)'.
(114) It is possible that the given items in all three languages have a common element: CCirc **q̄°ə*, Ub *ɋa* (< **ɋ°a*), CAbx **q°ə*. The final element *-p'ə* in Ubykh can be connected with *-p'a* in *λa-p'a* 'foot', *q'a-p'a* 'hand'. It is more difficult to connect the rest of the Circassian and Abkhaz words. Analysed independently, they can be explained as **c̄ama* 'wing' for Circassian, and **ma-q°ə* 'twig' (with **ma* 'hand') and *-ta* < **da* 'root' for Abkhaz, cf. the Tapanta form *maq°-da*. On the other hand, one cannot exclude the possibility that the Abkhaz form is a metathesis from **q°ətama*.
(123) It is not clear whether the words for 'water' in three languages are really connected, as the sound correspondences between these forms are quite irregular.
(127) The given words for 'lake' mean literally 'the round water' (CCirc), 'the deep water' (Ub), 'the lying water' (CAbx).
(128) Different West Caucasian words for 'wood, forest' all genetically correspond to each other, cf. the correspondences in Chapter V, under CWC **ʒ* in 2.2.1. (11) and under CWC **x°* in 5.6. (8).
(172) Cf. Circ *-γ°a*, Ub *γ'a* mean 'time' in Chapter V, under CWC **ʕ'* in 7.2. (1).
(173) The analysis of the Circassian verb is the causative prefix **γa-*, **bə* 'hollow' and **λə* 'to lie', 'place of'.

2. SOME COMMON WEST CAUCASIAN LEXEMES SUBDIVIDED INTO THEMATIC GROUPS

Personal pronouns
**sa* 'I', **wa* 'thou', **ja-* '(s)he/it, this', **ɕ°a* 'you'.

Deictic pronouns
**a* 'this', **na* 'there', **wə/a* 'this', **ra/ə* 'that', **ja-* '(s)he/it, this', **də* 'other', *da* 'there'.

Numerals

**za* 'one', **dG°ə* 'two', **ɬə* 'three', **p'ɬ'ə* 'four', **tx°ə* 'five', **ɬ°ə* 'six', **bLʲə* 'seven', **jəʃ°ə* 'eight', **bγ°ʲə* 'nine', **ʒ°a* 'ten'.

Kinship terminology

**(a)na/ə* 'mother', **(a)t°ə* 'father', **baba* 'mother/dad', **nana* 'mummy', 'grandmother', **dada* 'dad', 'grandfather', **q°a* 'son', **pHʷa/ə* 'daughter', **-ɬʲa* 'brother', **maHʷə* 'son-/brother-in-law', **t°ə-ɬə* 'relatives of wife', **jə/aba* 'orphan'.

Body-parts

**š-qa* 'head' (?), **t°əqə* 'neck', **q(')°ə* 'hair', **ras°a/ə* 'hair, wool', **pa* 'nose', **čʲa* 'mouth', **qʷə/a* 'mouth, orifice', **ca* 'tooth', **bz/źa* 'tongue', **Ła* 'ear', **b-la* 'eye', **q'a* 'hand', **λʲa* 'foot', **bγʲa* 'bosom, upper part', **bəʒə*, **ʒəʒa* 'woman's breast', **pxʲa* 'back (part)', **bĝa/ə* 'waist, (small of the) back', **nək°a//nəg°a* 'belly', **k°a* 'hip, thigh, back', **ć°a* 'finger', **ć°a* 'skin', **g°ʲə* 'heart', **bəG°ə* 'bone', **ć°a* 'liver', **λʲa* 'blood', **kʲa* 'spleen' or 'stomach', **c'a* 'inside(s), **ʒ°a* 'rib, side', **zazə* 'bile', 'gall-bladder', **źaźa* 'kidney', **ĝʲa* 'scrotum, testicle', **x°a* 'sinew'.

Geography, climate, natural phenomena

**qʷa* 'height', **bĝa/ə* 'mountain', **x°a* 'hill, mountain', **Hʷə* 'ravine, river', **q°a* 'valley, ravine', **d°ə* 'field', 'open space', **λ°ə* 'sea', **pč/šaHʷa* 'sand, sandy beach', **(nə-)ga* 'floodlands, shore', **ʃʲa* 'summer', **ś°ə* 'hail, cold', **s°ə* 'snow', **s°ə-tHʷa/ə* 'snowstorm', 'hoarfrost', **k°a/ə* 'rain', **čʲx°ə* 'rain', 'hail', **ʃ°arə* 'stream, torrent (after rain)', **psə* 'water, river', **ʒ°a* 'sky', **dəγa* 'sun', **məʒa* 'moon', **ć°a* 'star', **č°ə* 'thunder(-god)' (?), **d°əd°ə* 'thunder', **məć°a* 'fire', **cəɬə* 'night', **aqa* 'night', **məλ°ʲa* 'day'.

Flora

**tʲa* 'kind of big tree (beech or linden)', **bʒʲa/ə* 'beech/plane/oak', **čʲa/ə* 'kind of tree (hornbeam/beech/maple)', **məč'ə* 'plane/maple-tree', **psa* 'spruce/fir-/pine-tree', **bzə* 'linden/willow', **məʒə* 'pine-wood', 'prickly tree', **kʷə* 'bush, shrub', **ma/ə(γə)γə* 'prickle', **bana* 'prickled bush', **ša-sə* 'box-tree', **dəγa-* 'kind of evergreen tree (like laurel, juniper, holly)', **ʃ°a/ənə* 'tree, trunk', **məHʲa* 'wood (as material)', **məč'ə* 'wood (as material)', 'firewood', **sə* 'wood', **ža* 'large tree (trunk)', **tʲa* 'grass (for making hay)', **ʒa(-rə)* 'cornel fruit', **šx°ʲa* 'chestnut', **ra* 'nut', **mə* 'wild apple', **laHʷə* 'fig', **ć°a* 'fruit/apple', **məš°ə* 'wild grapes, liana', **šx°ə* 'grape', 'corncob', **markʷʲa* '(straw)berry', **pq°ə//pHʷə* 'plum', **tʲ°a* 'cherry', **q°ʲa* 'pear', **t'a/əma/ə* '(juicy) ripe fruit', **(b)ʒʲə(-nə)* 'onion', **p'q'a/ə-* 'reed',

*baća 'twigs (for wattle)', 'wattle', *cə 'root'.

Wild fauna and hunting

*šʷa '(to) hunt', *baga 'fox', *cəʒa 'marten', *cəɣʷa/ə 'small animal like mouse or marten', *(a)ča 'goat, deer', *šʷə 'deer, beast', *λ'ə 'deer', *məšʷə 'bear', *(a)La 'hare', *(H)ant'a 'reptile (like frog or snake)', *-cəšə 'lizard', *qʷənə//Hʷənə 'mouse, rat', *xʷa 'worm', *mać'a 'fly, locust', *bžə 'small insect' (beetle or flea), *kʷəb/mə- 'mosquito', *ʃʷə(-dʷə) 'flying insect (like gadfly or moth)', *ʒa/ə 'fly', 'flea', *ć'a 'louse', *ba(mə)č'a 'tick', *qʷaLa 'middle-sized bird like raven, crow or woodpecker', *raHʷa//raqʷa 'rook, raven', or 'dove', *ćʷəndə 'rook, raven', *(p')ć'a 'small bird', *t(')ə 'owl', *t(')ə-ʃʷərə-ʃʷərə 'eagle-owl', *nəbʃʷa 'quail'.

Agriculture and farming

*(a)ča 'kind of cereal (millet)', *pšə 'millet', *ma/əλ'ə 'millet (in field)', *λʷə 'millet', *ẑʷa, *ćʷa 'to plough', *mata 'quantity, measure (e.g. of land to be cultivated)', *(p')č'a/ə 'to weed, mow', *(p)sa 'to sow', *pxa 'to sow by strewing', *λʷəla 'seed, stone of fruit', *xə 'to rip, mow, saw', *Hamə 'threshing floor', *bə/a 'to pound, grind', *dʷədʷə 'to grind, pound', *tʷa 'to pound, thresh (seeds), husk grains out of ears', *źyə 'to husk', *gʷə 'to pound, husk', *gʷə-Hʷə 'mortar for threshing grains', *wə 'mill', *laga 'to grind, thresh, mill', *č'a/ə 'to grind, mill, thresh'.

Domesticated animals and related terms

*čə 'horse', *λʷa-kʷ'a 'stallion', *č(')ədə 'donkey', *ćʷə 'bull', *ẑʷə 'cow', *gʷəma 'cow (with small udder)', *maxˇ(ʷ)ča 'camel', *t(')ə 'ram', *wasa 'sheep', 'price', *st(')a, *waGə(jə), *bžˇanə 'goat', *kə/ac(')ə 'kid, young goat', *ʒə 'kid, goatling', 'small of animals', *qʷa//Hʷa 'swine/pig', *Hʷa 'dog', *ataqa 'rooster', *k(ʷ)a/ət(')ə 'hen', *gʷarta 'herd, flock', *gˇə/a 'to butt (as cow)', *jaGʷa 'trough for house animals', *xˇa 'to milk', *wacə/a 'dung, manure', *Hʷə 'to graze, pasture', *bžˇə 'yoke', 'to tame, subdue'.

Housing, household items and crafts

*gʷa '(fenced) enclosure', *ʒa 'covered enclosure', 'wall', *kˇala/ə 'hut', *ʃʷəna 'house', *abʃa 'fort', 'stone fence', *ćʷəja 'house', *kata 'settlement with sheds for cattle', *məčˇə 'wood for fire or as material', *ɣʷa 'smoke', *tqʷa 'ashes', *məʒa 'device for producing light, candle', *šəqʷə 'vessel', *č(')aqʷə/a 'basin, mug', *ša 'cord, rope', *dʷˇa(-dʷˇə) 'awl' (from the verb *dʷˇa 'to sew'), *gʷərə 'needle', *č'ˇəč'ˇə 'to wattle', 'to wind thread', *λʷə 'to plait, wattle', *kʷanə 'wattle', *śə/a 'to weave', *kʷa 'bobbin or shuttle used while making thread', *xˇʷə/a 'weaving loom',

'pivot of the shuttle', **x̌a* 'to knit, weave, spin thread', **ras°ə/a* 'hair, wool', **(s)k‴a(-k‴ə)* 'to pinch', 'to card (wool)', **pxə* 'to card (wool)', **wə/ap'a* 'felt', **psə* 'to plane, shave, sharpen', **ʒa* 'to rough-hew, carpenter', **γ°ə* 'stake, pole, plank', **bla* 'beam', **ja* 'to coat (the walls of the house)'), **z°ə* 'to scutch, swindle, comb (flax)', **ƛ°a* 'wax', **ƛ°a-məγ°ʼa//məγ°ʼa-ƛ°a* 'honeycomb', **g°ʼaś°ə* 'axe', **as°a* 'sabre, sword', **ƛʼa* 'arrow', **ẑ°a* 'oar', 'rudder'.

Metallurgy

ʃ°ə* 'metal', **ʃ°ə-pλa* 'red copper' (lit. 'red metal'), **ʃ°ə-λ°a* 'white copper' (lit. 'white metal'), **ʃ°ə-ć‴a* 'iron' (lit. 'black metal'), **raʒ°ənə* 'silver', **amp'a*, **t'əsa* 'lead', **k'ʼə* 'to forge', **ʃ°ə-k'ʼə* 'blacksmith', **k'ə-ƛə* 'smithy', **bžʼə* 'to melt, fuse', **(p)sə(n)gʼə* 'anvil', **λʼaś°ə* 'the god of the smithy'. Though the words for 'gold' in modern languages are heterogeneous, the presence of its genuine designations in all three languages (cf. CCirc **dəśa*, Ub *t°at°a*, CAbx **x̌ə*) testify to its possible existence. Cf. also CWC **žʼa/ə* in CCirc **ja-žʼa* 'ashes', CAbx **žə-jə* 'smith', **žə-jə-ra* 'smithy', **ž-aħ°a* 'hammer' (aħ°a* 'sabre'), **žə-q'ə* 'slag, dross' (when producing metal) (**q'ə* 'faeces').

Trade

**ś°a* 'to evaluate, pay', **ƛa* 'to sell', **x°ə* 'to buy', **x̂°a* 'to exchange, buy, take', **ʃa* 'loan', 'to borrow'. Cf. also **wasa* 'sheep', 'price', **λʼa-p'q‴a* 'dear, expensive'.

Social relations

**ra* 'army', **ƛ°əla* 'seed, stone of fruit', 'population of village', 'clan', **Hʼa/ə* 'prince', **γarə* 'captive, slave'.

Religion, beliefs

**psa* 'soul', **qa* 'grave', **wa* 'sky, heaven', 'god', **t'əG°a* 'dragon', **λʼaś°ə* 'god of the smithy', **č°ə* 'lightning', 'god of lightning' (?).

Clothes, decorations

**ša/ə* 'textile, linen', **k'ʼač'ə* 'short jacket' (< **k'ʼač'ə* 'short'), **tqamə* 'fur-coat', **q‴ʼəna* 'nail or metallic clasp', **pəʒʼə* 'buckle, clasp'.

Food, cooking

**xʼa* 'food', **γʼa-čʼə//*čʼa-γʼa* 'kind of food', **Lə* 'meat, flesh', **ša* '(internal) fat', **ʒʼə* 'salt', **čʼa* 'milk', **q°a-* 'cheese', **tx̂°ə* 'butter', **ś°a* 'honey', **ʃ°ə* 'wine', **ʒə/a* 'to roast, bake', **(b)ʒʼa/ə* 'to fry', **ẑ°a* 'to boil', **bək'ə* 'to cut or pinch dough'; cf.

also **fa/ə* 'to eat'.

