



North West Caucasian

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1. Introduction

1.1. The small N[orth] W[est] C[aucasian] family takes its name from the geographical region, viz. NW (Trans) Caucasia, in which the speakers of the relevant languages lived compactly until 1864. The family consists of three branches: Abkh[az]-Aba[za], Circ[assian], Ub[ykh]. The Abkhazian homeland is roughly the triangle formed by the Black Sea, the main Caucasus range and the lower reaches of the R. Ingur, which forms the traditional border with the Kartvelian speaking areas of Mingrelia and Svaneti(a)—in the 14th century a migration occurred across the Klukhor Pass giving rise to the population of T'ap'[anta] Abaza speakers along the Greater and Lesser Laba, Urup, and Greater and Lesser Zelenchuk rivers, a further wave of migrants in the 17th to 18th centuries producing there today's Ashkhar(ywa) Abaza speakers; the hinterland around Sochi was home to the Ubykhs; to their north along the coast and in the NW Caucasian foothills lived the various Circassian tribes, who constitute(d) the largest of the three groups. When the Great Caucasian War came to an end in 1864 with the sadly inevitable surrender of the NW Caucasian alliance at Krasnaja Poljana, Russia finally gained control of the whole Caucasus, and, rather than be resettled away from their mountain-strongholds, all the Ubykhs together with the majority Abkhaz-Abaza and Circassian populations preferred exile in Ottoman lands. Their descendants can be found (predominantly in Turkey) from the southern Balkans to Israel, Jordan, Syria, and Iraq.

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Nomenclature

A	agent
Abkh	Abkhaz
Aba	Abaza
Ab(d)z	Ab(d)zakh/Abadzekh
Abs	absolute
Absol	absolutive
Abzh	Abzhywa
Adv	adverbial
Aff	affirmative
Aor	aorist
Bes	Bes(le)ney
Bz	Bzyp
Bzh	Bzhedugh
Caus	causative
Circ	Circassian
Class	classifier
Col	column
Condit	conditional
Conv	converb
Dyn	dynamic
Dir	direct
E	east
Emph	emphatic
Fem	feminine
Fin	finite
Fut	future
Hab	habitual
Imper	imperative
Imperf	imperfect
Indir	indirect
Indef	indefinite
Infin	infinitive
Instr	instrumental
Intrans	intransitive
lit.	literally
Kab	Kabardian
Masc	masculine
Masd	Masdar
Neg	negative
N-Hum/N-H	non-human
NWC	North West Caucasian
O or Obj	object

Obl	oblique
Opt	optative
Ord	ordinal
Perf	perfect
Pl	plural
Plup	pluperfect
Poss	possessive
Pot	potential
Pres	present
Prev	preverb
Purp	purposive
Qu	question
Recip	reciprocal
Result	resultative
S	subject
Shap	Shapsugh
Sing	singular
Stat	stative
Sub	subordinator
Suff	suffix
T'ap'	T'ap'anta
Tem	Temirgoi
Trans	transitive
Ub	Ubykh
W	west

1.2. The last fully competent speaker of Ub (native term /t^Waχə bza/), Tefvik Esenç, died on 8 October 1992, and by the time Ub came under scholarly scrutiny there were so few speakers that only tantalizing hints were detectible of a possible dialectal division (Dumézil, 1965: 266–269). In his comprehensive survey of NWC phonological systems, Chirikba (1996) classifies the dialects of Abkh(-Aba) (native term /'aps.(wa bəz.)^Wa/) thus: North Abkh (T'ap') vs South Abkh, itself incorporating South-western (Sadz) vs South-eastern (Ahch'ypsy, Bz[yp], Ts'abal, Abzh[ywa]), whilst Ashkhar forms an intermediate stage, closer to the southern group. In Abkhazia itself only Bz and Abzh are still spoken. Circ (native term /'a:ɖəɣa(ɔ) bza/) naturally divides into two main groups: Western Circ (often, confusingly, styled 'Adyghe' in the literature), itself with two western dialects (Bzh[edugh], Shap[sugh]) and two eastern (Ab(d)z[akh/Abadzekh], Tem[irgoi]) vs Eastern Circ (Bes[(le)ney], Kab[ardian]). Before migrating, at least some Ubykhs seem to have been bilingual in (?Sadz) Abkh rather than Circ, this being the usual situation amongst the last diaspora speakers, whose Circ dialect, as argued by Smeets (1988), formed a distinct variety.

1.3. The last Soviet census (1989) listed 102,938 Abkhazians, of whom 93,267 resided within Abkhazia itself (capital Sukhum = Abkh 'Aq^W'a, cf. /a.q^W'a.ra/ 'stony shore'), where they represented 17.8% of the population; those Abkhazians who live(d) in mixed communities with Mingrelians tend(ed) to speak Mingrelian also, whilst those who were

educated in the 1940s could be expected to know Georgian—virtually all are fluent (sadly, perhaps exclusively) in Russian. At the time of writing, Abkhazia is de facto independent (sc. of Georgia). The remaining NWC speaking regions of the Caucasus are still part of the Russian Federation. Soviet Abazinians numbered 33,801 in 1989, of whom 27,475 formed 6.5% of the population of Karachay-Cherkessia (capital Cherkessk); Abazinians in the Caucasus tend also to speak Kab. Of the 124,941 Soviet West Circassians 95,439 formed 22% of the population of Adyghea (capital Maykop, cf. /məjɑ.q^Wɑ:pɑ/ ‘wild apple-tree corner’), most of the rest living in the neighbouring Krasnodar District, including 10,000+ Shapsugh around Tuapse (cf. /t^Wɑ.psə/ ‘two water(s)’) on the Black Sea. Soviet terminology styled East Circassians living in Karachay-Cherkessia (viz. Kabardians and Bes(le)neys) ‘Cherkess’, a term frequently used across the Near East to designate any Circassian (or indeed North Caucasian), and there were 52,356 on Soviet territory, of whom 40,230 constituted 9.6% of the population of this region, whilst the rest were called Kabardians, the total USSR population of whom numbered 394,651; of these 363,351 made up 48.2% of the population of Kabardino-Balkaria (capital Nal’chik, cf. /naʎts’ək^W/ ‘little horseshoe’). Christian Kabardians live at the Circassians’ easternmost extremity in today’s North Ossetia around Mozdok (cf. /maz.dag^W/ ‘deaf (=thick) forest’). The Karachay-Balkars, with whom the East Circassians share their administrative units, are a Turkic speaking group who settled in the Caucasian uplands at the time of the Golden Horde.

1.4. The earliest attestation of the three languages is contained in the short word- and phrase-lists included by the 17th century half-Turkish half-Abkhazian traveller Evliya Çelebi in his *Liber Peregrinationis*. The first serious studies and attempts to write them down date from the mid-19th century, Uslar’s sketch of Ub (1887; 1863 in lithograph) being the only one produced while the speech-community was still in the Caucasus (for a linguistic description see, principally, Dumézil, 1975; on which this chapter draws heavily throughout, 1976; Charachidzé, 1989; cf. also Mészáros, 1934). Various scripts have been tried; currently, despite their cumbersomeness, Cyrillic-based forms are used. Literary Abkh employs the southern, Abzh dialect (Dumézil, 1967, which includes some parallel texts, three of which are presented in Abkh, Ub, Tem and Kab versions; Hewitt, 1979e, 1989, to appear; Hewitt and Khiba, 1998); Bz is phonetically more complex (Bgazhba, 1964). Literary Aba is based on T’ap’ (Lomtadidze, 1944; Lomtadidze and Klychef, 1989); for Ashkhar see Lomtadidze (1954). Whilst the largest West Circ dialect-group may once have been Ab(d)z (Paris, 1989; Paris and Batouka, 1987, 1990, 1992), only a couple of such villages now survive in the Caucasus, and the literary form has Tem as its base (Jakovlev and Ashkhamaf, 1941; Rogava and Kerasheva, 1966), phonetically simpler than either Shap (Paris, 1974b; Smeets, 1976, 1984) or Bzh. Simplest of all the NWC tongues is Kab (Jakovlev, 1948; Colarusso, 1992b), foundation for literary East Circ—for a sketch of Bes see Alparslan and Dumézil (1963)—on comparative Circassian see Kumakhov (1989). The future of Kab alone can be regarded as (reasonably) secure.

2. Phonology

2.1. This family is widely known for the large consonantal inventories possessed by each of its members; see Colarusso (1988) for a survey based largely on instrumental data.

Their impressive totals are achieved by combining utilisation of the whole vocal tract with wide employment of ejectives and such secondary features as labialisation, palatalisation and pharyngalisation. Some commentators treat the retroflexes as the plain series to which the palato-alveolars are then presented as the palatalised variants, the two labialised fricatives in turn constituting the labialised counterparts—the problem with this view is that these fricatives represent a (bi)labial modification not of the retroflexes but of the palato-alveolars (?palatals).

Consonantal Phonemes for Literary Abkhaz (Abzhywa)							
Bilabial	p	b	p'			m	w
Labio-dental			[f']	f	v		
Alveolar	t	d	t'			n	r
	t ^w	d ^w	t ^w ,				
	ts	dz	ts'	s	z		
Alveolo-palatal	tʃ ^w	dʒ ^w	tʃ ^w ,				
Palato-alveolar	tʃ	dʒ	tʃ'	ʃ	ʒ		
				ʃ ^w	ʒ ^w		
Retroflex	tʂ	dʂ	tʂ'	ʂ	ʐ		
Lateral							l
Palatal							j
							ɥ
Velar	k	g	k'				
	k ^j	g ^j	k ^j ,				
	k ^w	g ^w	k ^w ,				
Uvular			q'	χ	ʁ		
			q ^j ,	χ ^j	ʁ ^j		
			q ^w ,	χ ^w	ʁ ^w		
Pharyngal				ħ			
				ħ ^w			

Comments. /f'/ characterises the speech of some speakers in only one lexeme, namely /a.'f'a/ 'thin', for which most speakers have /a.'p'a/. Though the six back fricatives are here ranged with the uvular plosives, they tend to fluctuate between velar and uvular position, depending on the phonetic environment. Bz extends this 58-phoneme system to 67 by filling out the alveolo-palatal series with /tʃ dz tʃ' ʃ z ʃ^w z^w/; it also has two more back fricatives, which, if the basic complement are truly uvular, are describable as pharyngalised uvulars /χ^ʃ χ^{ʃw}/—they could be regarded as uvulars if the basic six are deemed velars. /ɥ/ derives from /ʁ^w/ [ʁ^h] (cf. Aba) and for some speakers a relic of this origin is a perceptible constriction of the pharynx. The phonological feature of labialisation has a variety of phonetic realisations: with velars/uvulars it is simple lip-rounding; for the alveolar plosives it is rather a case of double articulations with lip-trilling [fʁ fʁ' fʁ^w]—speakers without

labialisation in this series produce straight alveolars; the labialised pharyngeal fricative is articulated [h^h]; Catford (1972: 680, 1977: 190–191) has suggested that the two palato-alveolar fricatives be treated as co-articulated bilabio-palatal fricatives and thus be represented as [ɸ̠ β̠] or [ɸ̠ ɸ̠] rather than [ɸ̠^h ɸ̠^w]; the alveolo-palatals require labio-dentalisation with the right side of the lower lip brought in contact with the upper teeth to give [tɸ̠^f dɸ̠^v tɸ̠^f]. Such labio-dentalisation is not shared by the sister-languages—in fact, Colarusso (1992a: 147) contends: ‘The Abkhaz series (in all the dialects) are apicalised both in their primary structure and in their rounding (labialisation). The rounding is, therefore, realised as labio-dentalisation (Colarusso, 1988: 189–193) and it is this that accounts for so much of the susurration heard in Abkhaz. By contrast the Ubykh series is lamino-alveolar, [+distributed], and its rounding is [+distributed] as well, realised as simple labialisation or approximation of the lips (Colarusso, 1988: 143–149)’. As Chirikba observes (1996: 15), a glottal stop, apart from being a possible realisation of intervocalic /q’/, is also heard in [ʔaj] ‘no’ (cf. [a:ʔ] ‘yes’).