Adjectives

**(p')ć'a* 'sharp', **λ̊a* 'warm, hot', **ʃ̊ə* 'dry', **č'ə* 'cold', **t'ə/a* 'wet', **ʒa* 'wet', **ć'ə* 'wet, humid', **λ̊ə* 'white', **pλə* 'red', **ʃ̊a* 'yellow', **ć̊a* 'black', **ʒ́a* 'black', **mač'ə* 'small, little', **t'a* 'small', **g̊ə* 'short, small', **k'ač'ə* 'short', **wa/ə* 'long', **č̊a* 'thin', **məć'ə* 'narrow', **bʃ̊a* 'wide', **ž̊ə* 'old', **č'a* 'new', **ć'a* 'young, new', **č(')a* 'good', **(a)g(')a* 'bad, lacking', **(a)ć̊a/ə* 'bad, evil', **bəbə* 'fluffy, downy', **p'a* 'large, thick', **t'at'a* 'mild, soft', **p'ć'a* 'naked, clean', **ć̊a* 'sour', **l/wasə* 'light, quick', **źaźa* 'slow', **šx̌̊a* 'strong', **abʃa* 'thin, weak'.

CHAPTER XI

THE PROBLEM OF EXTERNAL RELATIONS OF COMMON WEST CAUCASIAN

1. THE RELATION TO EAST CAUCASIAN LANGUAGES

Since the appearance of the pioneering publications by N. Trubetzkoy (1922; 1930; cf. also 1987) and G. Dumézil (1932; 1933), devoted to the establishment of the genetic relationship between the East Caucasian and West Caucasian linguistic groups, much has been achieved in this field, especially during the last two decades. This was mainly due to the works of a few Circassian and Russian scholars, namely, Balkarov (1964; 1966), Shagirov (ES I, II), Abdokov (1976; 1981; ZS) and Starostin (1982; 1985; 1987; 1988; NS). The most important from this point of view are the works by Abdokov and especially by Starostin. Both authors established the existence of patterns of regular sound correspondences between the East and the West Caucasian languages and created etymological dictionaries of the North Caucasian linguistic family. These works provided a final proof for the existence of a compact North Caucasian linguistic family with two branches, a Western, or Abkhazo-Adyghean, and an Eastern, or Nakh-Daghestanian. At the same time it became absolutely clear that the North Caucasian family has no immediate relation to the other autochthonous linguistic family of the Caucasus, Kartvelian.

Below I present a selection of the lexical material that demonstrates the relationship between the two branches of the North Caucasian family. For Common West Caucasian I use my own reconstructions (which not always/sometimes coincide with the reconstructions in NS), and for East Caucasian I use the reconstructions made by Nikolayev and Starostin (cf. NS). The North Caucasian forms are accompanied by their semantic counterparts in Kartvelian (cited from EK). The lexical items are chosen from the 200-basic wordlist proposed by Swadesh. Divergent meanings are placed between brackets.

1. leg/foot CWC **λ'a*; PNakh **lar*, PAvar-Andi **λoli*, PTsez **λolə*, PLez **λ̄äl*; cf. PK **bark'-(al)-*, **berq-*, **k'warc₁x̌l̥-*;

2. walk/go CWC **k*ʷa* 'to walk, go'; PNakx **=ik'-* ('to lead, drive'), PAvar-Andi **k'Vb-//*=ikʷ(Vn)-* ('to drive, urge, direct, (re)turn'), PTsez **ʔek'-*, PDarg **=irk'-* ('to drive, urge'), PLez **ʔa(r)kʼɬ* (also 'to drive, urge'); cf. PK **gwal-*, **wid-* 'to walk, go';
3. road, path CWC **məʕʷa*; PNakh **nǐq'*, PAvar-Andi **miq̄'i*, PDarg **dąq'*, PLez **räq̄'*; cf. PK **gza-*;
4. to swim CWC **sʷa/ə* 'to swim'; PAvar-Andi **=VzVn-* ('to soak, become wet'), PTsez **=ǐs-* ('to wash'), Lak *huzu-*, PDarg **=ac̄-//=ic̄-* ('to bathe'), PLez **ʔeča-* ('to pour as rain, liquid)'; cf. PK **c₁ur-*;
5. wing CWC **tama*; PNakh **tʕām*, Lak **t'imu* ('feather'); cf. PK **swe-*;
6. know CWC **ć'a*; PNakh **=abc'-* (also 'to get to know'), PAvar-Andi **c'in-//*=ac'Vn-* (also 'to look'), PTsez **=āc'-* ('to see, look'), PDarg **=umc'-* ('to search'), PLez **ʔac'a-* (also 'to be able, can'); cf. PK **k(a)b-*, **c₁n-*;
7. tooth CWC **ca*; PNakh **ca*, PAvar-Andi **colu*, PTsez **s̄ɬ̄l*, PDarg **cula*, PLez **sɬ̄l*, Xin *culoz*; cf. PK **k'b-il-*;
8. tongue CWC **b(ə)z/źa*; PNakh **mot't'*, PAvar-Andi **mič'i*, PTsez **mɬc*, Lak *maz*, PDarg **mec̄*, PLez **melc̄*; cf. PK **nena-*;
9. cry (v) CWC **ć*a*; PNakh **t-ēbč'-*, PAvar-Andi **=Vc̄'-*; cf. Geo *t'irili*, *kwitini*, Meg *gara*;
10. chew CWC **q'a-q'a*; PNakh **=aq'-* ('to eat'), PAvar-Andi **q̄'am/n-* ('to bite', 'to eat'), PTsez **=ūq-* ('to eat'), PLez **ʔeq̄'ɬ-* ('to bite'), Xin *q'ɬ̄n-* ('to eat'); cf. PK **γeč'-* 'to chew', **mx̌ar-*, **č'am-* 'to eat';
11. ear CWC **Ła-*; PNakh **la*, PDarg **leħi*; cf. PK **q'ur-*;
12. eye CWC **(b-)la*; PNakh **bʔa*, PAvar-Andi **ħarHi*, PTsez **ħɔre*, Lak *ja*, PDarg **ħuli*, PLez **ʔʷil*, Xin *pil*; cf. PK **twal-*;
13. sleep CWC **ƛʷa*; PAvar-Andi **ƛ̄'in-*, PTsez **=ǐƛ-//*ƛV-*, Lak *mak'*, PLez **näwƛ'*; cf. PK **ʒ₁in-*;
14. mother CWC **(a)nə*; PTsez **ʔinVju*, PDarg **ne-š*, PLez **ʔanaj*; cf. PK **deda-*;
15. father CWC **(a)tʷə//*(a)bə*; PTsez **ʔɔbu*, Lak *pu*, PDarg **ʔaba*, PLez **ʔapaj*, Xin *aba* ('grandfather'); cf. PK **mama-* 'father', **baba-* '(grand)father';
16. house CWC **ʕʷəna*; PNakh **pħē* ('village'), PTsez **qʷɬ̄n* ('farmstead'), PTsez-Xvar **qʷən* ('village'), PHunz-Bezh **qun* ('village'), PLez **muq̄'(a)* ('village, farmstead'). Another root: CWC > Ub *ćʷəja*, PNakx **c'ā* (also 'room'), PAvar-Andi *c'a(ʔV)* (also 'household'), Lak *c'ija-lu* ('earthen roof'), PLez **jic'V* ('sty, cattle-shed'), Xin

*c*ʷ*a*; cf. PK **(s)a-x̌ḷ-*;

17. name — CWC **(p')c'a*; PNakh **c'e*, PAvar-Andi **c̄'iri*, PTsez **cˤə̄*, Lak *c'a*, PDarg **zˤe*, PLez *c̄ʷer*, Xin *c'u*; cf. PK **ʒ1ax̌e-*;
18. kill — CWC **ƛ'ə* (also 'to die'); PNakh **=aɬ-* ('to die'), PTsez **=iƛ'-*, PHun-Bezh **-ƛ'-*, Lak *=i=č'a-* (also 'to die'), PDarg **=ibk'-* ('to die'), PLez **ʔiƛ'e* (also 'to kill'), Xin *k'-* ('to die'); cf. Geo *-k'(a)l-*;
19. to cut, hack — CWC **-q'ə*; PAvar-Andi **=uq̄'-*, Lak *q'u=q'i-*, Khosrekh Lak *=u-q'a-n*, PDarg **=alγVn-*, PLez **ʔiq̄'ä(l)* ('to butt, stick into, clip, shear'), Xin *ī-äq'-*; cf. PK **k'we(s1)t-*, **č'eč'k'-* (in EK 255 **č'eč'k-*, i.e. with *-k*, which is probably a misprint);
20. work (v) — CWC **x̌a*; Lak *=uqa-n* ('to plough'), PDarg **luqVn-*, PLez **ʔilx̌an*; cf. Geo *mušaoba*;
21. fly (v) — CWC **pərə*; PAvar-Andi **par-pV-//*par-x̄̌V-* (also 'to flutter'), PTsez **par-*, PLez **pVr-*; cf. PK **p'er-*, **prin-* (sound symbolic, cp. IE **per-* 'to fly', cf. EK 152-153);
22. rat, mouse — CWC **qˤənə//Hˤənə*; PAvar-Andi **hinkʷo* (Avar *ʕunk'*), PTsez **ʔāqʷV*, Lak *ɯk'u-lu*, PLez **nVqʷe-l*, Xin *nuk'ur*; cf. PK **(s1)tagw-* 'mouse', Geo *vir-tagwa*, *vir-tx̌a* 'rat';
23. meat, flesh — CWC **Lə*; PNakh **dilx̌u*, PAvar-Andi **riƛ̄'i*, PTsez **riƛ*, Lak *dik'*, PDarg **diĝ*, PLez **jaƛ̄'*, Xin *lɨɬ̄ka*; cf. PK **qorc-*;
24. louse — CWC **ć'a*; PNakh **mac'e*, PAvar-Andi **noc̄'i*, PTsez **nɔcə*, Lak *nac'*, PDarg **nez*, PLez **näc̄'*, Xin *nimc'*; cf. PK **t'iz1-*;
25. fish — CWC **pśa*; PTsez **bɨś°ə*; cf. Geo *tewz-i*, Meg-Laz *čx̌omi*;
26. grass — CWC **wəcə*; PNakh **būc*, PAvar-Andi **bici*, PLez **wVcVn* ('burdock'); cf. PK **tib-*;
27. soil, clay — CWC **nəš°ə*; PAvar-Andi **ʔonš°i*, Lak *ɑrši*, PDarg **heš/š̌*; cf. PK **tiqa-*;
28. sea — CWC **ƛ°ə*; PAvar-Andi **riλo*, Lak *x̄iri*, PDarg **ʔurx̄°i*; cf. PK **zγwa-*;
29. salt — CWC **ć'ə* ('salty'); PAvar-Andi **c̄'onʔi*, PTsez **cɔ̄*, Lak *ć'u*, PDarg **c̄e*; cf. PK **ʒ1m̥-*;
30. sky — CWC **ʑ°a(-ʕ°a)*; PAvar-Andi **zibu* (also 'day'), Lak *s̄aw*, PDarg **c̄ab* (also 'rain'), PLez **c̄aw*, Xin **c̄°a*; cf. PK **ca-*;
31. moon — CWC **məʒa*; PNakh **butt*, PAvar-Andi **birc̄ʷi* (Avar *moc̄'*), PTsez **bocV*, Lak *barz*, PDarg **bac̄*, PLez **wac̄*, Xin *wac'*; cf. PK **du(s1)te-*;
32. star — CWC **ć'ʷa*; PNakh **t'ɦari*, PAvar-Andi **c̄ʷarhi*, PTsez **cˤā*, Lak *c'u-ku*, PDarg *zuri*; cf. Geo *warsk'wlaw-i*;

33. cold — CWC *č'ə; PTsez *=ɔč'V, PTsez-Xvar *-oč'-, PHun-Bezh *-ɔč'-, PLez *ruč'(a) ('hoarfrost, dew'); cf. PK *c_1χro-;
34. ice — CWC *məLə; Lak *mik'* (also 'hail'); PDarg *miǧ, PLez *merλ̄ʷ (also 'icy water'), Xin *mik'*; cf. Geo *q'inul-i*;
35. dry — CWC *ʕʷə; PNakh *=aq'-, PAvar-Andi *=iq̄ʷV-, PTsez *qoqV-, Lak *q'a-q'-*, PDarg *=eryʷV-, PLez *ʔiq̄ʷar-, Xin *q'ï*; cf. PK *qmel-*;
36. fire — CWC *məćʷa; PNakh *c'e, PAvar-Andi *c'aʔi, PTsez *c'ə, Lak *c'u*, PDarg *c'a*, PLez *c'aj*, Xin *č'ä*; cf. PK *ʒec$_1$χ̌l̥-*;
37. smoke — CWC *ʕʷa; PAvar-Andi *k̄ʷinhi, PTsez *qʷɨ//qo, Lak *kuw* ('soot'), PDarg *k̄aw*, PLez *k̄un*; cf. PK *k'waml̥-*;
38. ash — CWC *tqʷa (also 'grey'); PAvar-Andi *rVq̄V, Lak *laǩ* (also 'dust'), PLez *laǩ* ('grain peelings'); cf. PK *t'ut'a*;
39. black — CWC *ǯʼa; PNakh *ʕārč'i- (Chech, Ing *ʕärža*), PAvar-Andi *-ič'V(r)-, PLez *č'ulV*; cf. Geo *šaw-i* (< Oss);
40. yellow — CWC *ʕʷa; PAvar-Andi *q̄oʔi- ('white, blue'), Lak *qaqi-*, PDarg *=uqu-, PLez *qäqV-*; cf. Geo *q'witel-i*;
41. small — CWC *k'ačʼə ('short'); PAvar-Andi *č'ik̄ʷV-, PLez *či[k']V-*; cf. Geo *p'at'ara*;
42. wide — CWC *bʕʷʼa; PAvar-Andi *q'a-b-* (Avar *ʕe-b-*, Andi *Ga-b*, Botl *ɣa-bi*, Bagv *ʕa-bu-*), PTsez *q'eq'-*, PDarg *-aʕu-* (Ak *b-aǩʕu-si*), PLezg *ẖarq'ɨ-*; cf. PK *wr̥c$_1$e-l-*;
43. old — CWC *ẑʷʼə; PNakh *šir-i(n), PAvar-Andi *-asara-* (also 'worn out'), PLez *jiīV-* (also 'year'); cf. PK *ʒ$_1$wel-*;
44. new — CWC *ćʼa (also 'young'); PNakh *c'in-, PAvar-Andi *c'inhV-*, PTsez *-ɨc'Vn-*, Lak *c'u-*, PDarg *c'i-*, PLez *c'enjä-*; cf. Geo *aǩal-i*;
45. day — CWC *məλʼʷa; PNakh *mälǩ* ('sun'), PAvar-Andi *miλi* (also 'sun'); cf. PK *dɣe-*;
46. year — CWC *sʼʷa/ə; PAvar-Andi *rišin*, Lak *šin*, PLez *šän*; cf. PK *za-, *c'el-*;
47. I — CWC *sa; PNakh *sō*, PLez *zo-n*, Xin *zɨ*; cf. PK *me(n)-*;
48. you (sg.) — CWC *wa; PNakh *waj*, PAvar-Andi *mi-n* (< *wi-n*), PTsez *mə (< *wə-n*), PLez *uo-n*, Xin *wɨ*; cf. PK *sen-*;
49. you (pl.) — CWC *śʼʷa; PNakh *šu*, PAvar-Andi *b-iš-//*ʔuš-*, PTsez *mižɔ*, Lak *zu*, PDarg *nu-ša*, PLez *ǯʷ[e]-n*, Xin *zu-r* (oblique base *sur-*); cf. PK *(s$_1$)tkwen-*;
50. not — CWC *mə; PNakh *ma*, PTsez *-m*, Lak *ma*, PLez *mV*; cf. PK

*wer, *mad;

51. one — CWC *za; PNakh *cha, PAvar *ci-, PTsez *hāš, Lak ca, PDarg *ca, PLez *ša, Xin sa; cf. PK *ert-;

52. two — CWC *dG°ə; PAvar-Andi *k'i-, PTsez *q"i-nV, Lak k'i=a, PDarg *k"i, PLez *q"ä, Xin k'u; cf. PK *jor-;

53. three — CWC *ƛə; PAvar-Andi *ƛob-, PTsez *l̄ɔ-, PDarg *ħab-, PLez *λepi-; cf. PK *sam-;

54. four — CWC *p'λ'ə, corresponds to East Caucasian 'eight': PNakh *barλ, PAvar-Andi *bil̄'i-, PTsez *beƛ-(nɔ), PLez *menl̄ä-; cf. PK *o(s$_1$)tx̌(w)- 'four', *arwa- 'eight'.

As can be seen from the given comparisons, Common West Caucasian shows a remarkable closeness to East Caucasian in all sections of its basic vocabulary: personal and demonstrative pronouns, body parts, relationship terms, natural phenomena, verbs, adjectives, numerals. On the contrary, the corresponding Kartvelian items demonstrate far-reaching differences on all lexical levels. Though some Kartvelian forms do resemble the North Caucasian ones, these occasional resemblances are better explained by borrowing, sound symbolic nature of the items, or simply by fortuitous coincidence, than by a common origin, as they do not form a system, and cannot be used for establishing regular sound correspondences.

2. THE RELATION TO HATTIC

Already the first explorer of Hattic, E. Forrer (1919: 1033, 1034), established its non-Indo-European character and suggested its relationship with Abkhazo-Adyghean languages. The same idea was proposed nearly at the same time by R. Bleichsteiner (1923). The main reasons for such a hypothesis were striking structural similarities between this ancient language of Asia Minor, extinct since the early second millennium B.C., and the languages of the West Caucasian group. These structural affinities were later discussed by I.M. Dunaevskaja (1960), I.M. Diakonov (1967) and V.G. Ardzinba (1979). The two latter authors also noted some material correspondences (in affixes) between Hattic and West Caucasian. V.V. Ivanov (1983; Ivanov) proposed many Hattic-West Caucasian material parallels, both in root and affixal morphemes. Though the persuasive force of these comparisons is not always equal, mainly due to the poor preservation of Hattic, in general Ivanov, in my view, effectively demonstrated the existence of such a relationship.

Among the specific difficulties connected with the etymological analysis of Hattic, is that one can often deal with homophonic forms or morphemes, while there is not enough material to trace their semantic and functional differences. This is even more complicated by the fact that we may often simply have to do with homographs, rather than with true homonyms, which appear so only due to the inability of the Hittite graphic system to express all phonemic contrasts which existed in Hattic. One Hittite grapheme may actually represent different Hattic consonants.

2.1. STRUCTURAL PARALLELS

The main grammatical features of Hattic (cf. Kammenhuber; Dunaevskaja 1960; 1961; 1980) which can be summed up here, strikingly resemble West Caucasian. It was probably an ergative language and, like Abkhaz, did not have a formal opposition between nominative and ergative case (cf. Dunaevskaja-Diakonov 82; Braun 353; but cf. Girbal 139). Like West Caucasian, Hattic had a rudimentary case system (cf. below). It was a predominantly prefixation-type language, with weakly developed suffixation, just like the Abkhazo-Adyghean languages as opposed to the reverse situation in East Caucasian and Hurrito-Urartian. The Hattic verbal form contained a string of prefixes, expressing different grammatical relations (subject, object, location, mood, etc.). The order of these prefixes was fixed, the number of prefixal positions ranging from 7 to 10, cf. 7-13 fixed prefixal positions in the West Caucasian languages. As in West Caucasian, verbal and nominal roots were predominantly one- or two-syllabic.

The Hattic verbal form could express at least two grammatical persons by means of personal prefixes, while polypersonalism is very characteristic for West Caucasian as well. It was noticed that in some Hattic verbal stems the alternation of vowels served to distinguish between centrifugal and centripetal meanings, the vowel *a* bearing the meaning 'inside', and the vowel *u* expressing the opposite meaning 'outside' (cf. Ardzinba 1979: 29-31). A similar alternation *a* ~ *ə* plays a major role in the opposition of centrifugal and centripetal forms of the West Caucasian verb. Note that Hattic *u* can be phonetically interpreted as *ə* (cf. Girbal 164).

As in West Caucasian, in Hattic word formation compounding played an important role. According to Kammenhuber, among the languages of ancient Asia Minor of the 2nd millennium B.C. it was Hattic which had the largest number of compound words (Kammenhuber 495).

In phonetics, a characteristic feature of Hattic was a simple system of resonants (as in Abkhazo-Adyghean), and the absence of anlaut *r-* (as in Ubykh

and Circassian). Though the character of the writing system by which Hattic was recorded does not allow us so far to make a judgement about the phonological contrasts which existed in this language, there are some indications that it had, for example, labialised consonants, which make up quite a developed system in West Caucasian. This can be shown as follows. The Hattic personal prefix *an-* (or *-n-*) regularly changed into *am-* before labial consonants. In the form *am-ḫuru-pa* with the unknown (verbal or nominal ?) root *ḫuru* (Kammenhuber 523), this prefix changes into *m*, as it would before the labials, which can probably indicate that the stem-initial consonant (i.e. *ḫ*) was in fact labialised (*ḫ°*), which can thus testify to the presence of labialised consonants in Hattic. It is also possible to trace some phonotactic conventions of Hattic, resembling those of West Caucasian. Thus, the change of the final vowel *-e* into *-a* before *ḫ*, as, for example, in Hat *katte* 'king' vs. *katta-ḫ* 'queen', *tette* 'great' vs. *tettaḫ* 'id.' (feminine form, cf. Girbal 164-165), resembles the same "lowering" effect of the pharyngal *ħ* in the West Caucasian languages, cf. for example Abkhaz, where the vowel *ə* usually changes into *a* before or after *ħ* (e.g. *jə-sə-z-dər-wa-m* "it-I-potential pref.-know-pres.suf.-neg." vs. *jə-ħa(< *ħə)-z-dər-wa-m* 'we do not know it' (cf. also Kammenhuber 459-460).

A peculiarity of Hattic was that in possessive constructions multiple objects of possession are expressed by a singular form (Kammenhuber 451). Cf. Hat *Eštan URULaḫzan le-weḛl a-an-te-eḫ* 'The Sun-god (in) Laḫzan his houses (lit. 'his house') for himself he built' (Kammenhuber 471-472), *tabarna[-n katti/e] le-weḛl* 'tabarna-king his houses (lit. 'his house')' (Kammenhuber 454), *le-pinu* 'his children', lit. 'his child' (Kammenhuber 465). This is characteristic for West Caucasian as well, cf. Abx *wə-nap'ə ʒ°ʒ°a* 'wash your hands (lit. 'your hand')!'

Like West Caucasian, Hattic was characterised by polysynthetism: a complex Hattic verbal form could incorporate independent words, cf. *ka-ur-a-n-ti-u* "local pref.-well-pref.(?)-subj.pref-stand-suf" = 'stands over the well' (cf. Dunaevskaja 1960: 76-77). Cf. with such Abkhaz polysynthetic form as *də-č'k"əna-bzəja-wə+p'* "he-boy-good-stat./fin." = 'he is a good boy'.

Some syntactic parallels between Hattic and West Caucasian (like the similarity in the structure of simple sentence, the relative position of the adjective in respect to the noun, etc.) were discussed in Ardzinba 1979: 35-37.

The mentioned typological affinities between Hattic and West Caucasian are too numerous to be ignored, and they in fact symbolise the existence of a common Hattic-West Caucasian structural type (which is in contradiction with the opinion about Hattic expressed by Kammenhuber 451: "What we so far have, differs from any of the presently known language types"). What is more

significant, the structural affinities between Hattic and West Caucasian are supported by quite a substantial number of material correspondences, both in grammatical elements and in the lexicon.

2.2. PARALLELS IN AFFIXES

Exactly in the same way as the earlier explorers of Indo-European languages established parallels in inflectional elements, the Hattic grammatical and lexical affixes (first of all prefixes) can be used to demonstrate the relationship with West Caucasian. I shall not give here West Caucasian examples in full scale, as they can easily be found in the sections on Common West Caucasian affixes.

Personal prefixes

(1) Hat *a* 3d p.sg. object and subject prefix : CAbx **a-* 3d p.sg., nonhum subject and object prefix, Ub *a-* 3d p.sg. and pl. subject and object prefix, CCirc **a-* 3d p.pl. subject and indirect object prefix. Hattic examples: (a) As an object: *a-ta-niwa$_a$š* (itr.) "he-inside-is sitting" = Hit *-šan anda ešzi* 'he there inside is sitting' (Kammenhuber 510); *antùu* = Hit *arta(ri)* 'he stands' (Kammenhuber 526) : *a-ntùu* ?; (b) As a subject: *ā-n-teḫ* = Hit *wetet* (Dunaevskaja 1961: 127) "it-he-has built"; *ā-ḫ-kun(n)-u-wa* = Hit *auštan* '(he) saw him' (Dunaevskaja 1961: 127); *ā-n-tuḫ* = Hit *dāš-ma-za* '(he) took for himself' (Kammenhuber 513): Hat: "it-he-took"; *a-n-neš* (Kammenhuber 481) "it-he-has put (on the throne)"; *a-n-taḫ-a* (Dunaevskaja 1961: 133) "it-he-has put (under the lock)"; *a-aššij-a* "it-they-gave" = Hit *pier* 'they (the gods) gave' (Kammenhuber 515).

Comments:

(a) The meaning of this Hattic prefix is usually interpreted, in accordance with the Hittite reflexive suffix *-za*, as reflexive (Kammenhuber 514; cf. Dunaevskaja-Diakonov 82). But the examples given above show that *a-* in fact does not necessarily have a reflexive meaning, and is better interpreted as a 3d p. object (cf. Ivanov 29) and subject marker in bi-personal verbal forms. It is not quite clear, however, why there is no subject marker in expressions like *tabarna katti ta-niwa$_a$š* 'ruler, king, inside is sitting' (cf. Kammenhuber 510). Can this be compared with the situation in Abkhaz, where the subject or object marker *jə-* of the 3d p. nonhum sg. and 3d p.pl. is regularly dropped if it immediately follows its referent (cf. LAbx *sa-ra s-cwajt'* 'I am going' vs. *da-ra ø-cwajt'* 'they are going', *aš°q^{w}ə jacə jə-lə-s-tajt'* "the book yesterday it-to her-I-gave" vs. *aš°q^{w}ə ø-lə-s-tajt'* "the book (it-)to her-I-gave") ? (b) It is possible that, as in West Caucasian, the arrangement of personal prefixes in Hattic depended on the

transitivity of the verb, with the same prefix serving as an object marker in transitive and as a subject marker in intransitive verbs. Cf. LAbx *d-cwajt'* 'he goes' vs. *də-j-bawajt'* 'him he sees'.