Consonantal Phonemes for Abaza (T’ap’anta)	
Bilabial	p b p’ m w
Labio-dental	[f’] f v
Alveolar	t d t’ n r
	ts dz ts’ s z
Palato-alveolar	tʃ dʒ tʃ’ ʃ ʒ
	tʃ ^w dʒ ^w tʃ ^w ’ ʃ ^w ʒ ^w
Retroflex	tʂ dʂ tʂ’ ʂ ʐ
Lateral	[ɸ]
Palatal	[ɸ’] l
Velar	k g k’ [x]
	k ^j g ^j k ^j ’ [x ^j]
	k ^w g ^w k ^w ’ [x ^w]
Uvular	q q’ χ ʁ
	q ^j ’ χ ^j ʁ ^j
	q ^w ’ χ ^w ʁ ^w
Pharyngeal	ħ ʕ
	ħ ^w ʕ ^w
Laryngeal	ʔ

Comments. This table is based on the presentations of Lomtadze (1977), Tabulova (1976), Lomtadze and Klychef (1989), and Chirikba (1996). Items in square brackets are attested only in loans. The alveolar labialised plosives together with the alveolo-palatal labialised affricates and fricatives have merged into the palato-alveolar labialised series, though some forms of speech attest [tɸ̠^w dz^w ɸ̠^w ɸ̠^w z^w] as non-distinctive variants. Preserved are the plain and labialised uvular plosives which in standard Abkhaz

Consonantal Phonemes for Ubykh							
Bilabial	p	b	pʰ			m	w
	p ^ʕ	b ^ʕ	p ^{ʕʰ}			m ^ʕ	w ^ʕ
Labio-dental				f			
				v ^ʕ			
Alveolar	t	d	tʰ			n	r
	t ^w	d ^w	t ^{wʰ}				
Alveolo-palatal	ts	dz	tsʰ	s	z		
	tʃ	dʒ	tʃʰ	ʃ	ʒ		
	tʃ ^w	dʒ ^w	tʃ ^{wʰ}	ʃ ^w	ʒ ^w		
Palato-alveolar	tʃ	dʒ	tʃʰ	ʃ	ʒ		
				ʃ ^w	ʒ ^w		
Retroflex	tʂ	dʂ	tʂʰ	ʂ	ʐ		
Lateral				ɬ		ɬʰ	l
Palatal							j
Velar	[k]	[g]	[kʰ]	x	ɣ		
	k ^j	g ^j	k ^{jʰ}				
	k ^w	g ^w	k ^{wʰ}				
Uvular	q		qʰ	χ	ʁ		
	q ^ʕ		q ^{ʕʰ}	χ ^ʕ	ʁ ^ʕ		
	q ^j		q ^{jʰ}	χ ^j	ʁ ^j		
	q ^w		q ^{wʰ}	χ ^w	ʁ ^w		
	q ^{ʕw}		q ^{ʕwʰ}	χ ^{ʕw}	ʁ ^{ʕw}		
Laryngal			h				

fell together with the corresponding fricatives. As stated above, /ʕ^w/ gave standard Abkhaz /q/.

Comments. The status of the three plain velar plosives is doubtful, as they are largely confined to loans (but N.B. /ʃə'k'la:wa/ 'see-saw'), so that the system consists of 80 (possibly 83) phonemes. However, if one accepts Colarusso's suggestion (1988: 147, 1992a: 147ff), the system is increased by one, for he argues that some instantiations of /ʕ^w/ should rather be interpreted as /x^w/[ç] (e.g. 'woman' exemplifies Ub /ʕ^w/ in [ʕ^wəmts'a] = Tem /ʕ^wəz/, whereas 'white' exemplifies Ub /x^w/ in [x^wa] = Kab /x^wəz/); this assumption is rejected by Catford (1997: 110–111) and Smeets (p.c.). Georges Dumézil, without whose sterling efforts over half a century from 1930 (see for example Dumézil (1931)) working with the few remaining speakers (especially Tefvik Esenç) our knowledge of this language would be sadly depleted, noted that speakers who had lost labialisation on the alveolar plosives articulated them as [p b pʰ]. Apart from two possible cases in Bz Abkh, pharyngalisation is limited to Ub within NWC. The alignment of the four labialised fricatives in the palatal region reflects the proposal made by Hewitt (1986), which seems to have found some acceptance (Charachidzé, 1989); cf. Vogt (1963), Paris (1974b), and Dumézil (1975).

Consonantal Phonemes for Literary East Circassian (Kabardian)							
Bilabial	p	b	p'			m	w
Labio-dental			f'	f	v		
Alveolar	t	d	t'			n	r
	ts	dz	ts'	s	z		
Alveolo-palatal				ʃ	ʒ	ʃ'	
Palato-alveolar	tʃ	dʒ	tʃ'	ʃ	ʒ		
Lateral				ɸ	ɸ̣	ɸ'	
Palatal							j
Velar				x	ɣ		
	k ^w	g ^w	k ^w ,	x ^w			
Uvular	q		q'	χ	ʁ		
	q ^w		q ^w ,	χ ^w	ʁ ^w		
Pharyngal				ħ			
Laryngal			ʔ				
			ʔ ^w				

Comments. The Kab total is a mere(!) 47. Some sub-dialects/idiolects have retroflexes (or velarisation) in place of the simple palato-alveolars. Bes (Kumakhov, 1981) adds the familiar retroflex series of three affricates and two fricatives as well as the three palatalised velar plosives, which in some varieties of E. Circ replace the palato-alveolar affricates; for Turkish Bes see Paris (1974a).

Consonantal Phonemes for Literary West Circassian (Temirgoi)							
Bilabial	p	b	p'			m	w
			p ^w ,				
Labio-dental				f			
Alveolar	t	d	t'			n	r
			t ^w ,				
	ts	dz	ts'	s	z		
Alveolo-palatal				ʃ	ʒ	ʃ'	
		dz ^w	tʃ ^w	ʃ ^w	ʒ ^w	ʃ ^w ,	
Palato-alveolar	tʃ	dʒ	tʃ'	ʃ	ʒ		
Retroflex	tʃ̣	dʒ̣	tʃ̣'	ʃ̣	ʒ̣		
Lateral				ɸ	ɸ̣	ɸ'	
Palatal							j
Velar				x	ɣ		
	k ^w	g ^w	k ^w ,	x ^w			
Uvular	q			χ	ʁ		
	q ^w			χ ^w	ʁ ^w		
Pharyngal				ħ			
Laryngal			ʔ				
			ʔ ^w				

Comments. A palatalised glottal stop is added in Ab(d)z to this 55-phoneme system. Labialisation on the alveolar plosive is realised as lip-rounding (cf. the numeral '2' /t^Wə/ = Shap /t'ɾ^Wə/ = Hakuchi Shap /t'q^Wə/ = Ub /t'q^Wa/ = Abkh /t̪(.ba)/). Thus far, aspiration has figured as only a sub-phonemic feature of voiceless non-ejectives. In both Shap (62 phonemes) and Bzh (65 phonemes) there is a distinctive contrast between some voiceless aspirates and voiceless (non-ejective) non-aspirates. The relevant contrasts in Bzh are: /p:/ vs /p^h/; /t:/ vs /t^h/; /ts:/ vs /ts^h/; /tɕ:^W/ vs /tɕ^Wh/; /tʃ:/ vs /tʃ^h/; /ʃ:/ vs /ʃ^h/; /tʂ:/ vs /tʂ^h/; /s:/ vs /s^h/; /k:^W/ vs /k^Wh/; /q:/ vs /q^h/; /q:^W/ vs /q^Wh/. Correspondences of the type:

Bzhedugh	Temirgoi	Kabardian
k ^{Wh} a	k ^W a	k ^W a 'thigh'
k: ^W əts:a	k ^W ətsa	g ^W ədza 'wheel-spoke'
g ^W ə	g ^W ə	g ^W ə 'heart'
k ^W ,ats'ə	k ^W ,ats'	k ^W ,ats' 'innards'

prove that the four-way opposition of Bzh/Shap must represent the situation of Common Circ. Common Circ's labialised alveolo-palatals became /f v f'/ in E. Circ, whilst Common Circ *x^W generally developed into W. Circ /f/ (W. Circ /x^W/ is only found in the complex /s̪x^W/), which means that Common Circ lacked a labio-dental series (cf. Kuipers, 1975).

2.2. It is in languages possessing many consonants where one would logically expect to find minimal vowel systems, and much has been written about just how minimal these NWC systems actually are. In general, the array of short phones is easily reducible to two potential phonemes, open /a/ vs close /ə/, whose realisation within a spread of allophones is determined in any particular instance by their phonetic environment. Equally, the long vowels/diphthongs [u:(w)], [i:(j)], [o:(w)] are generally analysable as sequences of /əw/, /əj/, /aw/, respectively, after the pattern of Abkh: /sə.w.'f̪ə.ə.jit'/ [su:(w)'fi:(j)t'] 'you (-Masc) killed me', /jə.'ʂə.q'a.w/ [j̪'ʂəq'o:(w)] 'as it is/they are', though Vogt (1963: 26) maintained that Ub distinguished between /o:/ [o:(w)] (/səq^Wə'ma:lo:/ 'I shall play') and /aw/ [aw] (/səq^Wə'ma:law/ 'my toy'). Questions pertaining to [a:] need to be discussed separately for the individual languages. No such vowel is found in T'ap', and already in his seminal 1956 paper Allen had argued that Aba's vocalic system could probably be reduced to the single element /a/, predicting future research would lead to all appearances of schwa becoming accountable by rule—he returned to the topic in 1965. Aba has distinctive stress, and under stress absence of /a/ necessitates presence of schwa, whilst in non-stressed syllables schwa is viewed as facultative (cf. Lomtadze's, 1967 variants for 'tongue': [bəz], [bəzə], [bʒə], and for 'the tongue': ['abəz], [abz]).

Kuipers (1960: 104) went one stage further in attempting to prove that: 'The most striking feature of the Kabardian phonemic system is the absence of an opposition consonant-vowel'—for criticism see Szemerényi (1967), Halle (1970) and Kumakhov (1973); Kuipers (1968) contains an animated response to the first of the above. He began by rejecting Trubetzkoy's (1925: 280) vertical system with its three degrees of aperture /ə e a/ and reverted to Jakoblev's (1923: 108) tripartite system with two degrees of aperture combined with two degrees of length /ə a a:/. Considering the patterns of initial syllable-

structure ([a:] being presented as the only vowel to appear in anlaut) and stress-placement, which, apart from with some grammatical suffixes, falls before the last consonant (-cluster) of the word, Kuipers derived Kab's [a:] from underlying sequences of either /h̄a/ (initially) or /ah̄/ (elsewhere), noting that stress does not move off final [a:]—in the various Circ dialects initial /a:-/ is accompanied by a 'strong onset', viz. glottal stop. Schwa was deemed to be wholly predictable, which *inter alia* required stress to be judged phonemic. The remaining open vowel was then simply interpreted as a 'feature of openness' characterising its preceding consonant. Kuipers supposed that, independently of the requirements of his theory, Kab should be analysed as having distinctive stress, but Job (1977: 54–56) subsequently demonstrated that Kab stress is not in fact distinctive, with the result that at least some instances of schwa must be regarded as phonemic. Job also shewed that stress is not distinctive in W. Circ either, falling on 'the final syllable of the word, as a rule' (Rogava and Kerasheva, 1966: 25). Most recently Catford (1997: 102–104), who first published on Kab in 1942, advocates reinstating Trubetzkoy's vertical system without distinctive length, though it is the Jakovlevian triad I use in this paper.

2.3. Stress is distinctive in standard Abkh (cf. /'a.χ^Waʂa/ 'unfortunate' vs /a.'χ^Wa.ʂa/ 'Friday' vs /a.χ^Waʂa/ 'fragment, piece, bit'). Though the interplay between /a/ and schwa is reminiscent of Aba, there is at least one grammatical opposition which is dependent on the presence vs absence of unstressed schwa, namely that between a Past Indef[inite] like /d.'k'a.h̄a.φ.n/ '(s)he fell and ...' and its Past Abs[olute] /d.'k'a.h̄a.φ.nə/ '(s)he having fallen'. Although these forms might appear to be so close semantically as to raise doubts about the need to separate them, the grammar in general clearly distinguishes between them, and their negatives are fully distinct, namely: /d.'k'a.m.h̄a.φ.z.t'/ vs /d.'k'a.m.h̄a.φ.k^W.a(n)'. The long vowel [a:] is somewhat problematic. The orthography writes it as a geminate, and, as it often correlates with the Aba sequences [ʂa] or [aʂ], some treat it as a two-mora segment, such that under stress it should be marked as either [aá] or [áa], corresponding respectively to the position of the vowel vis-à-vis Aba's pharyngeal fricative. I treat it as a simple long vowel, but is it phonemic? Where it marks the 1st person plural agent with a verb whose root starts with a voiced consonant, it can be regarded as the natural result of the morpho-phonological voicing-rule that is activated in such a context, as illustrated by: /jə.s.'k'ə.φ.jt'/ [jɪs'k'i:(j)t'] 'I grabbed it/them' vs /jə.s.'ba.φ.jt'/ [jɪz'be:(j)t'] 'I saw it/them' BUT /jə.h̄.'k'ə.φ.jt'/ [jəh̄'k'i:(j)t'] 'we grabbed it/them' (N.B. schwas lower to the open vowel next to /h̄/) vs /jə.h̄.'ba.φ.jt'/ [jə'be:(j)t'] 'we saw it/them', from an intermediate {ja.ʂ.'ba.φ.jt'}—for parallel voicing of the agent-affix (and indeed Obl[ique] agreement-affix) cf. W. Circ /φ.ɛ^W.də.ʂa/ [z^Wdəʂa] 'you Pl[ural] sewed it' (Tem /wə.qə.-s.a.z.tə.φ/ 'they give you to me' = Kab [wəq'əzət]); Ub /wə.ʂ.'bja.n.φ/ [wəʂ'bjen]. 'we see you'—in Kab devoicing (with glottalisation as appropriate) of 1st person Pl /d/ is also found. But not all instances of [a:] in Abkh fall into this category. The vowel is preserved in loans ([ama:'lɪk^j] 'angel', from Turkish). Contiguous short open vowels do not produce a long vowel (cf. /s.ab/ 'my father' vs /a.ab/ [ab] '(the) father'), and yet Mingrelian /manat-i/ 'rouble' appears as [a'ma:t]; even more puzzling is [aq^W'a'ra:n] 'raven' (cf. Georgian /q'oran-i/).

As for Ub, Vogt recognised contiguous short open vowels as source for some instances of his [a:] (e.g. /za/ 'one' + /a'zəa/ 'Abkhazian/Abazinian' = [za'zəa] 'one Abkhazian/Abazinian') but acknowledged that not all examples could be so explained (e.g. [za:'təa]

‘bridge’). Dumézil incorporated a ‘revision’ of all sections of Vogt’s Dictionary in his 1965 collection of texts (pp. 197–259; see also Charachidzé, 1997), and one strong point of disagreement concerned Vogt’s categorisation of the vowels. Dumézil strenuously urged the necessity of operating with schwa, an ‘unstable’ /a/, whose timbre altered with the phonetic environment, and a ‘stable’ /a/, whose timbre never altered (the word for ‘bridge’ he gives as /zəʔa/ and writes ‘see-saw’ as /ʃəʔk’lawa/), acknowledging that his stable /a/ might have developed from a vowel originally characterised by phonemic length. Charachidzé (1989: 364) follows Dumézil, though he notes: ‘D’un point de vue strictement phonématique, on serait enclin à postuler l’existence d’une unique voyelle médiane, avec trois variétés phonétiques distinguées seulement par leur degré d’aperture’.

2.4. Building on early ideas of Dybo (1977, 1989; Dybo et al., 1978), Spruit (1985) advanced the hypothesis that each ‘element’ in Abkh (viz. C, V, CV) is inherently designated as dominant (D) or recessive (R)—some are indeterminate (I)—for stress. His associated predictive rule then stated that stress falls on the first D of a word not immediately followed by another D—stress-placement with sequences of Rs (and/or indeterminates) remained unpredictable. Thus, ‘(the) dog’ illustrates DD to give /a.la/, whilst ‘(the) eye’ is DR, producing /a.la/; the Masd[ar] /a.χ.ša.ra/ ‘give birth’ is DDDD, whereas the abstract noun /a.χ.ša.ra/ ‘offspring’ is DDR (cf. Aba /tʃ^W.a.ra/ vs /tʃ^W.a.ra/ seat). Trigo (1992) added refinements to account for some of the cases uncaptured by Spruit. Unclearities still remain—in /a.tak^W.a.ʒ^W/ ‘(the) old woman’ the element /ta/ must be D (had it been R or I, stress would have fallen on the initial article, which is D) followed by an R or I; the indefinite /tak^W.a.ʒ^W.ə.k’/ ‘an old woman’ conforms fully, but how then is one to explain the variant /tak^W.a.ʒ^W.ə.k’/?

It has been claimed that T’ap’ might have a three-way tonal system with the high tone in some cases at least correlating with a dominant element as defined by Dybo and Spruit (Chirikba, 1996: 35–37).

Ub’s stress has been likened to that in Abkh but awaits further analysis.

2.5. Individual languages do, of course, have their own (morpho-)phonological rules in addition to those already discussed. The verb is the very heart of NWC grammar and represents each language’s most complicated morphological item. Therefore, it is hardly surprising that a number of these rules apply within verbal complexes. A few examples only must suffice. Whilst Abkh does not disallow sequences of rhotics (/rə.r/ ‘their army’; /jə.rə.r.ta.ə.jt’/ ‘they gave it/them to them’), if a 3rd person Pl pronominal prefix /r/ is followed by Caus[ative] /r/, it dissimilates to [d] (/jə.r.rə.r.ba.ə.jt’/ [jəddər’be:(j)t’] ‘they shewed it/them to them’). The sequence /awa/ normally remains unchanged (/a.wa/ ‘(the) relative; close friend’), but, if in Abzh the first open vowel ends a verbal root (or post-radical suffix) and is immediately followed by the so-called Dyn[amic] marker /wa/, then the sequence produces [ɔ] (/jə.tsa.wa/ [jə’tsɔ] ‘the one who is/those who are going’; /jə.tsa.k^W.a.wa/ [jətsa’k^Wɔ] ‘those who are going’); if preceded by /h/, no /a/ can undergo change (/də.tsa.wa.jt’/ [dətsɔ(j)t’] ‘(s)he goes’ vs /jə.s.a(.)hə.wa.jt’/[jəsahə’we:(j)t’] ‘I hear it/them’), and, as already seen, any schwa is lowered next to this pharyngal. T’ap’ exhibits unexpected changes: /s.tsa.(ʔ^Wa.)jt’/[stsi:(j)t’] ‘I go’ (N.B. the surface-absence of any reflection of Dyn suffix—‘I went’ = /s.tsa.ə.t’/); /s.tsa.wa.n/[stsu:(w)n] ‘I was going’; /jə.rə.ma.w/ [jə’rəmu:(w)] ‘whom/what they have’ (Lomtadidze and Klychef, 1989: 111–112).

In Circ, sequences of 3rd person prefixes marking indirect/Obl object and agent, both of which contain the palatal glide, are dissimilated and an /r/ inserted ($/\emptyset.ja.j.a.t\emptyset/\emptyset/$ yields W. Circ [rja'tə] = Kab [jər'jat] 'X gives Y to Z'; ($/\emptyset.ja.a.r.j.a.r.a.t\emptyset/\emptyset/$ is realised as W. Circ [a'ra:tə] = Kab [ja'ra:t] 'they give X to them'). Abkh realises parallel sequences thus: /jə.j.'ba.ϕ.jt'/ [ji:'be:(j)t'] 'he saw it/them'; /jə.'jə.j.ta.ϕ.jt'/ [ji:'te:(j)t'] 'he gave it/them to him'. The Circ marker /ma(ɔ)-/, as seen in /ma:k^W.a.ϕ/ 'X goes', is viewed as the realisation of the Dyn prefix which is argued by Rogava/Kerasheva (1966: 102) to have the underlying shape /wa/ (though Smeets, 1984, for descriptive convenience operates with /ma-/ as basic formant), surfacing in the 1st and 2nd persons of affirmative Fin[ite] forms of the Dyn Pres[ent] as W. Circ /a/ ($/w\emptyset.s.a.\text{ʔ}a\text{b}^W\emptyset.\emptyset/$ 'I see you') vs E. Circ /aw/ [o:] ($/w\emptyset.s.aw.\text{ʔ}a\text{b}^W\emptyset.\emptyset/ \Rightarrow [w\emptyset o:\text{ʔ}a\text{b}^W]$), where it causes the voicing of the agent-prefix /s/. Some analyse [ma(ɔ)] as 3rd person /m(a)-/ + Dyn /-a-/ (Paris, 1989).

2.6. Syllables (as well as morphemes and sememes) are proto-typically C(C)V.

3. Nominal morphology

3.0. The categories of case, number and (in)definiteness are relevant to the family, but there is no common template for their realisation.

3.1. Case. Aba possesses the simplest system: the citation-form is the bare stem, which is made definite by prefixation of /a-/ and indefinite by suffixation of /-k'/ (e.g. /qa/ 'head' vs /a.'qa/ 'the head' vs /qa.k'/ 'a/one head'). Though some special plural formants exist for certain noun-categories, /-tj^Wa/ (Abkh /-tɕ^Wa/) typically pluralises Hum nouns vs /-k^Wa/ for N[on]-Hum[an]s, though on postposed adjectives this is the only possible pluraliser. No cases differentiate the verb's major arguments, but rudimentary Instr[umental] and Adv[erbial] cases are formed by the suffixes /-la/ and /-(j)ta/ (rarely /-s/) respectively. Some elements that one might wish to treat rather as postpositions are also suffixed directly to their governed noun.

The bare stem is rarely found in Abkh (e.g. after certain adjectives or accompanying a negated verb in the sense of 'not ANY NP'), for /a-/ has here become a sort of definite-generic prefix (e.g. /a.'χə/ '(the) head' vs /χə.k'/ 'a/one head'). The Instr /-la/ is sometimes directly attached like a case-ending but at other times behaves like a postposition (the same is true of /-da/ 'without'), leaving the Adv the only formally marked case in /-s/ (sometimes /-nə/). If a cardinal stem is directly prefixed to a noun (as opposed to instances where it is standing free), plurality is preferably unmarked on the noun (obligatorily so for N-Hum nouns).

In Ub an unmarked stem serves as Absol[utive], undifferentiated for Sing[ular] vs Pl, as such plurality is verbally marked, whilst an Obl is produced by suffixing /-(ə)n/ (= Sing vs Pl /-na/)—N.B. /-(ə)n(ə)/ has Adv functions. /-(a)wn(ə)/ suffixed to the stem gives the Instr. The definite article is /a-/, the indefinite /za-/ 'a/one' (cf. /za NOUN g^Wara/ 'a certain NOUN').

Circ combines case with definiteness, producing the following pattern for Tem (Jakovlev/Ashkhamaf, 1941: 385–386; cf. also Kuipers (1962))—N.B. the neutralisation of (in)definiteness in the plural for Absol and Obl, for /-xa/ alone mostly serves only as a Vocative:

Case	Indefinite		Definite	
	Singular	Plural	Singular	Plural
Absolutive	- \emptyset	-xa(-r)	-r	-xa-r
Oblique	- \emptyset /- \emptyset	-m-a/-xa-m(-a)	-m	-m-a/-xa-m(-a)
Instrumental	-tʃ'a	-xa-tʃ'a	-m-tʃ'a	-xa-m-tʃ'a
Adverbial	-(a)w	-xa-w	-(a)w	-xa-w

Kab has its Adv in /-w(a)/ and Obl Pl in /-xa-m/. The dialects usually do not mark Absol and Obl for proper names, and these endings may be ignored when the noun takes a Poss[essive] prefix. Indefiniteness can be underscored by postposing /g^Wara/ (Kab /g^War/) 'some/certain', whilst preposing /zə/ '1' or combining the two is also possible. Formal marking of plurality on a Kab noun may be omitted if its plurality is morphologically marked elsewhere (e.g. an agreement-affix within the NP or verbal complex, or, as in W. Circ also, with quantifier as epithet).

3.2. Possession. This is universally indicated by pronominal agreement-prefixes on the possessed noun (cf. the prefixes illustrating the Col[umn] II verbal affixes in 4.5); the possessor stands in the Obl in Ub and Circ, although in Ub this case-marker surfaces only on Pl possessors; the UB Poss prefix itself expands by insertion of /aw/ to indicate the plurality of the possessed [sic!] noun. W. Circ distinguishes between alienable and inalienable possession. The Table shews that only Abkh-Aba distinguishes Masc[uline] from Fem[inine] in the 2nd Sing and Hum Masc from Hum Fem from N-Hum (sometimes abbreviated as N-H) in the 3rd Sing, distinctions which also apply to the personal pronouns and pronominal affixes in the verb. Deeters (1955) argued that Abkh-Aba's 2nd Sing Fem marker probably arose through reassignment of old bilabial plosive allophones [b/p/p'] for the assumed proto-NWC 2nd person prefix /w(ə)-/, an array still attested in Circ. The lexeme in the Table below equates to 'horse/horses'; Circ forms are shewn without desinence:

Person	Abkhaz/Abaza	Ubykh	Kabardian	Temirgoi
1st Sing	s.tʃə/sə.tʃ.k ^W a	sə.tʃə/s.aw.tʃə	s.əj.fə/s.əj.f.xa	s.əj.ʃə/s.əj.ʃ.xa
2nd Masc	w.tʃə/wə.tʃ.k ^W a	wə.tʃə/w.aw.tʃə	w.əj.fə/w.əj.f.xa	w.əj.ʃə/w.əj.ʃ.xa
2nd Fem	b.tʃə/bə.tʃ.k ^W a	wə.tʃə/w.aw.tʃə	w.əj.fə/w.əj.f.xa	w.əj.ʃə/w.əj.ʃ.xa
3rd Masc	jə.tʃə/jə.tʃ.k ^W a	ʃə.tʃə/ʃ.aw.tʃə	jə.fə/jə.f.xa	jə.ʃə/jə.ʃ.xa
3rd Fem	l.tʃə/l.tʃ.k ^W a	ʃə.tʃə/ʃ.aw.tʃə	jə.fə/jə.f.xa	jə.ʃə/jə.ʃ.xa
3rd.N-H	a.tʃə/a.tʃ.k ^W a	ʃə.tʃə/ʃ.aw.tʃə	jə.fə/jə.f.xa	jə.ʃə/jə.ʃ.xa
1st Pl	h.tʃə/hə.tʃ.k ^W a	ʃə.tʃə/ʃ.aw.tʃə	d.əj.fə/d.əj.f.xa	t.əj.ʃə/t.əj.ʃ.xa
2nd Pl	ʃ ^W .tʃə/ʃ ^W .tʃ.k ^W a	ʃ ^W .tʃə/ʃ ^W .aw.tʃə	f.əj.fə/f.əj.f.xa	ʃ ^W .əj.ʃə/ʃ ^W .əj.ʃ.xa
3rd Pl	r.tʃə/rə.tʃ.k ^W a	a.ʃə.tʃə/a.ʃ.aw.tʃə	j.aʃ.fə/j.aʃ.f.xa	j.aʃ.ʃə/j.aʃ.ʃ.xa

cf. the inalienable W. Circ. prefixes illustrated for the lexeme 'eye': /sə.na, wə.na, ə.na, tə.na, ʃ^W.ə.na, aʃ.na/ (but /j.aʃ.(.)nə/ 'X's/their mother', /j.aʃ.(.)tə/ 'X's/their father').