(2) Hat *n-* 3d p.sg. subject prefix : Ub *n-* (sg.), *na-* (pl.) 3d p. subject prefix, CAbx **na* 3d p.sg. subject prefix. Hattic examples: *a-am-pu* "it(*a*)-he(*n*)-make" = Hit *iet* 'he makes/does' (Kammenhuber 513); *a-n-taḫa* (Dunaevskaja 1961: 75) "it-he-inside-put"; *a-n-neš* = Hit *dāiš* '(he) has put' (Dunaevskaja 1961: 127); *ānteḫ* = Hit *wetet* 'he has built' (Dunaevskaja 1961: 126); *ā-n-tuḫ* = Hit *dāšmaza* '(he) took for himself' (Dunaevskaja 1961: 127); *ka-ur-(a)n-tī-u* 'stands over the well' (Dunaevskaja 1961: 132-3).

Comments:

(a) Cf. Ivanov 33. The Hattic prefix is regarded by specialists as a subject marker; according to Kammenhuber, it expresses a singular subject only in transitive verbs and corresponds to the prefix *aš-* in plural (Kammenhuber 505; cf. also Dunaevskaja-Diakonov 82). The last of the examples given above, however, probably represents an intransitive verb. (b) Before a following labial, the subject marker *(a)n-* changes into *(a)m-* (Kammenhuber 513), i.e. *n* => *m*___*p*. Thus Hat *a-am-pu* = Hit *-za-kan ... iet* (?) '(he) made, did' (Dunaevskaja 1961: 67) is in fact **a-an-pu* "it(*a*)-he(*n*)-made", Hat *a-am-miš* = Hit *-za dāš* 'himself he took' (Kammenhuber 514) is **a-an-miš* 'it-he-took', etc. (c) It is possible to analyse the verbs *a-n-taḫa* and *ā-n-tuḫ* in the examples given above as *a-n-ta-ḫa* and *ā-n-tu-ḫ*, respectively, regarding the elements *ta-* and *tu-* (phonetically *tə-* ?) as ablaut forms of the local preverb **t-*, expressing opposite directions: 'inside' (*t+a*) and 'to outside' (*t+u*)' by alternating vowels (*a* ~ *u*). This finds its direct parallel in West Caucasian, cf. Abx *a-ta-ǎa-ra* 'to remain inside' vs. *a-tə-ǎ-ra* 'to take off from inside', *a-ta-c'a-ra* 'to put inside' vs. *a-tə-c'-ra* 'to emerge from inside' (cf. Ardzinba 1979: 29-31; cf. also the chapter on West Caucasian morphophonology). (d) As I said above, it is better to analyse the prefix *a-* as 'it', rather than as the reflexive '-self', as it is usually considered in the literature. In the constructions of the type *a-n-taḫa* "it-he-put" we can actually deal with a bi-personal verb with object occupying the first place to the left from the root, the subject occupying the second place, which is a usual rank order of personal prefixes in the West Caucasian (bi-personal) transitive verb (i.e. in the ergative construction). Cf. Abx *sə-j-bawajt'*, Ub *sə-ø-bjan*, Circ *s-j-ă-λaγ°ə* "me-he-sees".

(3) Hat *wa-* personal prefix of 2d p.sg. (?; cf. Dunaevskaja 1964: 102) : CWC

**wə-* 'id.'. Hattic example: *wa_a-aḫ-zi-i-ḫé-ir* '(you-pl.) destroy' (Dunaevskaja 1961: 69).

Comment:
According to E. Forrer, Hat *wa-* was a prefixal personal pronoun (cf. Dunaevskaja 1961: 95-96). The given example can testify to its meaning as of 2d p.sg. (cf. Ivanov 26). Cf. also probably Hat *wa_a-ḫ-kun*, which corresponds to Hit *aušta-at* 'she saw it' (Kammenhuber 526), but can be analysed as "thou-she-saw". The Hattic prefix *ut-*, regarded by some authors as the marker of 2d p.sg. (cf. Dunaevskaja 1961: 96), can represent the same morpheme.

(4) Hat *eš-/aš-/uš-* personal prefix of 1st p.pl. : Ub *šə-* 'id.' (e.g. *šə-k'ān* 'we go', *š'-a-bəjān* 'us-they-see'). Hattic examples: *eš-kā-ḫer-pi* = Hit *taparijawenima* 'we shall appoint' (Dunaevskaja 1961: 126); *ūš-ša* = Hit *nan SIG_5-aḫḫwen* 'we predicted for him favourably' (Dunaevskaja 1961: 130; Kammenhuber 515); *uš-ḫa-aš* = Hit *weš-pat* 'we ourselves' (Kammenhuber 515); *uš-še-ša-lil* '?' = Hit *[...]eni* '(we) + present tense' (Dunaevskaja 1961: 129).

(5) Hat *i-* a proclitic pronominal marker of 3d p.sg. (cf. Dunaevskaja 1964: 102) : CWC **jə-* personal prefix of 3d p.sg. (in Abkhaz also pl.). Hattic examples: *i-malḫip* 'good(ness)' (Kammenhuber 453); *i-tu-ú-e* 'we (?) eat' (Ivanov 29); cf. also *i-zziptipil* '?', *i-ma-ḫu* '?', *izz(i)-* 'favourable' (Kammenhuber 452), *i-štarazzil* '(dark ?) earth' (Kammenhuber 472), etc.

Comment:
Cf. Ivanov 29. The presence of the prefixal *i-* in Hattic adjectives can parallel the presence of the 3d p.sg. in the Abkhaz non-finite verbal forms, cf. Abx *jə-bzəja-wə* 'good', lit. "it-good-being", *jə-ć°g'a-w* 'bad', lit. "it-bad-being", etc.

Possessive prefixes
(1) Hat *le-* 'his' (one or several objects of possession) : CAbx **lə-* 'her' (fem/hum). Hattic examples: *le-pinu* 'his child(ren)' (Kammenhuber 465); *li-kut*, *li-kuddu* 'his soul' (Kammenhuber 466); *le-ašaḫ* 'his-evil(s)' (Kammenhuber 467); *le-eštan* 'his day(s)' (Kammenhuber 472).

Comment:
The Hattic prefix did not distinguish between the feminine and masculine, which can be seen from such example as *Taru-n le-zuḫ* "Storm-god-of his-clothes"

(Kammenhuber 481): the god Taru was regarded as male. This fact would support the idea that gender distinctions in modern Abkhaz pronominal elements are secondary (cf. Ivanov 29).

(2) Hat *še-* possessive prefix (several possessors or several objects of possession) : Ub *šʼə-* possessive prefix of 1st p.pl. ('ours'). Hattic examples: *še-alep* (Kammenhuber 466): *alep* 'language'; *še-wu$_u$r(u)*: *wu$_u$r* 'land, country' (Kammenhuber 467); *še-munamuna* 'their stone(s)' (Kammenhuber 475).

Comment:
Kammenhuber 535 attributes to this Hattic prefix the meaning 'theirs', but it can be alternatively interpreted as referring to the 1st p.pl. ('ours'), connected with the Hattic subject/object prefix of 1st p.pl. (see above) and the well-attested personal pronoun *uš-* 'we' (see below). Ivanov 28-29 alternatively analyses the Hattic affix as belonging to the 1st p.sg. Can the grapheme *še-* hide in fact two different first person prefixes, one singular and another plural ?

(3) *te-* 'his', 'her' (one possessor and one object of possession) : CCirc **t^{h}ə-* 'our'. Hattic examples: *te-alep* (Kammenhuber 466); *te-karam-un* 'his-vessel for libation', or 'his drink' (Kammenhuber 467); *te-wu$_u$r(i)*: *wu$_u$r* 'land, country' (Kammenhuber 467).

Comment:
This Hattic affix (cf. Kammenhuber 535) is analysed by Ivanov 26-27 as being of 1st p.pl.

Directional prefixes
(1) Hat *ka-* directional prefix : CWC **Ga-* ? or CAbx **kʼa-* ? or CWC **qʼa-* ? Hattic examples: *ka-az-za* = Hit *iš-ḫar-ú-i-eš-ki-iz-zi* '(she) bleeds' (Dunaevskaja 1961: 67); *ka-a-w$_a$-a-aḫ* = Hit *wa-a-tar-na-aḫ-ḫi* '(I) trust' (Dunaevskaja 1961: 67); *ka$_a$-a-wa$_a$-aḫ-pí* = Hit *ḫa-at-tal-wa$_a$-aš* '(he) trusts' (Dunaevskaja 1961: 69); *ka-ur-(a)n-tī-u* 'stands over the well' (Dunaevskaja 1961: 132-3); *ka-ijaḫ-du* '(hither) from the sky' (Kammenhuber 492); **taš-te-ḫ-ka-(z)zija* "not-let-*ḫ*-there (?)-lie" = Hit *anda le (kittari)* 'inside should he/she not (lie)' (Kammenhuber 524); *ka-ḫanwa$_a$šuidd-un* "on (?)-throne-of" (Kammenhuber 491).

Comment:
It is not quite clear what kind of consonant(s) can be hidden behind the

grapheme *k*. Thus we can envisage the possibility that Hat *ka-* can either correspond to CWC **Ga-* 'hither', or to CAbx **k'a-* 'on the (vertical or horizontal) flat surface', CCirc **k'a-rə-* 'on the vertical surface', or to CWC **q'a-* local prefix '(on/to the) place' or, in different instances, to each of these prefixes.

(2) Hat *a-kka-* 'upwards' : CAbx **a-qa-* 'id.' (Bz *a-x̌-a-la-ra* 'to climb': "article-above/head-directive-go-masdar suf."). Hattic example: *a-kka-tuḫ* = Hit *šarā dāš* 'he took upward' (Kammenhuber 524).

Comment:
An alternative etymology is yielded by the comparison of this Hattic prefix with the first elements in CCirc **q'a-ta*, Ub *q'a-śa* 'to lift'.

Locational prefixes
(1) Hat *ta-/tu-* prev. 'in', 'inside' = Hit *anda* 'inside' : CAbx **ta-* prev. 'in', 'inside', **tə-* 'from inside'. Hattic examples: *ta-niw-aš* = Hit *anda ēšzi* '(he) is (inside)' (Dunaevskaja 1961: 128); *antaḫa* = Hit *anda dāiš* 'he has put' (Dunaevskaja 1961: 75, 81) : *a-n-ta-ḫa*; *tē-ta-ḫ-šūl* = Hit *anda tarneškiddu* 'let them allow them in' (Dunaevskaja 1961: 126); *ašaḫpi taš-tu-ta-šūl-a* = Hit *idalumakān anda lē tarnai* 'let (him) not allow the evil in(side)' (Dunaevskaja 1961: 127).

Comment:
The meaning of the Hattic prefix *ta-* as 'inside' is well established (cf. Dunaevskaja 1961: 128; Kammenhuber 522-523; Ardzinba 1979: 28-29). The corresponding Abkhaz prefix (cf. *a-ta-la-ra* 'to go inside') is connected with the stative verb *a-ta-z+aa-ra* 'to be inside' and with CAbx noun **ta* 'place, stand' (with further Ubykh and Circassian correspondences).

(2) Hat *ḫa-* 'among, between', 'in' = Hit *ištarna, anda* (Kammenhuber 490, 491) : CCirc **xa-* 'in the mass' (e.g. **xa-sa* 'to be sitting amongst sth/smb'). Hattic examples: *ḫa-an-wa$_a$-aš* = Hit *ú-it* 'he came' (Dunaevskaja 1961: 67); *ḫa-wa$_a$-šḫap* = Hit *DINGIR^{MEŠ}-naš=a ištarna* 'and amongst the gods' (Kammenhuber 473); *ḫa-wu$_u$r[i* 'in/to the land' (Kammenhuber 490); *ištarazzil ḫa-nuwa-pa* (Kammenhuber 472) "ground in-go-though"; *ḫa-nuwa-pa* 'herein-go-though' = Hit *anda-ma-aš-kan pait* "herein-though-he (+ local particle *-kan*) went ..." (Kammenhuber 511).
Comment:
Cf. Ivanov 33. The Hattic example *ḫa-wa$_a$-šḫap* demonstrates also the meaning 'in

the mass, amidst', just as in Circassian.

(3) *li-* locative prefix like German 'bei', 'in', 'aus', 'auf' before the enclitical pronoun (cf. Dunaevskaja 1961: 93) : CWC **la-* > Ub *La-* local preverb with an abstract location, CAbx prev. **la-* 'down' or, alternatively, **la-* 'in(to) the mass', **lə-* 'from the mass'.

(4) *zi-* local prefix of the type of German 'bei', 'in', 'aus', 'auf' before the enclitic pronouns (Dunaevskaja 1963: 94) : CAbx preverbs **c'a-* 'under' ~ **c'ə-* 'from under'. Hattic examples: *zi-jaḫ-du* 'from the sky thither' (Kammenhuber 492); *wa-zi-niwa$_a$š* "?-?-sit/be seated" (Kammenhuber 525); *wa-ḫ-zi-ḫerta* (Kammenhuber 525) "collective pref.-(s)he-hide".

Comment:
The same or a similar morpheme can be represented by the Hattic locative prefix *za-*, found in *tu-ḫ-za-šul* (Kammenhuber 518) "herein-he-down(?)-let" (*šul(a)* 'to let (free)'). The correspondence between *za-* and *zi-* can parallel that between *ta-ḫa* 'to put into' and *tu-ḫ* 'to take out'.

(5) Hat *pe-//pi-//wa-* locative prefix : Ub *wa-* prev. 'in(to) the mass, amidst sth or smb' (e.g. *wa-wa* 'to go into (the mass/amidst)'). Hattic examples: *taš-te-nuwa pe-weiḭl* "not-let-go into-house" (Kammenhuber 511); *wa-nup-pa ^{d}Ḫabantali* = Hit *paitt(a)-aš ^{d}Ḫapantalijaš* 'she went, (the goddess) *Ḫ.*' (Kammenhuber 511-2)

Comment:
Hat *wa-nup-pa* < **wa-nuw-pa*, cf. the variant *pi-nnuwa-t ^{d}Ḫapantali* 'id.'.

(6) *ḫa-* 'on' (Kammenhuber 432) : CAbx **qa-* prev. 'above, over the head/top' (< **qa* 'head'). Hattic examples: *ḫa-nwa$_a$š(u)-it* 'throne', 'the throne goddess' = 'on-is sitting-fem. suf.' (Kammenhuber 432), cf. CAbx **qa-t$^{\circ}$a* 'to sit over, preside', LAbx *a-x̌-a-n-t$^{\circ}$a-j$^{\circ}$ə* 'the chairman' = "its-head-to-adv.suf-sit-agent suf.", *a-x̌-a-nə* 'at the head', 'at the beginning'.

(7) Hat *išta-* in *ištarazzil* 'earth, ground' : CAbx prev. **šɬ'a-* 'on the ground'.

Comment:
Cf. Braun 356. The Abkhaz preverb can be analysed as **šɬ-t'a-*, with the first element going back to CWC **ɬ'a* 'foot'. But even in this case one can imagine the

rendering of the sequence *λ'-t'a by means of *(i)šta-*. Cf. also Hat *šteraḫ* 'coverlet' (Ivanov 46), which can contain the same preverb. An alternative etymology of Hat *ištarazzil*, which I find somewhat less convincing, can be found in Ivanov 46.

Number affixes

(1) Hat *wa-* collective or indefinite plural prefix (variants: *wi-*, *pi-*) (Dunaevskaja-Diakonov 81) : CAbx **wa-* in **wa-ʕ°ə* 'man', **wa-ʕa* 'men, people', **-wa* "ethnic suffix" < **wa* 'relative, friend, 'belonging to sth, related to', 'example'. Hattic examples: wa_a*-zari* 'people, mankind' (Kammenhuber 465); *wa-zar* 'sheep' (pl.) (Kammenhuber 462); *wa-šḫap/w* 'gods, deities' (Kammenhuber 465); wa_a*-ašaḫ* 'evil' (Kammenhuber 467).

Comment:

It is not excluded that this prefix is etymologically connected with the items in (5) in the preceding section. Ivanov 35-6 regards this prefix as a grammatical class marker.

Suffixes

(1) Hat *-ḫ* adjective-forming suffix (Schuster 1974: 126) : CWC **-x̌ə* > Ub *-x̌(ə)* attributive/possessive suffix (e.g. *k°anə-x̌* 'relating to tomorrow's days': *k°anə* 'tomorrow', *də-x̌ə* 'master', lit. 'the one (relative pref. *də-*) who possesses'), CAbx **-x̌ə* suffix forming deverbal nouns (e.g. SAbx *a-γ'əč'-ra-x̌* 'the stolen (thing)', from *a-γ'əč'-ra* 'to steal'). Hattic examples: *tittaḫ* 'big, great' (Schuster 1974: 126), *šaḫ* (Schuster, ibid.) or *ašaḫ* (Kammenhuber 451, 458) 'evil', *ijaḫ* 'shining' (Schuster, ibid.).

Comment:

Girbal 158 regards the suffix *-ḫ* in *tittaḫ* as the feminine suffix, connecting it with *-ḫ* in *katta-ḫ* 'queen' (see the following comparison).

(2) Hat *-aḫ* (or *-ḫ*, cf. Girbal 157) feminine suffix : CWC **H°a/ə* morpheme meaning 'feminine'. Hattic examples: *katte* 'king' vs. *katta-ḫ* 'queen'; **zintuḫ(i)* prob. 'granddaughter', 'young woman' (Kammenhuber 435, 460). Cf. also Ub *x̌a-* feminine 3d p.sg. pronoun.

Comments:

(a) Cf. Inal-ipa 1976: 138, Ivanov 37, Girbal 157-8, Braun 355. The West Caucasian morpheme is found in CWC **pH°a/ə* 'daughter' (cf. CAbx **pa* 'son',

thus **p-Hˤa/ə* ?), **pHˤa/ə-sˤə* 'woman' (**-sˤə* diminutive suf.), CAbx **ja-Hˤ-šˊa* 'sister', as opposed to **ja-šˊa* 'brother'. (b) The Hattic word **zintuḫ(i)* (**zintu-ḫ(i)*) is reconstructed on the basis of Hittite loan in the name of the goddess *Zintuḫi-*, granddaughter of the Hattic Thunder-god *Taru/Šaru* and the Sun-goddess from Arinna, *Wu$_u$runšemu*. The presence of this suffix in **zintuḫ(i)* was supposed by Laroche on the basis of comparison with *p/wa$_a$zi-zintu [fazi-zintu]* 'grandson', thus *zintu* 'grandson' vs. *zintu-ḫ* 'granddaughter', which parallels the opposition *katte* 'king' vs. *katta-ḫ* 'queen' (cf. Kammenhuber 460).

(3) Hat *-ma* definite suffix : CCirc **-m-a* ergative plural suffix (e.g. **cʼəxˤə-ma* 'people (erg.)'). Hattic examples: *wa$_a$-šḫap=ma eš-wu$_u$r aš-kaḫḫir* = Hit *DINGIR^{MEŠ} KUR^{MEŠ} manijaḫḫir* "gods (the-)lands they-ruled" (Kammenhuber 473-4); *šāwatma ka-ur-(a)n-tī-u* 'apple stands over the well' (Dunaevskaja 1961: 132-3) : *šāwat-ma* 'apple'.

Comment:
Though the first Hattic example (*wa$_a$-šḫap=ma* 'gods') can indicate something like an ergative plural suffix (cf. Ivanov 1983: 128, Ivanov 35), equal to Common Circassian **-m-a*, the second example (*šāwat-ma* 'apple') makes one think that it could be rather something like a definite article. In this function it could have served as a basis for the later ergative marker in Circassian (cf. CCirc demonstrative pronoun **mə* 'this'). See also below, in 2.6.2. (4). It is noteworthy that in Circassian the suffix **-m* (sg.), **-m-a* (pl.) serves not only as an ergative case marker, but can also bear an obvious definite function, cf. such a Kabardian example as *śʼaLă-r txələ-m jăwʒă* 'boy (nom.) reads (itr.) the book (*txələ-m*)' (cf. Urusov 295; Kumaxov 1971: 121).

(4) Hat *-an* past tense suffix ? : CAbx **-nə* imperfect finite tense suffix (e.g. *jə-s-fa-wa-n* 'I was eating'). Hattic example: *a-an-ta(?)-ḫa-an* 'he has put' (cf. Dunaevskaja 1961: 81): "it-he-inside-put-past (?)".

Comment:
Ivanov 38 sees in the given Hattic form *-ḫa-an* = *-ḫan* the perfective suffix, comparing it with the Abkhaz perfective suffix *-x̌ˊa-n*, but the Hattic form *a-an-ta(?)-ḫa-an* obviously contains the verb *ta-ḫa* 'to put'.
(5) Hat *-t* past tense suffix ? : CAbx **-tʼə* past tense dynamic finite suffix, Ub *-tʼ* past tense suffix (cf. Ivanov 38). Hattic examples: *ta-ḫ-kuwa-t, še-ḫ-kuwa-t* = Hit *weritemaš* 'caught' (Kammenhuber 519); *pi-nuwa$_a$-t* = Hit *pait(ta)-aš* 'she went'

(Kammenhuber 527).

(6) Hat *-e/-ja* "dative case" suffix; the oblique case marker 'him', 'her' (Kammenhuber 470; Dunaevskaja-Diakonov 80) : CCirc **ja-* (sg.), **ja-a-* (pl.) 3d p. indirect object prefix, CAbx **jə-* 3d p.sg. subject and object prefix. Hattic examples: *aja tabarna katte-ja* = Hit *piandu* 'they will give to the ruler, the king' (Kammenhuber 487, 526); *ja-e* 'to give-him' (Kammenhuber 487); *ta-ja-ja* "let-give-to him" (Kammenhuber 526).

Comment:
Dunaevskaja 1964: 102 analyses Hat *-a* as a locative suffix 'in'. The alternative West Caucasian comparison can be with such preverbs as Ub *ja-* 'towards', CCirc **ja-* 'upward', CAbx **ja-* 'over sth', or with CWC **-a* postpositional directional particle.

(7) Hat *-Vn* "genitive case" suffix (Dunaevskaja-Diakonov 80), according to Dunaevskaja 1964: 102, this suffix, besides the genitive meaning, expresses also locative and dative meanings : CAbx **-nə* locative suffix (e.g. Abx *a-mj°a-nə* 'on the road', *a-mj°a-n+t°ə* 'from the road'), Ub *-n* suffix of oblique case, including the functions of the ergative and locative cases (e.g. *za-š°abLa-n* 'in one country'). Hattic examples: *wu$_u$r-un* 'of lands, countries' (Kammenhuber 447); *te-karam-un* 'of his vessel for libation', or 'of his drink' (Kammenhuber 467); *zari-un* 'of man, mortal' (Kammenhuber 468); *ḫapalki(j)-an* 'of/from iron' (Kammenhuber 467); *takeḫa-un* 'of lion' (Kammenhuber 467).

(8) Hat *-tu/-du* "ablative case" suffix (answers the question 'from where?'; Kammenhuber 492) : CAbx **-t°a/ə* attributive/possessive suffix, having also the meaning 'from', **t°ə* 'to belong, possess', Ub *t°a* 'to exit, get/come out'. Hattic examples: *zar-du* 'sheep' (abl.) (Kammenhuber 462); *wu$_u$r-tu* 'from the land, country ?' (Kammenhuber 472); *ašaḫ-du* (*ašaḫ* 'evil') (Kammenhuber 467); *zari-ddu* (*zari* 'man, mortal') (Kammenhuber 468).

Comment:
cf. SAbx *a-j°ada-n+t°(ə)* 'from above', *w-aba-t°ə-jə-w* 'where are you from?', Bz *a-šχ̌a-t°(ə)* 'from the mountain', Ub *a-ź°a-sə-w-t°ə-n* 'I come down', *mā-w-La-t°a-nə-j* 'where do you come from?'. The alternative comparison with Hattic may be Ub *-d°a* attributive suffix (e.g. *ʒ°a-d°a* 'drink', 'designed for drinking', *ʒ°a* 'to drink').

(9) Hat *-l* agent suffix ? : CAbx **-la* comitative suffix (e.g. **g°ə-la* 'neighbour', from **g°ə* 'heart'). Hattic examples: *takkeḫal* 'hero' (Kammenhuber 447), obviously derived from *takeḫa* 'lion' (Kammenhubert 447); the same suffix can probably be found also in *šaḫtaril* '?' (Kammenhuber 447), *duddušḫijal* 'ritual functionaries' (Kammenhuber 447), *luizzil* 'messenger' (Kammenhuber 452), *ḫaggazuel* = Hit *e/akuttara-* "Tränker" (though cf. Kammenhuber 460).

Comment:
Does Hat *-el, -il*, suffix of possession or origin (> Hit *-el* 'id.'; Kammenhuber 460), also belong here ? Cf. Hat *Ḫaniku-il* 'the Haniku-dweller' (Kammenhuber 449); *Nerik-il* 'the Nerik-dweller' (Kammenhuber 461). The Hittite suffix *-li*, borrowed from Hattic, which was used in the forms like *ḫatti-li* 'in the Hattic language', i.e. with instrumental meaning, can also belong here, cf. Tap *t'ap'anta-la* 'in Tapanta (Abaza)', SAbx *apsə-š°a-la* 'in Abkhaz' (cf. Ivanov 39).

(10) Hat *-et* toponymic suffixe (Kammenhuber 461) : CAbx **-ta* 'id.' < **ta* 'place of'. Cf. also items in (1) in *Locational prefixes* above.

(11) Hat *-š* locative suffix in ^{URU}*Ḫattuš* (cf. Hit *Ḫatti* 'Hattic') : CCirc **-š^{h}ə*, Ub *-ś* locative suffix (< CWC **-ɬə*) 'place of'.

Comment:
The alternative comparison with Ub *-š°a* locative suffix ('the place of', e.g. *Lak^{w}a-š°a* 'the village (of the family of) *Lak^{w}a*') seems phonetically (because of the lack of any trace of labialisation in the Hattic form) somewhat less plausible.

(12) *-ma-* suffix of place (Kammenhuber 539) : Ub *ma-* verbal prefix designating the place of the action, cf. also Ub *mā-k'a* 'where ?', *ma-ʒa-j* 'where ?'

(13) Hat *-šu/-uš/-š* "accusative case" suffix (Kammenhuber 470) : CAbx **-śa* adverbial/transformative suffix (e.g. CAbx **laba-śa* 'by a log', **qać'a-śa* 'as a man'), Ub *-śa* gerundial suffix (e.g. *a-j-k'a-śa* '(the one) who is coming').

Comment:
It is clear that Kammenhuber's term "accusative case" can be used here only as purely conditional. Cf. Ivanov 38-9.

(14) Hat *-u* present tense suffix : CWC **wa* present tense affix (>

present/dynamic prefix in CCirc, present tense suffix in CAbx).