3.3. Pronouns. Only Abkh-Aba has a full set of personal pronouns, for the sister-languages employ one of their demonstratives (usually 3rd person deictic) in the 3rd person. Ub does not add any case-marker to its pronouns. Circ does not usually distinguish Absol and Obl (but an Obl, bracketed below, calqued on the demonstrative formation is sometimes attested in W. Circ), though Instr and Adv forms exist:

Person	Abkhaz/Abaza	Ubykh	Kabardian	Temirgoi
1 st Sing	sa(.'ra)	sə.ʁwa	sa/sa.r.tʃ'a/ sa.rə.w	sa/(sa.ʃ)/sa.r.tʃ'a/ sa.r.aw
2 nd Masc	wa(.'ra)	wə.ʁ ^W a	wa/wa.r.tʃ'a/ wa.rə.w	wa/(wa.ʃ)/wa.r.tʃ'a/ wa.r.aw
2 nd Fem	ba(.'ra)	wə.ʁ ^W a	wa/wa.r.tʃ'a/ wa.rə.w	wa/(wa.ʃ)/wa.r.tʃ'a/ wa.r.aw
3 rd Masc	ja(.'ra)	–	–	–
3 rd Fem	la(.'ra)	–	–	–
3 rd N.H.	ja(.'ra)	–	–	–
1 st Pl	ħa(.'ra)/ħa.r.t	ʃə.ʁ ^W a(.'ʁa)/ʃa.ʁa	da/da.r.tʃ'a/ da.rə.w	ta/(ta.ʃ)/ta.r.tʃ'a/ ta.r.aw
2 nd Pl	ʃ ^W a(.'ra)/ʃ ^W a.r.t	ʃ ^W ə.ʁ ^W a(.'ʁa)/ʃ ^W a.ʁa	fa/fa.r.tʃ'a/ fa.rə.w	ʃ ^W a/(ʃ ^W a.ʃ)/ ʃ ^W a.r.tʃ'a/ʃ ^W a.r.aw
3 rd Pl	da(.'ra)	–	–	–

Demonstrative-systems in the Caucasus usually distinguish at least three levels of deixis: (1) ‘this (by me)’; (2) ‘that (by you/visible)’; (3) ‘that (yonder/invisible)’. Ub’s system, however, is only two-way. The pronominal systems are presented with Sing vs Pl separated by / and vertical ordering of the relevant cases:

	Abkhaz	Ubykh	Kabardian	Temirgoi
1	a.(b)'rə.j/ a.(b)a.r.t	jə.na/jə.ʁa	mə.r/mə.xa.r	mə.r/mə.xa.r
		jə.na.n/ jə.ʁa.na	mə.bə/mə.bə.xa.m	mə.ʃ/mə.xa.m
			mə.bə.tʃ'a/mə.bə.xa.m.tʃ'a mə.rə.w/mə.xa.rə.w	mə.ʃ.tʃ'a/mə.xa.m.tʃ'a mə.r.aw/mə.xa.r.aw
2	a.(b/m)'nə.j/ a.(b/ma)n.t	–	maw.r/maw.xa.r	maw.r/maw.xa.r
			maw.bə/maw.bə.xa.m maw.bə.tʃ'a/maw.bə.xa.m.tʃ'a	maw.ʃ/maw.xa.m maw.ʃ.tʃ'a/maw.xa.m.tʃ'a
			maw.rə.w/maw.xa.rə.w	maw.r.aw/maw.xa.r.aw
3	wə.(b'brə.)j/ wə.(b'a/ə.)r.t	wa.na/wa.ʁa	aː.r/aː.xa.r	aː.r/aː.xa.r
		wa.na.n/ –	aː.bə/aː.bə.xa.m	aː.ʃ/aː.xa.m

wa.ʼʰa.na

aɪ.bə.tʃʼa/aɪ.bə.xa.m.tʃʼa
aɪ.rə.w/aɪ.xa.rə.waɪ.ʃ.tʃʼa/aɪ.xa.m.tʃʼa
aɪ.r.aw/aɪ.xa.r.aw

Aba diverges slightly (viz. (1) a(ba)rəj/a(ba)rat, (2) a(ba)nəj/a(ba)nat, (3) a(ba)wəj/a(ba)wat). These same demonstrative pronouns also function in Abkh-Aba as demonstrative adjectives, the Pl forms accompanying Pl nouns. Ub prefixes /jə-/ or /wa-/ to the noun (/jə.ʰa-/ or /wa.ʰa-/ if the noun is Pl), whilst Circ uses free-standing /mə/, /maw/ or /aɪ/ regardless of the case or number of the accompanying noun.

The main indefinite pronouns are: Abkh /a.dz^W(ə)/, Aba /(z.)a.dz^W(ə)/ ‘someone’ (Abkh /a.dz^Wə.r/ ‘anyone’); Abkh /a.kʼ(ə)/, Aba /z.a.kʼ(ə)/ ‘something’ (Abkh /a.kʼə.r/ ‘anything’). The sister-languages do not distinguish Hum from N-Hum: Ub /za.g^Wa.ra/; Kab /zə.g^War/; Tem /zə.g^Wara/.

The interrogative pronouns are: Abkh /d-arban(ə.w)/ ‘who/which one (is it)?’ (substituting another Col I affix, cf. 4.5, for the /d-/ produces forms for 1st/2nd persons); /j-arban/ ‘which (one) (is it)?’; /də-z.wəs.t/d.a/ ‘who (is it)?’ (the same substitutions as above can apply); /jə.z.a.k^Wə.wə.j/ ‘what (is it)?’; 3rd person Pl forms are: N-Hum /j-arba(k^Wa)n/ vs Hum /jə-z.wəs.tə^Wa/k^Wa.d.a/. Aba has: /d-z.a.tʃ^Wə.j.a/ or /d-a.zə.w.d.a/ or /d-a/ə.z.d.a/ ‘who (is it)?’ and /(jə-)z.a.tʃ^Wə.j.a/ or /(j.)a.tʃ^Wə.j.a/ ‘what (is it)?’; Ub’s stems are /jə-/ ‘who?’ vs /sa-/ ‘what?’; Circ has /xat/ (Obl /xat.ə/ in W. Circ) ‘who?’ vs /səd/ (Kab /sət/) ‘what?’.

Neg[ative] pronouns are produced by adding a coördinating suffix to the appropriate indefinite and using the resulting form with a negated verb: Abkh /a.dz^W.gⁱə/, Aba /(z.)a.dz^W.gⁱə.j/ ‘no-one’; Abkh /a.kʼ(ə).gⁱə/, Aba /z.a.kʼ(ə).gⁱə.j/ ‘nothing’; Ub /za.gⁱə/; Circ /zə.j/ or /zə.g^Warə.j/, no case-forms combining with Circ /-g^Warə.j/.

3.4. Adjectives. No particular morphology sets them apart. Comparatives are produced in Circ by preposing Kab /naχ/ vs Tem /na:h/, whilst the postposing of Kab /dədə/ vs Tem /dad/ to the comparative sequence creates the superlative grade—cf. this Shap example:

- (1) pəa:əa.xa.m(.)a j.a:n.a:ha.da:xa.r
girl.s.Obl them.more.beautifl.the(.Absol)
‘The most beautiful of the girls’ (Smeets p.c.)

Ub prefixes /təa-/ to the adjective for the comparative, whilst suffixing /-gⁱəʰə/ to the simple adjective produces one form of superlative. Abkh-Aba comparatives make the adjective the root of a relativised Stat[ive] verb preceded by /ja:hā/ (Aba /r.ə.ts’a/ or /r.a.hā/) ‘more’, whilst placing the phrase /zagⁱ r.ə.j.hā/ ‘more than all’ before the relativised verb-form produces the superlative (in Aba the equivalent phrase /zə.m^Wa r.a.ts’k’əs/ stands before the comparative form).

Adverbs can be derived from adjectives in Abkh by wrapping /j(ə)—nə/ around the root, whilst many onomatopoeic forms (perhaps expressing types of motion rather than pure

sound) end in /-h^Wa/, the root of the verb ‘say’. Circ naturally associates its Adv case with the adjective root. Similarly, Ub adds /-n(ə)/, Aba /-ta/.

3.5. Adpositions. NWC is exclusively postpositional. In Abkh-Aba postpositions are linked to their governed nouns in exactly the same way as possessed nouns to possessors, though some shew no overt agreement with a 3rd person Sing N-Hum entity (/sa.ra) sə.'zə/ ‘for me’; /a.l a.'zə/ ‘for the alder’; /a.dz ø.nərt^W/ ‘across the water’; /a.dz.'k^Wa r.nərt^W/ ‘across the waters’). In Ub and Circ the same parallelism applies, the governed noun standing in the Obl, though Ub employs no case-marker in the Sing. For Tem Rogava/Kerasheva (1966: 92) give as agreement-pattern for /daʒ/ ‘at, with’:

1st Sing	sa s.aʔ.daʒ	1st Pl	ta t.aʔ.daʒ
2nd Sing	wa w.aʔ.daʒ	2nd Pl	ç ^W a ç ^W .aʔ.daʒ
3rd Sing	a.ʃ (ə).daʒ	3rd Pl	aʔ.xa.m (j).aʔ.daʒ

N.B. unexpected /-aʔ-/ in the first two persons, for which Smeets (1984: 394–400) offers an explanation in terms of ‘shared possession’. However, an alternative agreement-pattern is illustrated for ‘for me’ in Vodozhdokov’s dictionary (1960: 183), namely /sa.ʃ ø.pa:ja/, where the Obl form of the pronoun is treated as a 3rd person entity for purpose of agreement. Similarly, Kardanov’s Kab dictionary (1957: 285) offers /wa.r ø.pa:p.ç^Wa.(tʃ^Wa)/ ‘for you’, which looks to have 3rd person Sing agreement on the postposition plus a mysterious element /-r/ on the pronoun (N.B. Circ /sa.rə.ra wa.rə.ra/ or /sa.rə.j wa.rə.j/ ‘I and you’). Kumakhov/Vamling’s Kab examples (1998: 72–73) all have standard possessive-type agreement (e.g. /fə.j.b^Wə.m/ ‘beside you Pl’).

4. Verbal morphology

4.1. The polysynthetic verbal complex is the fulcrum of NWC clausal morpho-syntax. Dumézil devised a basic eightfold classification based on the oppositions Trans[itive] vs Intrans[itive] and presence vs absence of Prev[erb]:

	Root alone	Prev + Root
Monovalent Intrans	Class A	Class E
Bivalent Intrans	Class B	Class F
Bivalent Trans	Class C	Class G
Trivalent Trans	Class D	Class H

The (in Ub and Circ Obl) argument correlating with the Col II affix (cf. 4.2 and 4.5) of some Class B verbs equates to the typical subject of parallel verbs in W. European

languages (e.g. Abkh /jə.s.ta'χə.w.p'/ 'I-s- want it/them'; Tem /tj' a:ħa ø.jə.j.ʔ/ 'X jə- has a son'); such verbs are called 'indirect'. But whether lexical meaning is determined by root alone or a Prev-root jointly, many more elements are potentially present in typical instantiations, the root merely nestling amongst them. A list for pre-radical elements in Abkh(-Aba) would include (moving away from the root) markers for: (1) Caus; (2) Neg; (3) Agent (=Trans S[ubject]); (4) Indir[ect] Obj[ect]; (5) Prev; (6) Obl Obj; (7) Relational Particle; (8) Obl Obj (again!); (9) Orientational Prev; (10) Conjunctive Particle (±Qu[estion]); (11) Connective; (12) Intrans S/Dir[ect] Obj. Post-radical markers include: (1) Root-suffix; (2) Adverbial; (3) Pl; (4) Hab[itual]; (5) Dyn; (6) Neg; (7) Qu; (8) Mood/(Non-)Fin Tense; (9) Qu/Conv[er]b; (10) Propositional content. Not all combinations are possible, which complicates precise ordering, and the various languages differ in points of detail. On the Abkhaz verb see Spruit (1987).

4.2. It is convenient to operate with three sets of pronominal agreement-affixes: those of Col I correlate with an Intrans S or (Trans) Dir Obj, whilst the Col III set take up the agent (=Trans S), making the languages ergative in character. The remaining set, Col II, correlate with *either* a pure Indir Obj *or* an Obl Obj (i.e. one 'governed' by a Prev or relational particle). The actual affixes are set out in 4.5 (cf. also Paris (1969)).

4.3. Postposed Negs in Circ follow the tense-mood suffixes, as does Circ's pluraliser /xa-/ , whilst in Ub and Abkh-Aba the relative ordering depends on the tense-mood concerned. All the sisters may use their respective markers to underline the plurality of a 3rd person Absol NP or for relatives that of the *relativised* item, though Abkh-Aba use their equivalent /-k^Wa-/ sparingly in Fin forms and optionally in relatives (Abkh /jə.r.ba.k^Wa.la.'wa.jt'/ them.they.see.Pl.Hab.Dyn.Fin(-Pres). 'they see *them* [the many fragments] from time to time /-la-/'; Abkh /wə.z.ba.(k^Wa.)'wa/ you(-Masc).who.see.(Pl.)Dyn(-Non-Fin-Pres) = Ub /wə.də.bj(a).a.'n.ə/) you.who.see.Pl.Dyn.Non-Fin(-Pres) = Tem /wə.z.ə.ɸa^W.ə.ɸ.xa.ra.r/ you.who.see.Pres.Pl.Non-Fin.Absol = Kab /wə.z.ə.ɸa^W.ə.ɸ.xa.r/ you.who.see.Pres.Pl.Absol(-Non-Fin) 'those who see you (Masc in Abkh)'. The placement and variety of Ub pluralisers require special description.

4.4. Ub has a wider range of pluralising-strategies, especially within the verb, than the sisters. For, if Circ uses its nominal pluraliser to underline the plurality of a 3rd person argument standing in the Absol (a rare occurrence in Abkh-Aba), and if both other branches can use this same (N-Hum) pluraliser to emphasise the plurality of the head-noun in a relative structure, Ub has the following mechanisms: (1) suppletive roots determined by the plurality of the Absol nominal (/t^W(ə)/~/q^la/ 'give'; /w(ə)/~/k^la/ 'enter; take'; /s(ə)/~/ɹ^Wa/ 'sit'; /t^W(ə)/~/xa/ 'stand/be upright'; /tʃa.wə/~/tʃa.k^la/ 'fall'; /da.t^W(ə)/~/da.xa/ 'rise'; /q^W.a.t^W(ə)/~/q^W.a.xa/ 'halt'; /χ(ə)/~/wə.χ^Wa/ 'belong to'); (2) similar determination for the choice between the Caus formants (/də/ or /ɸ/~/ɸa/); (3) same determination but also occasioned by the presence of a Pl 2nd person argument in ANY function for the choice between the tense-markers /-jt'/~/-jt+(a)/ in the Imperf[ect], Condit[ional] and and Plup[erfect]; (4) exactly parallel determination for the insertion in the Dyn Pres and Imperf tenses of /-a-/ immediately after the root; (5) exactly the same determination for the pluralising suffix /-n(a)/ in the Stat Pres, Aor[ist] (where it follows the tense-suffix), Fut[ure]s (where it precedes the tense-suffixes), and Imper[ative]s with 2nd person Pl addressee. In a gem of philological investigation Smeets (1997)

demonstrated that, whilst this distribution of pluralisers correctly characterises the speech of Tevfik Eसेң in his last years, these ‘norms’ for items 3–5 are not wholly borne out by the practice of other speakers or even of Eसेң in his early years of collaboration with Dumézil. The tendency revealed to ‘standardise’ usage Smeets ascribes to Ub’s moribund state.

4.5. The agreement-affixes:

	Abkhaz-Abaza					
	Singular			Plural		
	I	II	III	I	II	III
1st	s-	s-	s- (/z-)	ħ-	ħ-	ħ- (/a:~)
2nd Masc/N-Hum	w-	w-	w-	ʃ ^w -	ʃ ^w -	ʃ ^w - (/ʒ ^w -)
2nd Fem	b-	b-	b-	ʃ ^w -	ʃ ^w -	ʃ ^w - (/ʒ ^w -)
3rd Masc Hum	d-	j-	j-	j-	r- (/d-)	r- (/d-)
3rd Fem Hum	d-	l-	l-	j-	r- (/d-)	r- (/d-)
3rd N-Hum	j-/ø-	a-/ø-	(n)a-	j-	r- (/d-)	r- (/d-)

In Bz 2nd Pl = /ç^w/. Schwa can accompany any of these markers, but in contact with /h/ this will open to /a/. Some (morpho-)phonological rules affecting these markers have been discussed above (2.3 and 2.5); Abkh [a:] = Aba [ʃa/aʃ]. When immediately preceded by its referent, Col I /j-/ drops; if the verb is trivalent or contains a Prev, Col III /a-/ expands to /na-/.

	Temirgoi					
	Singular			Plural		
	I	II	III	I	II	III
1st	s(ə)-	s(ə/a)/z-	s(ə)/z-	t(ə)-	t(ə/a)/d/tʰ-	t(ə)/d/tʰ-
2nd	c ^w (ə/a)/c ^w /ʒ ^w -	w(ə)-	w(ə/a)/p(ʰ)/b- c ^w (ə)/c ^w /ʒ ^w -		w(ə)/p(ʰ)/b-	c ^w (ə)-
3rd	ø/ma(ʔ)-	j(.a)/ø-	j(ə)/ə-	ø/ma(ʔ)- (-x)	(j)aʔ-	(j)aʔ-

3rd person /ma(ʔ)-/ is used only with preverbles, Aff[irmative], Fin, monovalent Intrans Dyn verbs in the Pres. The vowelless variants in Col II tend to be used when governed by a Prev or relational particle. If one operates with an Indir Obj affix /-a-/, the a-variants in Col II can be omitted.

Kabardian						
	Singular			Plural		
	I	II	III	I	II	III
1st	s(ə)-	s/z(a)-	s/z-	d(ə)-	d(a)t(ʻ)-	d/t(ʻ)-
2nd	w(ə)-	w(a)/wa/p(ʻ)/b-	w/p(ʻ)/b-	f(ə)-	f(a)/fʻ/v-	f(ʻ)/v-
3rd	ø/ma(ʻ)-	j(.a)/ø-	j-	ø/ma(ʻ)- (-xa)	(j)aʻ-	(j)aʻ-

Greater variety is observed in Kab in respect of person-marking as one shifts between some of the tense-moods than is attested in the sisters: /wə.ø.z.aw.t/ 'I give you to X' vs /w.ja.s.tə.nə.w.ɕ/ 'I'll give you to X' vs /w.ja.zə.t/ 'let me give you to X' (Dumézil, 1975: 34). The same applies to the a-variants in Col II as for Tem above.

Ubykh						
	Singular			Plural		
	I	II	III	I	II	III
1st	sə-	s/z-//sə-	s/z(ə)-	ʃə-	ʃ/3-//ʃə-	ʃ/3(ə)-
2nd	wə-	w-//wə-	w(ə)-	ɕ ^w ə-	ɕ ^w /3 ^w -//ɕ ^w ə-	ɕ ^w /3 ^w (ə)-
3rd	a/(j)ə/ø-	ø-	ø/n(ə)-	a/jə/ø-	ə-	(n)ə-

In Col II the variants before // mark the Obl Obj of a Prev or relational particle, whilst those to the right mark a simple Indir Obj. Of the 3rd person Col I markers /j(ə)ə-/ appears if preceding a zero-marked 3rd person Col II affix, but /a-/ is selected when followed by a non-zero Col II affix, though these may drop especially if (immediately) preceded by their referent; in Col III /nə-/ appears if the verb is tripersonal or contains a Prev (cf. Abkh-Aba).

4.6. Col I affixes are replaced in Abkh-Aba by /j(ə)ə-/ vs Circ /ø-/ if their referent is the head of a relative phrase (Ub patterns like Circ in switching to a 3rd person form of the verb), whilst those of Col II and III change in Abkh-Aba to /z(ə)ə-/ vs Circ /z(ə)a-/ vs Ub /d(ə)t-/—since it is essentially the Col II affixes which signify possession in NPs, if the head-noun of a relative contracts a possessive relationship within its clause, the usual Poss prefix will yield to the same relative substitute. The Col I affix is replaced in some verbs for reference to non-specific Dir Objs: Abkh-Aba /(.a).kʻr(ə)-/ (/a.kʻrəf a.kʻrəz^w/ 'Eat (something), drink (something)!'); Ub /ja-/ (/ja.s.ʻfə.n/ 'I'm eating (something)'); Circ rather switches verb-class from a Trans (with root-final /-ə/ø/) to Intrans (with root-final /-a/) (/ø.j.a.ʃxə.ø/ 'X eats Y' vs /maʻ.ʃxa.ø/ 'X eats'), a shift (minus vowel-change) paralleled in such Abkh examples as: /jə.z.ʻq.wa.jtʻ/ 'I'm writing it/them' vs /sə.ʻq.wa.jtʻ/ 'I'm writing' (cf. Hewitt, 1982). A special reflexive marker may substitute (in some verbs) for the expected Col I affix alone in Abkh-Aba with the difference that in Abkh the affix /tʃ(ə)ə-/ 'self' is accompanied by a Col II (Poss) prefix coreferential with the agent, whilst

no such prefix is present in Aba (Circ influence?)—in other verbs and where the reflexive element functions as Indir/Obl Obj, Abkh-Aba employs the lexeme for ‘head’ outside the verbal complex; in Circ the intraverbal reflexive marker /z(ə/a)-/ may substitute for either a Col I or Col II affix, whilst in Ub /-v^la/, preceded by a Poss prefix, functions outside the verb as Trans Dir Obj whereas intraverbally /za-/ substitutes for a Col II affix alone—contrast ambiguous Abkh:

- (2) jə.'mag^W.k^Wa ø.'jə.fə.j.ts'a.ø.jt'
 his.boot.s them.him.Prev.he.don.Past.Fin(-Aor)
 'He_i donned his_i boots/He_i put his_i/j boots on him_j'

vs Tem:

- (3) jə.j.fazma.xa.r ø.zə.fə.j.+.a.ɯ
 X.Poss.boot.Pl.Absol them.self.Prev.X.don.Past(-Fin)
 '(S)he_i donned his/her_i boots'

Cols II and III affixes can also yield to a Recip[rocal] marker: Ub /za-/; Circ /za-/ or /za.ra-/; Abkh /aj-/ or /(a)j.ba-/; Aba /a(j)-/ or /a.ba-/—the Recip markers are discussed separately below (4.19) because of the need firstly to describe Potentiality.

4.7. It is usual to distinguish between verbs indicating an activity, the Dyn group, from those that mark a result or state, the Stat group. The latter are usually only found in the Pres or Past, though, as the Abkh table of Indicative forms demonstrates, means are available to produce derivative tense-forms beyond the basic two. Noun- or adjective-complements appear as Stats. Whilst the languages all lack a (Dyn) passive voice (using instead an active form with non-specific 3rd person Pl subject), a Stat will sometimes be translateable as a non-Dyn passive, e.g. Abkh:

- (4) a.'tʂ.ajmaa mʃta 'bʂəja.s jə.pχ^la'dza.w.p'
 the.horse.shoe charm good.Adv it.deem.Stat.Fin(-Pres)
 'The horse-shoe is deemed to be a good-luck charm'

vs Dyn:

- (5) ga'dza.s sə.r.pχ^la'dza.wa.jt'
 idiot.Adv me.they.deem.Dyn.Fin(-Pres)
 'They consider me an idiot'

Note the Shap Circ transformation of Stat /sə.ɕ^Wəz/ 'I'm a woman' into Dyn /s.a.ɕ^Wəzə.ø/ 'I'm becoming like a woman' (Smeets, 1992a), suggesting that the final schwa might be interpretable as the tense-marker.

4.8. Indicative mood. The languages have, with individual particularities, a range of basic Indicative tenses (e.g. Pres, Fut, Aor(-Perf[ect]), Imperf, Perf, Plup, Condit = Fut in the Past) and moods (e.g. Imper, Opt[ative]). The Indicative tenses exist in both Fin and Non-Fin forms, the latter typically characterised by pre-radical negation (and possibly different stress), though not all forms with pre-radical negation are thereby

to be deemed Non-Fin. Abkh-Aba makes the clearest formal differentiation between the two types, and the Abkh pattern is set out below for both Aff and Neg—for a study of tense-mood forms in Abkh-Aba see *Chkadua (1970)*. As already remarked, Aba lacks in surface-realisation the Dyn suffix in the Fin Aff Pres, and in the Aor the Fin marker is /-t'/ alone. The Fin forms are given with 1st person Sub /s-/ 'I', replaced under relativisation by /jə-/ 'who, which':