Comment:
The present tense meaning for this Hattic verbal suffix was tentatively proposed by Girbal 124-126. He sees the presence of this suffix in such Hattic forms as *an-ka-ti-i-u-ma*, *ḫa-zu-ú-wa-ḫé-en-tu*, *ti-i-u* ('stands'), *untuḫkantiu* 'cleaned (or cleans ?) himself', etc.

2.3. VERBS

(1) Hat *pu/bu* 'to do, make' = Hit *ija-* 'to make' (Kammenhuber 513, 528) : CWC **wə* 'to do, make'. Hattic examples: *ni-i-pu* = Hit *ijaweni* 'we shall do', *nīpupe* = Hit *ijaweni-ma-aš* 'wir machen-aber-sie' (Kammenhuber 528), *a-am-pu* = Hit *i-e-it*(?) '(he) made, did' (Dunaevskaja 1961: 67).

Comments:
Ivanov 40 tentatively analyses the Hattic verb as the combination of the grammatical class prefix *b-* with the verb *u*, connected with the corresponding Abkhaz and East Caucasian verbs. Though such an approach is possible, the peculiarities of the Hittite graphic system, where *p* can render *p*, *b*, *w* and *f*, allow us to reconstruct Hat **wə* 'to do', reflected in Hittite graphics as *pu* or *bu*.

(2) Hat *tuḫ* 'to take' = Hit *dā-* (Dunaevskaja 1961: 67; Kammenhuber 447) : CAbx **tə-x̌ə* 'to take from inside' (the local preverb **tə-* 'from inside' and the verb **x̌ə* 'to take'). Hattic examples: *a-an-tuḫ* ^{d}*Šu-li-in-kat-ti kat-te-e li-e-wa$_a$-e-li-e [...]* = Hit *da-a-aš-ma-za* ^{d}*Šu-li-in-kat-te-eš LUGAL-uš Ú.NU.TE^{meš}* 'Š., king, took the things' (Dunaevskaja 1961: 77); *pa-la a-an-da-ḫa ak-ka-tu-uḫ pa-la a-an-ta-ḫa* = Hit *na-at ša-ra-a da-a-aš na-at-kan an-da da-a-iš* 'and them has taken, and them has put' (Dunaevskaja 1961: 77); *a-an-tu-uḫ li-e-zu-u-uḫ li-eš-te-ra-aḫ ba-la l[i-e-še-ip-še-ip]* = Hit *da-a-aš-ma-za TUGḫi.a KUŠGAR.TAGḫi.a KUŠE.SIR ḫi.a$_{=ja}$* 'he took clothes, bed-spreads and s[hoes] (Dunaevskaja 1961: 77).

(3) Hat *taḫ//taḫa* 'to put, sit, make sit' = Hit *dāi-* (Dunaevskaja 1961: 75) : CAbx **ta-x̌a* 'to remain/stay inside' (**ta-* prev. 'inside', **x̌a* 'to remain, stay'). Hattic examples: *pa-la a-an-da-ḫa ak-ka-tu-uḫ pa-la a-an-ta-ḫa* = Hit *na-at ša-ra-a da-a-aš na-at-kan an-da da-a-iš* 'and them has taken, and them has put' (Dunaevskaja 1961: 77).

Comment:

While Dunaevskaja 1961: 82 regards *tuḫ* and *taḫ(a)* as different verbs, Ardzinba 1979: 30 suggests to analyse *taḫa* as a combination of the well-attested Hattic local prefix *ta-* 'inside' and the root *ḫ(+)a*. The form *tuḫ*, according to him (ibid.: 31), is the same stem formed by alternation *a/u*, *a/ø*. The stem *taḫa* thus indicates the action directed towards the speaker, and *tuḫ* - the action directed to outside.

(4) Hat *neš* = Hit *dāi-* 'to put' (Dunaevskaja 1961: 90) : CAbx **nə-žʹə* 'to put, leave'. Hattic example: *anneš* = Hit *daiš* '(he) put' (Dunaevskaja 1961: 81 fn).

Comment:
The Hattic form can be analysed as *a-n-neš* "it-he-put". There can also be an alternative comparison of the Hattic verb with CWC **sə* 'to sit' (?), which means that *ne* can be analysed as a local prefix.

(5) Hat $wa_{a}u//pu$ (according to Kammenhuber and Ivanov, phonetically probably *[f(a)u]*) = Hit *ed-/ad-* 'to eat' (Kammenhuber 528) : CWC **fa/ə* 'to eat' (cf. Ivanov 48). Hattic example: *teš-pu//teš-*$wa_{a}u$ 'let-them-eat', variant: *te-eš-pu-ú [= te-(a)š-f(a)u* (or *fu]* = Hit *adandu* 'they shall eat' (Kammenhuber 505, 528).

(6) Hat *tī* or *tij* = Hit *ar-* 'to stand, rise, climb' (Dunaevskaja 1961: 87, 91) : CWC **tə/a* > CCirc **tʰə* 'to stand', **tʰa-gʹə* 'to stand up, rise', Ub *tʼə* 'to be, exist, be present somewhere', CAbx **ta* 'to be inside'. Hattic example: *antiu* = Hit *arta(ri)* 'he stands' (Kammenhuber 509).

Comment:
It is possible that Hat *put* = Hit *eš-/aš-* 'to be, exist' (Kammenhuber 528) also contains this root. Cf. Hat *te-(a)š-put* "let-them-be" = Hit *ašandu* 'they will be' (Kammenhuber 528). It can be analysed as *pu-t*, where one can see the preverb *pu-* = CWC **pa-* 'at, beside', and the root *t*, same as in (6).

The final *-u* in Hat *antiu* can either point to the labialised character of *t* (thus **a-n-tʼə*, cf. Ub *tʼə*, given in (6)), or can be interpreted as a separate verbal morpheme, probably the marker of present tense (thus **a-n-tə-w*; cf. Girbal 124-5), which can be compared with the similar West Caucasian affix (cf. above, in Chapter X, 3, no. 31).

(7) Hat *ḫerta*, or *ziḫerta* = Hit *mun[nāi-]* 'to hide' (Dunaevskaja 1961: 91) : Ub *qarda* 'id.'.

Comment:
The comparison with Ubykh was proposed by Ivanov 41. The alternative comparison could be with CAbx **ć°aǎə* 'to hide' (thus Hat *ziḫer-ta*).

(8) Hat *kuwa* = Hit *ep(p)-/ap(p)-* 'to take, catch, grab' (Kammenhuber 519) : Ub *q°a* 'id.' (cf. Ivanov 44). Hattic examples: *ta-ḫ-kuwa-t*, *še-ḫ-kuwa-t* = Hit *epta-an* 'caught' (Kammenhuber 522, 527).

(9) Hat *niwa$_a$š* = Hit *eš-/aš-* 'to sit/be seated' (Kammenhuber 510) : CWC **sə* 'to sit'. Hattic examples: *^{d}Šulinkatti katti a-ta-niwa$_a$š* "Š., king, he-inside-sits" = Hit *-šan anda ešzi* 'he is sitting there inside' (Kammenhuber 510).

Comment:
It is quite probable that only the last consonant in Hattic (i.e. *š*) is an actual root, the part *niwa$_a$* probably representing a local preverb, or a combination of two preverbs (*ni+wa* ?; cf. Ivanov 45), cf. CWC **t°a-sə* 'to sit', with the preverb **t°a-*.

(10) Hat *nuwa* = Hit *pāi-* 'to go, come' (Kammenhuber 447), *uwa-* 'to enter' (Dunaevskaja 1961: 90) : CAbx **nəq°a* 'to walk' (?).

Comment:
Cf. also Braun 357. There can be an alternative comparison of the Hattic verb with Ub *wa* 'to enter' (the element *nu-* can be analysed then as a local or directional prefix).

(11) Hat *zija* = Hit *ki-* 'to lie' (Kammenhuber 529) : CCirc **čə-ja* 'to sleep'. Hattic example: *taš-teḫ-ka-z(z)ija* "not-let-*ḫ*-there inside(?)-lie" = Hit *anda le kittari* 'shall not lie there inside" (Kammenhuber 504).

Comment:
The first part of the Circassian word is supposedly connected with CAbx **ć°a*, Ub *ć°a* 'to sleep', while the second one with CAbx **ja* 'to lie' (cf. NS 409), Ub *ja-* prev. 'under'. Another possibility is to analyse the Hattic form as consisting of the locative preverb *zi-* 'beneath' and the root *ja* 'to lie', connected with *ja* in Circassian, Abkhaz and Ubykh forms given above. Braun 357 alternatively connects Hat *zija* with CAbx **c'a* 'to put, lay'.

(12) Hat *pu* 'to look, see' = Hit *ušk-* 'to look into' : CWC **ba/ə* 'to see'. Hattic

example: *pa-la a-an-da-ap-pu pí-iz-zi-e* wa_a*-aš-ḫa-ap* = Hit *na-aš-ta DINGIR*^{MEŠ} *an-da ú-uš-k[i-e-ir...* (Ardzinba 1979: 33) 'and then the gods looked into'.

Comment:
The Hattic *andappu*, as a parallel to Hit *an-da ú-uš-k[i-e-ir* 'inside were looking' (cf. Ardzinba 1979: 33; cf. also Ivanov 45), can be analysed as *a-n-ta-pu* "it-he(they?)-inside-look". Cf. the discussion of the irregular correlation of the subject singular marker *n-* in *a-n-ta-pu* with its referent in the form of the (collective) plural wa_a*-aš-ḫa-ap* 'gods' in Ardzinba, ibid., 34.

(13) Hat *ḫu* 'to speak' : CWC **H°a* 'to speak'. Hattic examples: *pala ita uk-ḫu-ma(//-ba)* = Hit *me[?mai?] kiniššan* 'Sie sp[rach(?)] folgendermassen' (Kammenhuber 520); *un-ḫu-pi* = Hit *ziga-wa-kan* 'you + the particle of direct speech *wa(r)* + local particle *kan*' (Kammenhuber 536); *ud-ḫu ga-uri antuna-ḫu ga-ur[?* (Kammenhuber 536).

Comments:
cf. Ivanov 41, Braun 357. Kammenhuber 520 translates the first Hattic example given above as 'Und so wie(?)+Redepartikel *-ḫu* + *-ma/ba* so', commenting on it "Empty phrase, which introduces the speech' (ibid., 521), though the Hittite translation indicates that we should rather analyse the Hattic sentence as 'and so thus-(she) said-though'. It means that *ḫu* here must be interpreted as the verbal root 'to say, speak', not just the particle. The second Hattic example can be analysed as *u-n-ḫu-pi* "to you-(s)he-say-though".

The verbal stem *ḫu* in Hattic was used also as a particle of the direct speech, e.g. *malḫip-[ḫ]u* 'good(ness)-*ḫu*'; *Eštan-ḫu* "The Sun-god-*ḫu*" (Kammenhuber 471); *kap-ḫu* 'from the sky-*ḫu*' (Kammenhuber 517) = Hit *-wa(r)* (cf. Kammenhuber 471), which functionally and materially corresponds to the Abkhaz particle *-ħ°a*, cf. *s-aa-jt'-ħ°a* 'I came-*ħ°a*', *ħ°a* being an archaic form of the past absolutive of the verb *a-ħ°a-ra* 'to speak', meaning literally 'having said' (= Rus мол).

(14) Hat *zaraš* (*za-ar-aš*) 'to call' (Girbal 138) : CAbx **c'arə//*c'ərə* 'to shout, yell, howl', CWC **c'ərə* 'to chirp, squeak, cheep, peep'.

(15) Hat *ša* = Hit SIG$_5$*-aḫḫ-* 'to favour, make healthy' (Kammenhuber 528) : CAbx **ša* 'to divide, distribute'. Hattic examples: *u-uš-š[a(-.)]* = **uš-ša* "they-favour (?)" (Kammenhuber 528); *taš-te-ša(?)* 'not-allow-to favour (?)' (Kammenhuber 528).

Comment:
Cf. also *ša* in SAbx *a-g°ə-r-γ'a-č'-ħ°a-ša*, Tap *a-g°ə-r-γ'a-ša* 'present for smb who brought good news' (*g°ə-r-γ'a* 'happy', Tap *č'-ħ°a* 'to announce'), *n-x̌a-ša* 'salary' (*n-x̌a* 'to work'), *qa-x̌°ħa-ša* 'farming' (arch.) (*qa* 'head', *x̌°ħa* 'to buy'), *ħ°a-ša* 'for free' (*ħ°a* 'to speak') (Tabulova 1976: 63); cf. perhaps also the Abkhaz suffix of second future *-ša*: *jə-s-fa-ša* 'sth which I am going/supposed to eat'.

2.4. NOUNS

(1) Hat *ḫamuruwa* 'beam' (Dunaevskaja 1961: 88) : CAbx **q°ə(m)bələ-ra* 'beam over the hearth', 'cross-beam'.

Comment:
The meaning of the first syllable of the Abkhaz word is not quite clear, though the second part (**bla/ə*) is related to **bLa* in CCirc **qʰa-bLa* 'stretcher for carrying the dead to the cemetery' (**qʰa* 'dead'), **pxă-bLa* 'id.'. Ivanov 40 compares the first part of the Hattic word with CCirc **pxă* 'wood(en)', used in **pxă-bLa* and in other Circassian compounds.

(2) Hat *zīḫar//ziḫer* 'wood' (Dunaevskaja 1961: 89) : CCirc **čə-ĝə* 'tree', in nom. case **čə-ĝə-r* (cf. Ivanov 49), cf. also **čə-ĝ-ajə* 'oak-tree'.

(3) Hat *uš-ḫa-aš* = Hit *weš-pat* 'we-ourselves' (Kammenhuber 515) contains *uš-* 'we' (Kammenhuber 515) and *ḫa-aš* = *ḫaš*, which can be compared either with CCirc **śħa*, or with CAbx **qa* both meaning 'head', cf. Ad *ə-śhă-č'ă* ("its/his/her-head-instr."), LAbx *-x̌-a-la* 'himself' (< **qa-a-la* "head-dir.-instr."), CCirc **śħa-x°a-wə* ("head-for-participial suf."), LAbx *-x̌-a-zə* '-self', 'separately' (< **qa-a-źə* "head-dir.-for").

(4) Hat *šaḫiš* 'kind of tree' > Hit *šaḫi-* 'tree, wood (as material)' (Kammenhuber 437, 447) : Ub *səx̌ə* 'wooden bolt, latch', 'pole, perch' or, alternatively, CCirc **saxə* '(wooden) bar, gate'.
Comment:
The Ubykh word is analysed as *sə* 'wood' plus relative-possessive suffix *-x̌ə*, i.e. 'the wooden (thing)' (cf. ES II: 60). CCirc **saxə* can be related to the Ubykh word only by its first part, *sa-* < CWC **sə* 'tree, wood (as material)'. As for the composition of the Hattic word, cf. the attributive suffix *-ḫ*, probably related to Ub *-x̌ə* (see above). The final *-iš* in Hattic remains unclear.

(5) *katte* 'king', *kat(t)a-ḫ* 'queen' (Kammenhuber 447) : CAbx **qada* 'chief' (adj.).

Comment:
The etymology of the Abkhaz word is not quite clear. It can be derived from the unattested verb **qa-da* 'to lead' (?), with preverb **qa* 'head' and the root **da* 'to lead, carry'. The antiquity of the Abkhaz word can be supported by the fact that it can probably be seen in the Apsilian (Old Abkhazian) masculine name of the VIII century A.D., rendered in Greek as Χάδος (cf. Agathias). The reflection of the uvular stop *q* by a cuneiform sign for a velar stop (*k*) is quite natural (cf. the ethnic name *šʻqara-wa* 'Ashkharywa', rendered in Russian transcription as шкарава, i.e. by means of *k*). The presence of the uvular stop *q* as the initial consonant in Hattic can be confirmed by the variant Hittite rendering of the Hattic *katta-ḫa* 'queen' (with the feminine suffix *-ḫa*) in the name of goddess *Kattaḫḫa*, in later Hittite texts rendered as *Ḫataḫḫa* (Kammenhuber 449).

(6) Hat *pinu* 'son' (Kammenhuber 447; *pi-nu* ?) : CAbx **pa* 'son, child'.

Comment:
Cf. Braun 355. For a possible explanations of the final *-nu* in Hattic cf. the comment to the following comparison. **pa* is likely to be present also in CWC **pHʷa/ə* 'daughter' < **pa-Hʷa/ə*, with the feminine suffix *Hʷa/ə* discussed above, in 2.2.6. (2).

Ivanov 45 alternatively compares the Hattic word with CCirc **bənə* 'descendants', '(children of) family'. Though this comparison matches the Hattic word better, the unclear etymology of the Circassian word renders it less likely. Thus, Shagirov (ES I: 103) and Ivanov 45 himself suggest the possibility of a Semitic borrowing in Circassian (cf. Arab *ibn* 'son', 'descendent'). On the other hand, the Circassian word is being also connected with Oss *bən/nun* 'beneath, basis, bottom, heritage' (cf. Chapter IV, in 8.1.).

(7) *psun* 'soul', 'breathing', also as a verbal root in *a-am-pu-ša-an* = Hit *pa-ra-iš* '(he) breathed, blew' (Girbal 100) : CWC **psə* 'soul', cf. also CAbx **psə-pə* 'breathing'.

Comment:
The meaning of the Hattic word was established by Girbal 100. The final *-n* in Hattic is either a suffix, or a part of the root, which, in this case, can indicate its loss in Common West Caucasian.

(8) *(a)šḫap/w* = Hit *DINGIR* 'god', pl. *wa$_a$-šḫap/w* = Hit *DINGIR^{MEŠ}* (Kammenhuber 447, 453) : CCirc **wašx̌ʷa* 'oh, skies', 'vow' (used in archaic formulas), Ub *wašx̌ʷa* 'thunder and lightning', CAbx **wašx̌ʷa* 'vow, oath' (in archaic formulas).

Comments:

This comparison, in fact the first one to be proposed as proof of a Hattic-West Caucasian relationship, remains controversial. The Circassian word is analysed as **wa* 'sky' and **šx̌ʷa* 'blue', which is supported, according to Shagirov (ES II: 89), by such Kabardian oath formulas as *wăšx̌ʷă, məvăšx̌ʷă č'ănă* 'blue sky, a piece of blue stone'. The Common Abkhaz word, given above, is regarded as a Circassian loan (cf. ES II: 90), while the borrowed nature of the Ubykh word is not certain (ES, ibid.; ZL 30). The most serious argument against this otherwise quite tempting comparison with Hattic is that the bearer of the main lexical meaning (i.e. 'god') in Hattic is obviously the part *šḫap/w*, the element *wa-* being regarded as a collective plural prefix (cf. Kammenhuber 441). However, in West Caucasian it is certainly the first part (*wa*) which means 'sky', or 'god', cf., apart from CCirc **wa-šx̌ʷa*, also Ub *wa//wa-ḫa//wa-ba* 'God', which etymology can be 'sky/god-grey' (cf. MS 69). The only possible explanation for this controversy, if we still persist in connecting the Hattic and West Caucasian words, can be that in Common Circassian **wašx̌ʷa* was folk-etymologically reinterpreted, while in Ubykh and Abkhaz it was preserved in its fossilised form (cf. Ivanov 1983: 128). Just to show that the etymology of the Circassian word as "blue sky" cannot be the only one possible, one can in principle analyse the pair CCirc **wašx̌ʷa* and Ub *wašx̌ʷa* as consisting of **wa* 'sky/god' and the adjective **šx̌ʷa* 'strong, mighty', i.e. 'the mighty sky/god', cf. CCirc **γa-šx̌ʷa/ə* 'to temper, harden' (**γa-* causative prefix), i.e. 'to strengthen', related to Ub *šx̌ʷa* 'strong'. Yet still another possibility is to see in Hat *(a)šḫap/w* 'god' the word related to CCirc **šx̌ʷa* 'sorcery, poison', borrowed into Ubykh (cf. Ivanov 1983: 128), present also in CCirc **xʷə-šx̌ʷa* 'medicine, curative', and probably in **qʷə/a-šx̌ʷa* 'to be delirious'.

Cf. also in Braun 356 the attempt to connect the Hattic word with CAbx **šʹqa* 'mountain'.

(9) *-anna* 'woman', cf. *tabarna* 'ruler (masc.)', *tawann-anna* 'ruler (fem.)', the title of the ruling queen (Kammenhuber 459) : CWC **(a)nə* 'mother', used also to designate females (as the second part of the compounds).

Comment:

Cf. CCirc **t̄əγ°ə+ź-ana* 'she-wolf', **q̄az-ana* 'female goose', CAbx **č-anə* 'mare' (**čə* 'horse'), **ħ°-anə* 'sow' (**ħ°a* 'swine'), etc.

(10) *ur(a/i)* 'well; spring' (Kammenhuber 462) : CWC **ʕ°arə* 'stream, torrent' (> CCirc **warə* 'wave, stream', 'turbulent water', CAbx **ħ°arə* 'torrent, stream (after rain)').

Comment:
Braun 356 alternatively compares the Hattic word with CAbx **k°ara* 'little river, creek'.

(11) *ureš* 'smith' (Kammenhuber 462), *wae* 'working tools' (Kammenhuber 494) : CCirc **wərə* 'big hammer', 'sledge-hammer', **wa* 'to beat, strike', Ad *wată* 'hammer'.

Comment:
Cf. Ivanov 48. CCirc **wərə* is regarded as a derivate from **wa* 'to beat' (Rogava 1956: 109), which can be true for Ad *wată* as well.

(12) *kut, kud(u)* 'soul' (Kammenhuber 59) : CWC **g°ə* 'heart'.

Comment:
Ivanov 44, who proposed this comparison, suggests that we analyse the element *-du* (*//-ttu*) in Hattic as a suffix, probably "ablative", though cf. CAbx **g°ə-ta* 'centre, core' (**g°ə* 'heart', **-ta* 'place of'), also cited by Ivanov. As Girbal 101 remarks, Hat *kut, kud(u)* 'soul' and *psun* 'soul', both rendered in Hittite translations by the Shumerogramme ZI, were probably not completely synonimic, as ZI covers a broader semantic field.

(13) *zar* 'sheep' (sg.), wa_a*-zar* (pl.) (Kammenhuber 468) : CWC **wasa* 'sheep', 'price'.

Comment:
If the CWC word is really connected with Hattic, it can represent a fossilised "collective plural" form (cf. Ivanov 36). In this case the usual connection of the Common West Caucasian word with the Iranian word for 'sheep' (cf. ES II: 88-9) must be rejected. Braun 356 compares the Hattic word with CAbx **ʒə-śə* 'goatling, kid', pl. **ʒ-ara*, which seems to be a rather good alternative to the

comparison in (13).

(14) Hat *wi¡n* 'wine' (?) : CAbx **ĥ°ə* 'wine'.

Comment:
The Hattic word can be extracted from the compound *LÚwi¡ndu-qqaram* 'wine-scooper', containing *karam* 'libation vessel or a drink' (Kammenhuber 496). *wi¡ndu* can be analysed as *wi¡n-du*, the form with the "ablative" suffix *-du(/-tu)*, while *wi¡n* is logical to be regarded as 'wine'. If the Abkhaz word is really connected with the Hattic, then it must have lost the final *-n*. The word represents a migrational cultural term, cf. IE **w(e/o)ino-* 'wine' (> Hit *wijana-*, Myc. Gr *wo-no-*, Lat *vīnum*, Gothic *wein*, Arm *gini*, etc.), Semitic **wajn-*, Egyptian *wnš* 'edible fruit; grape; wine', PK *γwino-* (GI 647-649). Structurally, and by its second part probably materially, Hat *wi¡n-du* resembles Ub *ʒ°a-d°a* 'beverage' (*ʒ°a* 'to drink', *-d°a* deverbal suffix), cf. also Ub *ʒ°a-ta*, CCirc **ś°a-īa* 'beverage'.

Ivanov 43 (cf. also GI 649) compares Hat *karam* 'libation vessel or a beverage' (Kammenhuber 474) with Akkadian *karānu* 'grapevine; wine', regarding the Hattic word as being borrowed from Akkadian, which has such parallels in other Semitic languages, as Arab *karm*, pl. *kurūm* 'wine', 'grape', 'wineyard', Old Hebrew *kerem* 'wineyard', *karmel* 'place covered with thick vegetation'. If this connection is possible, it can perhaps somehow include also SAbx *a-q'arma* 'hop', 'bindweed', phonetically irregular corresponding to Tap *k'arma* *'hop', 'snowball-tree'.

(15) Hat *zinar* 'music', 'musical instrument' (Kammenhuber 437) : CCirc **pčʰəna* 'accordeon', **čʰə-k'a-pčʰəna* 'native violin', lit. 'horse-tail violin' (PC 34).

Comment:
Ivanov 49, who proposed the comparison, translates Hat *zinar* as 'harp', 'lyre'. The Hattic word was borrowed into Hittite (*ḫunzinar(a)* 'big Ištar-instrument') and probably into Akkadian (*zannaru*, cf. Kammenhuber 437-8) and somehow into Old Armenian (*ʒnar* 'lyre', 'harp', cf. Ivanov 49). Ivanov 41, 42 also supposes a relation between Hat *ippi-zinar* 'Klein-Musik' (Kammenhuber 437) and Ad *ʔăpă-pšəna* 'the hand-lyre/harp' (*ʔăpă* < CCirc **q'a-pʰa*, lit. 'hand-front') and between Hat *ḫun-zinar* 'Groβes Ištar-Instrument' (Kammenhuber 437) and Ad *pšəna-šx°ă* 'big (*šx°ă*) harp', with different order of components.

(16) Hat *kaita* 'grain' (Kammenhuber 460-1) : CCirc **k̄°ačə* 'wheat' (?).

2.5. ADJECTIVES

(1) *titte* (masc.), *tittaḫ* (fem.) 'big, great' (Girbal 158) : CCirc **dada* emphatic particle, CAbx **də-wə* 'big, great' (**-wə* adverbial suffix).

(2) *malḫip* = Hit *aššu-* 'good', 'favourable', 'goodness' (Kammenhuber 451) : CWC **məλ°a* 'happy, lucky' (> CCirc **max°a*, Ub *məś°a*, CAbx **məša*), homophonic and quite likely etymologically identical to CWC **məλ°a* 'day'.

Comment:

The combination *lḫip* can render the labialised-palatalised lateral fricative *λ°*, while *-p* can well be a suffix. Ivanov 44 analyses the Hattic form *i-malḫip* as *i-ma-lḫi-b* "it-do not-put-*b*!", but the meaning 'good', 'favourable' for *malḫip* is well-established, cf., for instance, the juxtaposition of the parallel texts wa_a<*ašaḫ*> *zeḫar* / wa_a-*ašaḫ ḫamuruwa* ... 'evil tree / evil beam' vs. *i-malḫip-pi ziḫar* / *i-malḫip ḫamuruwa* ... 'good tree / good beam ...' (Kammenhuber 455; cf. also Ardzinba 1979: 33) and by the corresponding Hittite translations, containing the opposition *idalu* 'evil' vs. *aššu* 'good'.