Finite vs Non-finite indicative tense-forms in Abkhaz				
Dynamic Group I tenses				
	'Stand up'		'Not stand up'	
	Finite	Non-finite	Finite	Non-finite
Pres	s.'gəla.wa.(j)t'	jə.'gəla.wa	s.'gəla.wa.m	'jə.m.gəla.wa
Aor	s.'gəla.ø.jt'	jə.'gəla.ø	sə.m.'gəla.ø.jt'	'jə.m.gəla.ø
Fut I	s.'gəla.p'	jə.'gəla.ra/ə	s.'gəla.rə.m	'jə.m.gəla.ra/ə
Fut II	s.'gəla.ʂ.t'	jə.'gəla.ʂa	s.'gəla.ʂa.m	'jə.m.gəla.ʂa
Perf	s.'gəla.χ ¹ a.jt'	jə.'gəla.χ ¹ a.w =jə.'gəla.χ ¹ a(ts)// jə.'gəla.ts	sə.m.'gəla.ts.(t')	'jə.m.gəla.χ ¹ a.w ='jə.m.gəla.χ ¹ a(ts)// 'jə.m.gəla.ts
Dynamic Group II tenses				
	Finite	Non-finite	Finite	Non-finite
Imperf	s.'gəla.wa.n	jə.'gəla.wa.z	s.'gəla.wa.mə.z.t'	'jə.m.gəla.wa.z
Past Indef	s.'gəla.ø.n	jə.'gəla.ø.z	sə.m.'gəla.ø.z.t'	'jə.m.gəla.ø.z
Condit I	s.'gəla.rə.n	jə.'gəla.rə.z	s.'gəla.rə.mə.z.t'	'jə.m.gəla.rə.z
Condit II	s.'gəla.ʂa.n	jə.'gəla.ʂa.z	s.'gəla.ʂa.mə.z.t'	'jə.m.gəla.ʂa.z
Plup	s.'gəla.χ ¹ a.n	jə.'gəla.χ ¹ a.z// jə.'gəla.tsə.z	s.'gəla.tsə.z.t'	'jə.m.gəla.χ ¹ a.(tsə.)z// 'jə.m.gəla.tsə.z
Stative Pattern				
	'Be standing'		'Not be standing'	
	Finite	Non-finite	Finite	Non-finite
Pres	s.'gəla.w.p'	jə.'gəla.w	s.'gəla.m	jə.'gəla.m
Past	s.'gəla.n	jə.'gəla.z	s.'gəla.mə.z.t'	jə.'gəla.mə.z
[Perf]	–	jə.'gəla.ts	–	'jə.m.gəla.ts]
Derived Stative Pattern				
Def Fut	s.'gəla.z.a'.wa.jt'	'jə.gəla.z.a'.wa	s.'gəla.z.a'.wa.m	'jə.gəla.m.z.a'.wa
Fut I	s.'gəla.z.a'.p'	'jə.gəla.z.a'.ra	s.'gəla.z.a'.rə.m	'jə.gəla.m.z.a'.ra
Fut II	s.'gəla.z.a'.ʂ.t'	'jə.gəla.z.a'.ʂa	s.'gəla.z.a'.ʂa.m	'jə.gəla.m.z.a'.ʂa
Condit I	s.'gəla.z.a'.rə.n	'jə.gəla.z.a'.rə.z	s.'gəla.z.a'.rə.mə.z.t'	'jə.gəla.m.z.a'.rə.z

Root-final /-a/ and /-j/ of the Fin suffix often jointly drop, giving here [sgølt']. The Pres serves as a general Fut, whilst the Fut I suggests action following fulfilment of some condition or, with 1st person subject (and often post-radical /-la/), conveys an exhortation; the Fut II often suggests obligation 'that which should happen', the Condit II being 'that which should have happened'. Besides being a progressive past, the Imperf is also used for 'would VERB/would have VERBed' (contexts in which the Condit I and II are also found, with appropriate nuances). The Past Indef clearly fits the morphological pattern for Group II tenses, and its Non-Fin forms are semantically equal to those of the Aor (=Simple Past), but, as the Fin forms need to be followed by another (Fin) past tense, they are functionally equivalent to a Non-Fin. The Dyn Perfs and Plups containing /-ts(-)/ imply repetition of the activity. Aba prefers the increment /-z.la-/ to /-z(.)a-/ to derive Dyn tenses for Stats (Lomtatidze, 1944: 143).

The Ub Indicative suffixes (Pl in brackets) are: Stat Pres = Sing /-ø/ vs Pl /-n(a-)/ vs /-jt'/ and /-jɬ(a-)/ respectively for the Past. Dyn Pres = /-n(a).ø/, where the morpheme /-n(a-)/ is the Dyn suffix, (/-.a.n(a).ø/); Imperf /-na.jt'/ (/-.a.na.jɬ(a-)/); Fut I (immediate or obligative) /-aw/ (/-.na.w/); Fut II (general) /-aw.t/ (/-.na.w.t/); Aor /-q'a/ (/-.q'a.n(a-)/); Plup /-q'a.jt'/ (/-.q'a.jɬ(a-)/); Condit I /-aw.ɔ.jt'/ (/-.na.w.ɔ.jɬ(a)/); Condit II /-aw.t^W.q'a/ (/-(n(a).)aw.t^W.q'a.n/).

In Tem the Indicative markers are: Dyn Pres /Dyn.Root.ø/ (unless the final vowel is the tense-marker); Imperf /-ʃtə.ɰ/; Fut I (immediate/obligative) /-n/; Fut II (general) /-ʃt/; Aor /-(r)ɰ(a)/; Plup /-ɰa:ɰ(a)/; Condit I /-ʃtə.ɰa/ (or /-n.ɰa/); and Condit II /-ʃtə. ɰa:ɰ/. The Stat Pres, like its Dyn counterpart, has no suffixal marker but also lacks any Dyn prefix.

Indicative markers in Kab are: Pres /Dyn.Root(r)/; Imperf /-t/; Fut I /-n.ɛ/; Fut II /-nə.w.ɛ/; Aor /-(ɰ)a:ɛ/; Plup /-(ɰ)a:ɛ.t/; Condit /-n(ə.w).t/. Stat Pres ends in /-ɛ/.

Regarding the formation of Non-Fin forms in Ub, Dumézil described the situation thus: 'All indicative forms can be employed in participial function and declined, sometimes with accent-displacement' (1975: 181). He then noted that the only changes that occur are: (1) exclusive use of pre-radical Neg; (2) consonant-final stems with no case-ending *may* add a (sometimes accentuated) schwa; (3) Pl-markers /-n/ and /-ɬ/ take their full forms /-na/ and /-ɬa/. In relative structures (equivalent to the Non-Fin forms set out in the table for Abkh), relative affixes replace the appropriate agreement-marker, as explained in 4.6. Essentially the same flexibility, with pre-radical Neg, applies to Circ, with the exception that in W. Circ the Dyn Pres adds a suffix /-ra/ and in E. Circ the Aff suffix /-ɛ/ disappears. Examples:

- (6) s.tsa.t' [sts' i (j)t'] vs jə.M.'tsa a.'qats'a (Aba)
'I went' vs 'the man who did not go'
- (7) a.'sə.n.t^Wə.n.ø vs za.m^ɕa ø.'sə.də.t^Wə.n.ø tət (Ub)
'X gives Y to me' vs 'The man who gives an apple to me'
- (8) jə.'sə.j.ta.wa.m vs tɕ^W.a.k' ø.'sə.zə.m.ta.wa a.'χats'a (Abkh)
'He does not give it/them to me' vs 'The man who does not give an apple to me'
- (9) ts'əfə.r ma:k^W.a.ø//ø.qa.k^W.a.ft vs ø.k^W.a.ra ts'əfə.r = ts'əfə ø.k^W.a.ra.r vs
'The man is going/will come' vs 'The man who is going'
ø.qa.k^W.a.ftə.r vs ø.qa.k^W.a.ft ts'əfə.r (Tem)
'The one who/which will come' vs 'The man who will come'
- (10) s.aw.ʒa.za.ø vs ø.mə.ʒa:za.ø ts'əx^Wə.r vs ø.ʒa:za.nə.w.r (Kab)
'I work' vs 'The man who does not work' vs 'The one who will work'

4.9. The pre-radical Neg marker in all the languages is /m(ə)-/. The post-radical Neg is /-m(ə-)/ in Abkh–Aba vs Ub /-m(ə-)/ or /-ma/ vs Tem /-ap/ vs Kab /-q'əm/. In Abkh the basic marker is often accompanied by the post-radical intensifier /-dza-/ (parallel to Ub /-bza-/ and Circ /-xa-/), this latter being identical to the pluraliser), whilst Aba invariably places /-g^j-/ immediately after the Col I slot in Fin forms (in Abkh /-ag^j-/ is sometimes similarly found; cf. the connective /d.ag^j.pʂdza.n d.ag^j.baja.n/ 'X was (both) beautiful and rich'). In Tem an /-r-/ precedes the suffix in the Dyn Pres, and Circ universally loses both the Dyn prefix and the Aff suffix /-ɕ/. Examples: Tem /ma:k^w.a.ɸ/ 'X is going' vs /ɸ.k^w.a.r.ap/ 'X isn't going'; /sə.w.a.ɸab^w.ə.ɸ/ 'you see me' vs /sə.p.ɸab^w.ə.r.ap/ 'you don't see me'; /ɕ^w.ə.s.ɸab^w.ə.ɸa.z.ɸ.ap/ 'I hadn't seen you.PI'; Kab /wə.z.aw.ɸa:ɸ^w.ɸ/ 'I see you' vs /wəs.ɸa:ɸ^w.ɸ.q'əm/ 'I don't see you'; /fə.t.ɸab^w.a:q'əm/ 'we didn't see you(PI); Ub /sə.m.k^j.a.n.ɸ/ 'I'm not going'; /s.k^j.a.na.jt'.ma/ 'I wasn't going'; /s.k^j.a.q'a.ma/ 'I didn't go'; /s.k^j.a.q'a.jt'.ma/ 'I hadn't gone'; /s.k^j.a.mə.t/ 'I certainly won't go; let me not go'; /s.k^j.a.w.mə.t/ 'I'll not go'; /ʃə.χ^j.ə.n.ɸ/ 'we are princes' vs /ʃə.χ^j.ə.na.ɸ.ma/ 'we are not princes'.

4.10. Yes–No questions are produced in Abkh by attaching /-ma/ (sometimes /-w/) to the appropriate Non-Fin form; if the verb contains a Neg, then the suffix is /-j/, which may be omitted from the Pres and all Group II tenses. In Aba only /-ma/ exists. In the sisters Qu-markers attach to Fin forms, Ub using /-ɕ/ universally. W. Circ uses /-a:/, which voices the final /p/ of the Neg suffix; this is not to be confused with the suffix /-ba/ used to convey a strong assertion (as at Luke 14.5 /ɸ.qə.ɸ.xə.j.xə.zə.n.ba/ 'X will assuredly pull it out again', a statement rendered in Abkh by the Neg question /jə.ɸ.tə.j.m.ga.dza.wa.j/ 'he'll surely pull it out, won't he?'); E. Circ is more complex: the Qu-suffix /-a/ is only found in combination with the Neg ending (giving /-q'.a/), whilst, according to Kumakhov/Vamling (1999: 309), the Aff interrogative is produced by means of the suffix /-ra/ in the Pres and Imperf (the formant being inserted between root and Imperf ending); other Affs in /-ɕ/ lose it; in the Plup interrogation is by intonation.

4.11. Content-questions in Abkh are based on the relativised, Non-Fin form of the verb and employ /-d.a(-)/, suffixed to Group I Non-Fin stems (the /-w/ of the Stat Pres and Dyn Perf is omitted) but inserted before the /-z/ of the Group II Non-Fin stems, if the question pertains to a human; otherwise, the choice of formants is /-(za//ə.)j/ suffixed to the Non-Fin Stat Pres or any Group I tense; for the remaining Non-Fin tense-forms either /-za//ə.j/ is placed after the ending /-z/ or /-zə-/ alone is inserted before this /-z/—in Bz one also finds in this pre-final slot the formant /-j/, which may be the source of the other strategy in standard Abkh with lengthened vowel in this syllable. Aba simply uses /-ja/. Alternatively, the relativised Non-Fin just stands alongside the appropriate interrogative pronoun containing the relevant Col I affix. This latter construction, being the basic NWC pattern, is found in the sisters, Ub always attaching /-j/ to the verb, whilst Circ has no special indicator, though the Yes–No marker /-a:/ seems optional in Tem. A Circ and Ub alternative case-marks an interrogative pronoun and inserts no relative affix in the verb. Examples:

- (11) wə.zə.'fta.wə.j = jə.z.a.'k^w.ə.wə.j
 you(-Masc).whose.track.Stat(-Non-Fin-Pres).what? = what-is-it?
 wə.zə.'fta.w (Abkh)
 you(-Masc).whose.track.Stat(-Non-Fin-Pres)
 'What are you(Masc) seeking?'

These equate respectively to the Ub pair /s̄a.n wə.θ.ʰaq' a.dʒə.j/ (with Obl suffix on the interrogative and no relativised verb) or /wə.'də.ʰaq' a.dʒ s̄a'k'ə.j/ (with relativised verb and the interrogative 'what is it?'). Cf.

- (12) xat.ə ø.j.a.wə. mə.ʔ^Wa:ʙ = ø.z.a.wə.mə.ʔ^Wa:ʙa.r
 who.Oblit.X.to.you.not.tell(-Past) = it.whom.to.you.not.tell(-Past).the(-Absol)
 xat(.a:) (Shap -- Smeets 1984.316)
 who(.is-it-Qu)
 'To whom didn't you tell it?'

This pair equates respectively to Abkh /'d.arban(ə.w) jə.z.a.w.m.'h^Wa.θ(z)/ vs /jə.z.a.w.m.'h^Wa.θ.da(z)/.

4.12. Abkh-Aba produce sentential questions by inserting /-ba-/ immediately after the conjunctive prefixes, which are treated under Syntax: /-an(ə)-/ 'the time when' ⇒ /-an.ba-/ 'when?'; /-s̄(ə)-/ 'the manner in which; how' ⇒ /-s̄.pa-/ 'how?'; /-aχ^j(ə)-/ '(the place) where' ⇒ /-a.ba-/ 'where?' (Aba also has /-aχ^j.pa-/). These complexes end in either the Non-Fin stem or add any of the markers for a N-Hum content-question. Only the latter shape is taken by interrogatives marked by prefix /-z-/ 'why?', no doubt because this was /-z.z-/ 'which.for' in origin. Examples:

- (13) (Ub) mə-w.k^ja.nə.ø.j = (Tem) tə(da)-w(ə).k^Wa.ra(ə) = (Kab) ta.na-w(ə).k^Wa.ra
 (with interrogatives preceding the Col I affix and thus analysable as separate from the verbal complexes but here indicated by a hyphen)
 vs (Abkh) w.a.'ba.tsa.wa
 you(Masc).where.Qu.go.Dyn(-Non-Fin-Pres)
 'Where are you(Masc) going?'
- (14) (Ub) 's̄a.ba w.'la.wəɁa.nə.ø.j = (Abkh) wə.z.χ^Wəts.'wa.j
 why you.Prev.think.Dyn.Pres.Qu you(Masc).why.think.Dyn
 (-Non-Fin-Pres).Qu
 'Why are you(Masc) lost in thought?'

4.13. The Imper has no special marking in Abkh-Aba Dyn verbs and, if a Trans verb's addressee is Sg, no affix correlates with this argument in the verb, but for a Proh[ibition] a final /-n/ is added and all addressees are co-referenced—root-final /-a/ often drops. For Stats either the full Subjunctive ending /-z.a.:(j)t'/ is used, as it preferably is for Prohs, or this is shortened to /-z/, e.g.

- (15) jə.q'a.'ts'a vs jə.q'a.ʃ^W'ts'a vs jə.q'a.bə.m.'ts'a.n vs
 '(you-Sing) do it!' vs '(you-Pl) do it!' vs '(you-Fem) don't do it!' vs
 bə.'tsa vs wə.m.'tsan vs ʃ^W.'t^Wa.z(.a.:(j)t') vs
 '(you-Fem) go!' vs 'Don't (you-Masc) go!' vs '(you-Pl) remain seated!' vs
 ʃ^W.'t^Wa.m.z.a.:(j)t' (= ?ʃ^W.'t^Wa.mə.z) (Abkh)
 'Don't (you-Pl) remain seated!'

In Ub the 2nd person agreement-affix for the addressee is always present minus any special Imper marker in Classes A, B, E, F; for Class C verbs a morpheme /-dʒ(ə)-/ is often inserted between 2nd person affix and root, but both may be omitted; for the remaining Trans classes (D, G, H) no Imper infix and no 2nd person affix is used, though in all cases where the addressee of a Trans verb is Pl, its plurality will be indicated by suffix /-n/; all Prohs require the presence of the 2nd person affix, e.g.

- (16) a. 'ɕ^wə.dʒə.bja.n (= a.'bja.n) vs a.'bja vs a.sə.ɕ^wə.m.'t^wə.n (Ub)
'(you-Pl) see it!' vs '(you-Sg) see it!' vs 'Don't (you-Pl) give it to me!'

In Circ no agreement-affix is used for a Sing addressee, but in Prohs this affix is always present; if there is more than one syllable, a root final /-a/ tends to reduce or drop; Stats have no Imper, the sense being conveyed by forming a Dyn equivalent with Caus and Refl affixes, e.g.

- (17) k^w.a vs ɕ^wə.k^w vs ɕ^wə.mə.k^w (Tem)
'Go!' vs '(you.Pl) go!' vs 'Don't (you.Pl) go!'

1st person exhortations in Ub and Circ pattern as in English with Caus (=‘let’), 2nd person addressee and 1st person Dir Obj:

- (18) ʃə.w.m.ʋa.k^la.n (Ub)
us.you.not.Caus.go.Pl(-Imper)
'Don't let's go/Let's not go!' (Class C)
- (19) də.w.mə.ʋa:txa vs ø.də.w.mə.ʋa.tx (Kab)
us.you.not.Caus.write(-Intrans-Imper) vs (Trans equivalent)
'Let's not write!' vs 'Let's not write it!'

Abkh uses Fut I, usually plus post-radical /-la-/, with 1st person Pl subject:

- (20) ʰa.tsa.'la.p' (Abkh)
we.go.Suff.FutI
'Let's go!'

4.14. The Subjunctive in Abkh is formed by suffixing /-a:(j)t'/ to the Non-Fin Aor (future reference), Past Indef (past reference), Imperf (present reference), or Plup (perfect reference); where the Non-Fin forms in question end in /-z/, the actual Subjunctive formant may be omitted. The same is true of Stats, where the formant is suffixed to the Non-Fin Past. In Aba Dyn stems add /-ra/ə.ʃa.(j)t'/, whilst Stats add either /-z.t'/ or /-z.r.ʃa.t'/. The Subjunctive is commonly used in curses, e.g.

- (21) 'a.mg^wa.χ^j ø.'wə.χ^j.ə.aa.(j)t' (Abkh)
the.stomach.pain it.you(Masc).befall.Past.Subjunctive
'Let diarrhoea befall you!'

Circ has a Subjunctive(-Opt) produced by infixing /-(w)a.ra-/ (alternatively /-ra.j-/ , /-r.ja-/ , /-a-/ , /-(w)ə-/ , those in /-(w)a-/ being found more in W. Circ) after any Col III affix, e.g.

- (22) (Tem) s.a.ra.k^W = (Kab) sə.ra.j.k^Wa (or s.ə.k^Wa)
'Let me go!'
(23) (Tem) w.a.ra.k^W = (Kab) wə.ra.j.k^Wa/ (or wə.k^Wa)
'You're to go'
(24) (Tem) ø.wa.ra.k^W = (Kab) jə.ra.j.k^Wa (or ø.wə.k^Wa) vs (Tem) ø.wa.ra.mə.k^Wa
'X is to go' 'X is not to go!'

Ub seems not to have a Subjunctive as such.

4.15. The Opt in Abkh attaches the suffix /-nda(.z)/ to Stat roots (present reference) and for Dyns to the Non-Fin Aor (future or past reference), Pres (present, future, progressive past reference), or Perf minus final /-w/ (past reference) (cf. with ex. 21 /'a.mg^Wa.χ^j ø.'wə.χ^jə.nda(.z)/ 'I hope you suffer diarrhoea!/Would that you('d) got diarrhoea!'). In Aba the suffix has the variants /-nda(.ra)/ or /-nda.z/) and is usually associated with the simple root (present reference for Stats, future reference for Dyns) or Perf in /-χ^ja/ (past reference). In Ub /-(a)χ/ attaches directly to the root (with prefixal Neg); the suffix /-da.j/ is also found in association with a Fin form:

- (25) 'wa.jχ^Wa ø.wə.'ja.χ vs a.j.k^ja.'q'a.(j't')da.j
'May lightning strike you!' vs 'If only X had come!'

W. Circ suffixes /-b^Wa.t/ (with lengthening of root-final /-a/) to the Pres (future, present or past reference) or Aor (past or future reference only):

- (26) sə.txa.ə^Wa.t vs sə.txa.əa.ə^Wa.t
'If only I were to write/were writing/had written!' vs 'If only I had written/were to write!'

Rogava/Kerasheva (1966) also have examples of this mood formed on the Fut II and Condit I. Kab suffixes /-çara(.t)/ usually to the Aor (minus Aff /-ç/) (past or future reference) but can also add it to the Pres (present reference):

- (27) ø.p.ç'ə.ø.çara.t vs ø.p.ç'a:çara.t
'Would that you were doing it now!' vs 'Would that you had done/would do it!'

4.16. To express an inference or hearsay-based statement Abkh attaches /-z.a:z.p'/ to Stat roots or the Non-Fin Pres, Aor, Fut II and Perf of Dyn roots. For the Past of Stats and

Non-Fin forms of the Imperf, Past Indef, Condit II and Plup, all minus their final /-z/, /-z.aʔ.rə.n/ is used (cf. Hewitt, 1979a; Chirikba, 2003). In Aba the suffixes are /-za.pʔ/, /-za.rə.n/ for Aff forms and /-za.rə.z.tʔ/ for Negs. Tem uses the suffix /-j/ with present and past tense-forms, Aff Pres Dyns adding the usual /-r/:

- (28) w.a.k^Wa.rə.j vs ø.fə.tə.βə.j (Tem)
 'You seem to be going' vs 'X seemed to be standing'

Oddly, no strategy is reported for Ub.

4.17. Abkh possesses a verbal noun similar to an Infin[itive], but, because of nominal governance it is generally styled a Masd; it ends in /-ra/ (/-/z.aa.ra/ for Stats) (in Aba the Stat ending is /-z.a.ra/ or /-z.la.ra); sometimes stress differentiates the Masd from the abstract-noun (e.g. Abkh /a.ʂa.'ra/ 'dawning' vs /a.'ʂa.ra/ 'dawn'). To the extent that these forms in Aba sometimes have verbal rather than nominal governance (e.g. Aba /pəjsma ø.ftə.j.ra/ 'to send a letter' vs Abkh /'a.salam.ʃ^Wq^W'ə'a.ft.ra/ 'sending a letter'), we can speak here of a true Infin. Circ has a form in /-n/ that, as Kumakhov/Vamling have pointed out (1998) for Kab, sometimes behaves more verbally (viz. when it incorporates verbal cross-referencing affixes, in which case it can be analysed as the Fut I plus nominal ending), sometimes more nominally (with subjective or objective genitive)—verbal:

- (29) ø.ʂ'a.z.dz.a.ʂ (sə.)k^Wa.n
 it.Prev.I.start.Past.Aff (I.)gø.Infin(-Absol) 'I began to go'
- (30) də.ʃxa.n ø.də.wəx.a.ʂ
 we.eat(-Intrans).Infin(-Absol) it.we.end.Past.Aff 'We finished eating'
- vs nominal:
- (31) də.j.ʃxa.nə.r ø.də.wəx.a.ʂ
 our.Poss.eat.Masd.the(-Absol) it.we.end.Past.Aff 'We finished eating'

Ub has no exact counterpart but sometimes uses the bare root:

- (32) 'sə.f(ə) d(.)a.ø.sə.ø.tʃa.t'ə.n
 my.eating(?-Masd) Sub[ordinator].it.I.Caus.end.Past(-Non.Fin).Obl
- cf. Tem:
- (33) ʂxa.nə.r ø.zə.s.a.wəxə.m
 eat.Infin.the(-Absol) it.Sub.I.Dyn.end.Obl
 'When I finish eating'

4.18. NWC has the means to express potentiality within the basic verbal complex (i.e. without resort to lexical verbs of ability, though these too exist). Abkh-Aba employ the benefactive relational prefix (cf. 4.24) /-z(ə)-/ (Bzyp /-z(ə)-/) but usually only with Neg or interrogative verb-forms—W. Circ has a similar preference for linking potential-marking to Neg verbs; Tem /-f(a/ə)-/ and Kab /-x^W(a/ə)-/ are the corresponding Circ

dual-functioning prefixes, though they are found only with Trans verbs that have no Prev; Circ otherwise uses a post-radical suffix (Tem /-ɕ^W(ə)/ vs Kab /-f(ə)/), which is the only means available to Ub, where the suffix is /-fa/. Examples:

- (34) ja.s.fə.'fa.n.ø (Ub) vs ø.s.txə.ɕ^W'ə.r.ap (Tem) vs ma.k^W'a.f.ø (Kab)
 X.I.eat.Pot[ential].Dyn.Pres X.I.write.Pot.Pres.not X.go.Pot.Pres
 'I can eat (something)' vs 'I can write X' vs 'X can go'

As regards the prefixal variants, they preserve their basic role with Trans verbs in governing a Col II affix, which means that, as this affix correlates with the agent, such verbs actually lack their normal Col III agent-prefix, which I have argued (Hewitt, 1979b) to be a case of 'extended demotion'. Examples:

- (35) bə.s.'na.ta.wa.jt' vs b.a.z.'sə.ta.wa.m (Abkh) vs
 you(Fem).me.it.give.Dyn.Fin(-Pres) you(Fem).it.Pot.me.give.Dyn.Neg(-
 Fin-Pres)
 'It gives you(Fem) to me' vs 'It can't give you(Fem) to me' vs
 ø.s.fa.txə.r.ap (Tem) vs psə.m wə.ø.xa.z.dz.a:ɕ (Kab)
 X.I.Pot.write.Pres.Neg vs water.Obl you.it.in.I.throw.Past.Aff
 'I can't write it' vs 'I threw you into the water' vs
 psə.m wə.s.x^Wə.ø.xa.dz.a:q'əm
 you.I.Pot.it.in.throw.Past.Neg
 'I couldn't throw you into the water' (Kumakhov 1989.242)

In Neg and interrogative forms Kab can use both affixes in the one complex (/ø.ø.x^Wa.ɕ'ə.fə.nə.w.q'əm/ 'X won't be able to build Y' (Kumakhov/Vamling, 1998: 300)). Abkh-Aba are then the only languages to use the prefixal option with Intrans verbs; in this case the affix is merely inserted (in its usual pre-radical slot) without any alteration to the basic structure:

- (36) də.tsa.'wa.jt' vs də.z.tsa.'wa.m vs də.z.tsa.'wa.ma (Abkh)
 'X is going' vs 'X can't go' vs 'Can X go?'