2.6. PRONOUNS, ADVERBS, PARTICLES, CONJUNCTIONS

Personal pronouns

(1) *par-//war-* 'to you (sg.)' (cf. Dunaevskaja 1961: 93, 94) : CAbx **wa-ra*, CCirc **wa-rə* 'you'.

Comment:

Cf. also Hat *ud-* 'to you' (Dunaevskaja-Diakonov 82; Kammenhuber 490, 501, 536), *un-* 'you' (Kammenhuber 536; Dunaevskaja-Diakonov 82).

(2) Hat *uš-* 'we' (cf. Kammenhuber 515) : Ub *šʼə-* 'we'.

Demonstrative pronouns

(1) *wa-* demonstrative element (Dunaevskaja 1961: 94) : CWC **wə/a* 'this'. Hattic examples: wa_a-*aḫ-ku-un* = Hit *auštat* '(goddess) saw it' (Dunaevskaja 1961: 140); wa_a-*ka-a-pu-ud!-du* = Hit *adanzi* '(they) will eat (his body)' (Dunaevskaja 1961: 138). Cf. also Hat *u-* ? *wi-* ? prefix with a weak deictic meaning (cf. Kammenhuber 494) in such examples as *u-pulašne* (*pulašne* 'bread'; Kammenhuber 466); wi_i-$wu_u r$-*un* ($wu_u r$ 'land, country': Kammenhuber 467); *u-zuḫ* (*zuḫ* 'clothes': Kammenhuber 481).

(2) Hat *anna, ana* 'this' (Kammenhuber 481, 535; Dunaevskaja-Diakonov 81) : CCirc **na/ə*, CAbx **a-na*, Ub *ana-n* 'there' (*-n* locative suffix), CAbx **a-nə-jə* 'that one'. Hattic example: *katte//kattaḫ ana* 'König//Königin dies(e(r))' (Kammenhuber 535).

(4) Hat *ima/e-* demonstrative pronoun (Kammenhuber 535; Dunaevskaja-Diakonov 81) : CCirc **mə* 'this', cf. also SAbx *a-m-nə-j* 'that one', *a-ma-n-t* 'those'. Hattic examples: *i-ma-(a)al-li-en* '?', *ima-ḫu, ime* (Kammenhuber 535).

Comment:
The variant of Hat *ima-/e-* is probably *-ma*, cf. *ana-ma* 'this...' (Kammenhuber 541); *ida-ma/inta-ma* 'so...' (Kammenhuber 541); *pala-ma* 'and...' (Kammenhuber 541). This can be probably the same (demonstrative) element as (3) in 2.2., *Suffixes* above.

(5) Hat *-šu* 'his', regarded also as an accusative sg. suffix (Kammenhuber 535; Dunaevskaja-Diakonov 81) : Ad ergative suf. *-šʹə*.

Comment:
The Adyghe ergative suffix is found in demonstrative and personal pronouns, cf. *mə-šʹ* 'this', *măw-šʹ* 'that', *a-šʹ* 'he', *să-šʹ* 'I', *wă-šʹ* 'you (sg.)', *šʷă-šʹ* 'you (pl.)', etc. (cf. Urusov 296-7).

Adverbs
(1) *anna* = Hit *mān* 'when' (Dunaevskaja 1961: 130; cf. Kammenhuber 535) : CAbx **anə* 'when', cf. also CAbx **an-kʹa*, Ub *an-ćʷ* 'earlier, before' (cf. Ivanov 40). Hattic example: *anna eš-kā-ḫer-pi* = Hit *mānat taparijawenima* 'and when we shall designate this' (Dunaevskaja 1961: 130).

Particles, conjunctions
(1) *pala//bala* 'and', 'and then', used also as coordination particle (Kammenhuber 447) *pala ... pala* 'and ... and' : Ub *-la ... -la*, CAbx **la ... la* coordination suffix, Ub *-la*, CAbx **-la* instrumental suffix, CAbx **-la* comitative suffix.

Comment:
The Hattic word can be perhaps a compound *p/ba-la* (a combination of the enclitical *-pa* 'but, though' and the suffix *-la* ?). Ivanov 45 proposes an alternative connection with CCirc **pʰaλa* 'like, as', which is somewhat less plausible

semantically.

(2) *inta, ita, ida* 'so' (Kammenhuber 536) : CCirc **nt'a, *t'a* 'yes'.

(3) *-pi/-pa* (Kammenhuber 504)*/-ba* = Hit *-ma* 'but, though' : CWC **(-)ba* verbal and nominal particle of hypothesis, condition, doubt. Hattic examples: *ašaḫ-pi taš-tu-ta-šula* "evil-though not-let-inside-let" = 'evil, though, does not allow in!' (Kammenhuber 504); *ḫa-nuwa-pa* "hither-go/come'+*pa*" = Hit *anda-ma-aš-kan pait* "herein-but/though-he(+ locative particle *-kan*) went..." (Kammenhuber 511); *wa-nup-pa* ^{d}*Ḫabantali* = Hit *paitt(a)-aš* ^{d}*Ḫapantalijaš* 'went she, (the goddess) *Ḫ.*' (Kammenhuber 511-2); *ištarazzil ḫa-nuwa-pa* (Kammenhuber 472) 'ground into-go-though'; *a-an-ḫawet-pa* meaning unknown (Kammenhuber 514); *uk-ḫu-ba* (Kammenhuber 541); *ita-ba//ita-pa* 'so...' (Kammenhuber 541).

Comment:
The fact that the Hattic particle *-pi* had variants *-pa/-ba* (pace Kammenhuber 540-541), which are phonetically closer to the CWC particle, is supported, in particular, by the second example, where Hat *-pa* clearly corresponds to Hit *-ma-* 'but/though'.

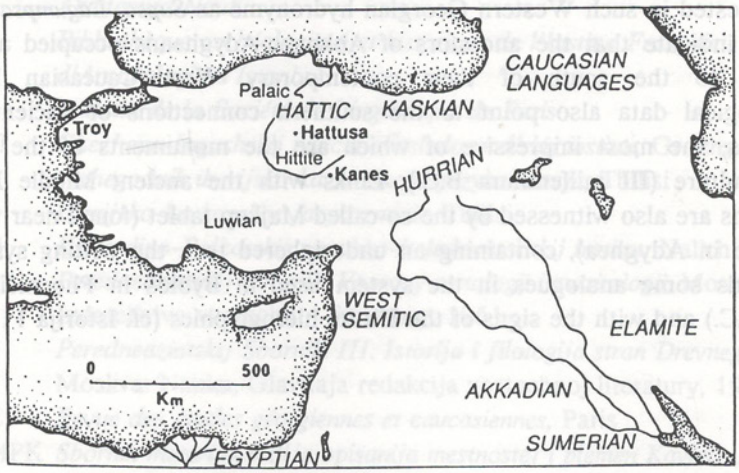
2.7. CONCLUSIONS

Even the scarce Hattic material which is currently at our disposal, together with the obvious structural similarity of Hattic and West Caucasian, allows us to suppose with a rather high degree of certainty a genetic relationship between this long extinct language and the modern Abkhazo-Adyghean languages. Further progress in this field will depend on the discovery of new Hattic texts, and on the publication of those texts which still remain inaccessible to a broader scientific circle.

It has been suggested that Hattic was related to the language of the Kaskians, the warlike mountainous tribes situated on the vast territories to the north of the Hattians, on the Black Sea coastal area. The analysis of Kaskian personal and place-names allowed Giorgadze 1961: 209-210 to suppose their linguistic relationship to Hattic (cf. also Melikishvili 1960: 9; Diakonov 1968: 12). One of the tribes known to be in the Kaskian tribal union were the Abešla, whose name in some contemporary sources (e.g. in Assyrian sources of XII century B.C.) was given as a synonym for Kaskians (cf. Inal-ipa 1976: 129). It has been suggested that the name Kaški (Hit *kaš-kaš*) can be connected with the later designation of Circassians, cf. Arab *kšk*, ORus *kasogi*, Oss *kæsæg*, cf. also

Byzantine Gr χασαχια 'Circassia', etc. At the same time, the name Abešla resembles the later designations of Abkhazians, cf. OGeo *apšil-*, OArm *apšel-k* (pl.) 'Abkhazian(s)', OGr *apsilai*, Lat *(gens) Apsilae*. These facts formed the basis for the hypothesis according to which Kaški represented the ancient ancestors of Circassians, while Abešla - ancestors of Abkhazians (cf. Melikishvili 1960: 9; Diakonov 1968: 12; Inal-ipa 1976: 122-135; Istorija 10-11).

Map 4. *The ancient languages of Asia Minor (after Mallory 1989: 25)*



With Hattic and probably Kaskian likely to represent the most ancient specimens of Abkhazo-Adyghean, two important issues arise. First, must Hattic be regarded as the oldest attested West Caucasian dialect, or should we speak rather in terms of Hattic-West Caucasian unity, much in the way as some linguists place Hittite in relation to the rest of the Indo-European languages? The second important issue is, whether the appearance of Hattic (and Kaskian) in central and northeastern Asia Minor was due to migration from the Caucasus or whether, on the contrary, the ancestors of the present-day speakers of Abkhazo-Adyghean languages have once come to inhabit the West Caucasus area as a result of a migration from their ancient Anatolian homeland? There is yet a third possibility, viz. that the whole area including northeastern Anatolia and the Western Caucasus was occupied by ethnically and linguistically related tribes, who became extinct in Anatolia quite early, but who managed to preserve themselves in the mountains of the West Caucasus (cf. Diakonov 1968: 13; Inal-ipa 1976: 117; Istorija 10-11)? This hypothesis finds some justification in the toponymics of

ancient Anatolia, which might contain traces of ancient Abkhazo-Adyghean population. Thus, the typical West Caucasian toponymic element *-*psə* 'water, river' is probably attested in such ancient Anatolian place-name as *Aripsa* (city and fortress in northern Anatolia) (cf. Diakonov 1968: 84). Cf. also the oldest name of the river Chorokh in Adjaria (Southern Georgia) and northeastern Turkey, *apsara*, earlier called *akampsis*, and the name of the city Ἄψαροῦς in Byzantine Lazica (somewhere on the border between the modern Adjaria and Turkey), which are likely to contain the same element. Note that the element *-psa* is also attested in such Western Georgian hydronyms as *Supsa*, *Lagumpsa*. These facts can indicate that the ancestors of Abkhazo-Adygheans occupied also the territories to the south of their contemporary West Caucasian habitat. Archaeological data also point to the southern connections of ancient West Caucasians, the most impressive of which are the monuments of the famous Majkop culture (III millennium B.C.). Links with the ancient Middle Eastern civilisations are also witnessed by the so-called Majkop tablet (found near the city of Majkop in Adyghea), containing an undeciphered text, the writing system of which finds some analogues in the system used in Byblos in Phoenicia (XIII century B.C.) and with the signs of the Hittite hieroglyphics (cf. Istorija 11).

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ABBREVIATIONS:

AbIJLI *Abxazskij Institut Jazyka, Literatury i Istorii im. D.I. Gulia* (Sukhum)

AN *Akademija Nauk*

BAH *Bibliothèque archéologique et historique de l'Institut Français d'Archéologie d'Istanbul*

BSLP *Bulletin de la Société de Linguistique de Paris*

ChINII *Checheno-Ingushskij nauchno-issledovatel'skij institut,* Grozny

JIKJ *Jezhegodnik iberijsko-kavkazskogo jazykoznanija,* Tbilisi

IKJ *Iberijsko-kavkazskoe jazykoznanie,* Tbilisi

KBNII *Kabardino-Balkarskij nauchno-issledovatel'skij institut,* Nal'chik

PS I *Peredneaziatskij Sbornik. Voprosy xettologii i xurritologii.* Moskva, Izdatel'stvo vostochnoj literatury, 1961

PS III *Peredneaziatskij Sbornik. III. Istorija i filologija stran Drevnego Vostoka.* Moskva: Nauka, Glavnaja redakcija vostochnoj literatury, 1979

REGC *Revue des études géorgiennes et caucasiennes,* Paris

SMOMPK *Sbornik materialov dlja opisanija mestnostej i plemen Kavkaza,* Tiflis

TAbIJLI *Trudy Abxazskogo Instituta Jazyka, Literatury i Istorii im. D.I. Gulia* (Sukhum)

TMIE *Travaux et Mémoires de l'Institut d'Ethnologie,* Paris, Musée de l'Homme

UZ *Uchenye zapiski*

VDI *Vestnik Drevnej Istorii,* Moskva

VJ *Voprosy jazykoznanija,* Moskva

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This book deals with the reconstruction of Common West Caucasian, the postulated proto-language of the West Caucasian (Abkhazo-Adyghean) languages, Abkhaz, Circassian and the recently extinct Ubykh.

The book contains a synchronous description of the phonemic systems of all West Caucasian dialects and presents intermediary reconstructions of the Proto-Abkhaz, Proto-Circassian and Proto-Ubykh phonemic systems.

The reconstructed intermediary proto-languages serve as a basis for the reconstruction of Common West Caucasian. Besides phonology, the book deals also with certain aspects of the morphology (nominal and verbal affixation, ablaut) and the lexicon of Common West Caucasian.

Finally, the author touches upon the problem of the external relations of Common West Caucasian, namely, with the East Caucasian (or Nakh-Daghestanian) languages, and with the long extinct Hattic language of ancient Asia Minor (early second millennium B.C.).

ISBN: 90-73782-71-6 (thesis)
ISBN: 90-73782-73-2

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