The prefixes indicating the Sub's unwilling participation in, or non-control of, the action (Circ /-ʔatj'a-/ , Abkh /-amχa-/ , Aba /-a//əmqa-/) behave in the same way.

4.19. Reciprocity is marked by: Ub /-za-/; Circ /-za-/ or /-za.ra//ə-/; Abkh /-aj-/ or /-(a)j.ba-/; Aba /-a(j)-/ or /-a.ba-/ . Under no circumstances is the Col I affix replaceable by any of these. The Col II affix is replaced by the shorter variant if the reciprocal relation holds between Intrans S or Dir Obj and Indir Obj, whilst the longer variant replaces the Col III or possibly Col II affix to underline that (at some stage of derivation) a Trans S (agent) is involved in the reciprocal relation—the shorter variant is sometimes found replacing the Col II affix under such conditions. Where the replacement affects the expected Col III affix,

some observers claim that the verb is detransitivised; I do not agree with such an interpretation (see Hewitt, 1979b), preferring to view the reciprocal marker as itself indicating both agentivity and reciprocity, being controlled/identified by an affix earlier in the verbal complex, which correlates with its referent (case-marked appropriately in Circ and Ub) external to the verb. Examples:

- (37) $\text{h.aj.'sə.}\theta.\text{jt}'$ vs $\text{'a.dz.k}^{\text{W}}\text{a}$ $\text{\theta.aj.ba.'ba.}\theta.\text{jt}'$ vs
 we.Recip.hit.Past.Fin(-Aor) the.flea.Pl them.Recip.Ag.see.Past.Fin(-Aor)
 'We hit each other' vs 'The fleas saw each other' vs
 $\text{h.aj.ba.p.f}^{\text{W}}\text{\theta.r.'q'a.}\theta.\text{jt}'$ vs $\text{jə.'hə.k}^{\text{W}}\text{\theta.j.ba.}\chi\text{\theta.}\theta.\text{jt}'$ (Abkh)
 us.Recip.Ag.Prev.you(Pl).Caus.cut.Past.Fin(-Aor) X.us.Prev.Recip.Ag.lift.Past.
 Fin(-Aor)
 'You(Pl) made us cut each other' vs 'We_i lifted it/them off
 each other_i'

Cf.:

- (38) $\text{a.}\zeta.\text{'b}\theta^{\text{J}}\text{a.za.}\theta^{\text{W}}\text{.}\theta.\text{n.}\theta$ (Ub) vs $\text{a:}\text{f}$ $\text{a:}\text{.xa.r}$ $\text{\theta.za.r}\theta.\text{j}\theta\text{a.w}\theta\text{b}\theta\text{t}\theta.\text{v}$
 them.us.Prev.Recip.hurl.Pl.Dyn.Pres X.Obl X.Pl.Absol the.Recip.Ag.X.Caus.
 catch.Past
 'They hurl each other upon us' vs 'X caused them to catch each other'

Only with the Pot or Unwillingness prefixes attaching to the normal Col II affix of a Trans reciprocal verb (as opposed to the reciprocal marker in Col II position itself) does the longer variant NOT behave like a regular agent-prefix:

- (39) $\text{j}\theta.\text{r.'z.aj.ba.m}\theta.\text{r.ba.}\theta.\text{jt}'$ (Abkh)
 X.they.Pot.Recip.Ag.not.Caus.see.Past.Fin(-Aor)
 'They couldn't make each other see it/them' (ONLY!)

The Abkh example / $\text{j.aj.'b}\theta\text{.s.ta.}\theta.\text{jt}'$ / 'I gave them to each other' contravenes the rule suggested above; however, dictionaries give 'assemble; fit out with' as the basic meaning of / $\text{[a]aj.b}\theta\text{.ta.ra/}$, where /-aj.b θ -/ is best treated as a Prev; might this have affected the form of the prefix when reciprocity is combined with the root's basic force of 'give'?

4.20. The Caus is basically formed morphologically by means of Abkh-Aba /-r-/ and Circ /-ba(:)-/—double Caus are permitted in Circ and, under its influence, Aba:

- (40) sa a:r $\text{\theta.s.aw.ba.k}^{\text{W}}\text{a.}\theta$ (Kab) vs
 I(Obl) X(Absol) X.I.Dyn.Caus.go.Pres
 'I make X go/despach X'
 sa $\text{a:}\text{b}\theta$ a:r $\text{\theta.ja.z.aw.ba.ba.k}^{\text{W}}\text{a.}\theta$ (Kab)
 I(Obl) X.Obl Y(Absol) Y.X.I.Dyn.Caus.Caus.go.Pres
 'I get X to despach Y'

(Cf. Aba /jə.lə.j.sə.r.rə.fə[.wə].jt'/ 'I get him to get her to eat X' (Lomtadidze, 1944: 131)). As seen here, the agent of an embedded Trans verb becomes an Indir Obj when causee of the synthetic Caus (an embedded Intrans S becomes Dir Obj of the Caus, whilst an Indir Obj remains unaltered). Abkh avoids quadripersonal verbs and so employs an analytic method when the basic verb is tripersonal, placing the embedded verb in its Result[ative] form (in /-r(a).t^w/(ə)/) coupled with the lexical verb 'make', itself possibly causativised:

- (41) jə.'sə.l.ta.r.t^w ø.q'a.r.'ts'a.ø.jt' = jə.'sə.l.ta.r.t^w
 X.me.she.give.Result it.Prev.they.make.Past.Fin(-Aor)
 ø.l.'də.r.q'a.ts'a.ø.jt' (Abkh)
 it.her.they.Caus.Prev.make.Past.Fin(-Aor)
 'They got her to give X to me',

(This latter reveals that under causativisation an Abkh Prev sometimes merges with the root). The situation in Ub is more complex because of the interplay between agent-, Neg- and Caus-markers, plus whether or not a Prev is present: when negated, the Caus markers are always present, these being /-də-/ for a Sing Dir Obj and /-ɬa-/ for a Pl; the 1st and 2nd person Col III affixes are present in their schwa-grade. In Aff forms the Pl Caus formant is always present, voicing those Col III affixes susceptible to assimilation, but the Sing is either present or sometimes absent, depending on the above-mentioned factors, schwa (?the Caus marker) usually accompanying 1st and 2nd person Col III prefixes:

- (42) wə.sə.ø.'kʰa.n.ø vs wə.sə.m.də.'kʰa.n.ø vs
 you.I.Caus.go.Dyn.Pres vs you.I.not.Caus.go.Dyn.Pres
 'I make you go' vs 'I don't make you go' vs
 ɕ^wə.ʒ.ɬa.kʰ.ə.n.ø vs ɕ^wə.fə.m.ɬa.kʰ.ə.n.ø (Ub)
 you(Pl).we.Caus.go.Pl.Dyn.Pres you(Pl).we.not.Caus.go.Pl.Dyn.Pres
 'We make you(Pl) go' vs 'We don't make you(Pl) go'

Ub also has a periphrastic Caus: /-j(ə)-/ 'be(come)' is causativised and inserts the prefixal element /ɬa-/ ← /ɬa/ 'X' + /a-/ 'to':

- (43) a.'sə.n.t^wə.n.ø vs a.'sə.n.t^w ø.'ɬa.w.də.fə.n.ø (Ub)
 Y.me.X.give.Dyn.Pres vs Y.me.X.give it.it-for.you.Caus.be.Dyn.Pres
 'X gives Y to me' vs 'You make X give Y to me'

[N.B. a sequence /-j.a-/, no doubt morphologically identical to Ub's odd prefix, appears in some Kab verbs where it is difficult to explain, e.g. /ʒə.ʃa.n/ 'say(ing)':

- (44) ø.q'ə.z.ʒə.ʔa vs ø.nə.b.ʒ.j.a.s.ʔa.n.ɕ (Kab)
 it.hither.me.Prev.tell(-Imper) vs it.thither.you.Prev.?.?.I.tell.Fut.I
 'Tell me!' vs 'I'll tell you'

where there is no 3rd person Indir Obj associated with the verb.]

4.21. In terms of Orientational Prevs, Ub is the simplest, having only /-j-/ ‘hither’ (/s.k^j:a.n.ϕ/ ‘I go’ vs /sə.j.k^j:a.n.ϕ/ ‘I come’). One can largely equate this with Abkh /-a:z-/ , Aba /-ʒa-/ , Tem /-q(a)-/ and Kab /-q'(a)-/ , to which /-n(a)-/ in these four languages is usually contrasted and broadly translatable as ‘thither’ (Abkh /d.a:z.'ga.ϕ.jt'/ ‘I brought X’; /d.n.a.z.'ga.ϕ.jt'/ ‘I took X there’). However, the precise definition of the opposition has been much discussed (Allen, 1956: 164–169; Deeters, 1959; Dumézil, 1975: 133–136; Hewitt, 1979e: 212–216; Smeets, 1982; Colarusso, 1984) in attempts to relate such parameters as speaker, context of the speech-act and verbal action, from which it will be evident that the usage of these items is hardly straightforward. In Abkh there is also /-l(a)-/ ‘downwards’ and /-q(a)-/ ‘upwards’. In addition to their basic orientational force, Abkh employs all four with a kind of modal force to suggest the speed, slowness, deliberateness of the action:

- (45) dard.'ɥ^wə.s 'j.a:q'a.l.ts'a.ϕ.jt' vs dard.'χa.s jə.'nə.q'a.l.ts'a.ϕ.jt' (Abkh)
 spindle.Adv it.Prev.Prev.she.make.Past.Fin(-Aor)
 'She (?)smartly made it into a spindle' vs 'She (?)smartly made it into a
 spindle-weight'

4.22. As for the locational Prevs (see Spruit (1983)), each language possesses a *large* inventory, many with very specific nuances. Some Prevs are limited to the verbal complex, whilst others are clearly nouns or adjectives incorporated therein, Dumézil styling this latter group ‘determiners’. Some Prevs govern an Obl Obj, marked by a Col II affix, whilst others do not; the affix for a 3rd person Sing N-Hum entity is sometimes /-a-/ , sometimes /-ϕ-/ in Abkh-Aba. One feature peculiar to Abkh-Aba is that some Prevs have two forms, an a-grade vs a zero- (or reduced schwa-) grade, reminiscent of the Circ mechanism for opposing Intrans vs Trans forms of some roots; where two grades of a Prev are found, the semantic difference is that the former has inessive or illative/allative force, whilst the latter has an ablative/elative sense—does the distinction in the roots of the Abkh pair /a.ta.j^w'a.'ra/ ‘fall into’ vs /a.'ta.r.j^w.ra/ ‘make fall/throw into’ (cf. the small number of such pairs in Ub as illustrated by /-t^w'a-/ ‘descend (towards)’ vs /-t^w'(ə)-/ ‘descend (away from)’) belong to this opposition? A morphological concomitant of preverbal usage is that sometimes, when they accompany a root that does not obligatorily take a Prev, a root-suffix is also inserted (e.g. Abkh /-la-/ to emphasise the a-grade function, /-a:z-/ for the zero/reduced-grade function). Examples:

- (46) ɥa.'tʃə.n a.'wəwa ϕ.ϕ.'bɥ^la.nə.ʈ.q'a (Ub) =
 X's.horse.Obl the.saddle(Absol) it.it.on.X.put.Past
 jə.ʒə wa.na.r ϕ.ϕ.təɾə.j.ʈ.ħa:ɥ (Tem)
 X's.horse(Obl) saddle.the(Absol) it.it.on.X.put.Suff[ix].Past
 'X put the saddle on his/her horse'
- (47) a.'ʒk'ol d.ϕ.'ta.r.ts'a.ϕ.jt' vs d.ϕ.'tə.r.χə.ϕ.jt' (Abkh)
 the.school X.it.in(to).they.take.Past.Fin(-Aor) X.it.(from-)in.they.take.Past.Fin
 (-Aor)
 'They took X into school' 'They removed X from the school'

Like Abkh-Abs, Circ has root-suffixes (see Smeets 1982).

4.23. Copulas. In general, noun- and adjective-complements simply become the roots of Stat verbs (Ub /sə.ʎʰə.θ/ 'I am a prince'; Abkh /d.a'wə.n/ '(s)he was tall'; Tem /sə.ʎʰə.z.θ/ 'I am an old man'; Kab /ʒəʎə.r θ.ʎa:ʎa.ʎ/ 'the tree is tall'). Such a 'defining' copula is also expressible in Abkh for noun-complements by the copular root /-q'a-/ (Aba /-ʔa-/) coupled with the noun represented adverbially:

- (48) wa(.)'qə.s//d.wa(.)q'ənə 'də.q'a.w.p' vs a.'ra 'də.q'a.w.p' (Abkh)
 man.Adv//X.man.Adv X.is.Stat.Fin(-Pres) here X.is.Stat.Fin(-Pres)
 'X is a man' vs 'X is here'

The 'identity' copula is: Ub /-dz(a)-/; Abkh /-a/ or /-a.k^W(ə)-/ (only /-a.k^W(a/ə)-/ is found in Aba); Circ uses /-rə/ (Kab /-rə.ʎ/), which Smeets (1992b) argues to be a Stat root meaning 'be identical to', thus governing a Col II agreement-affix, which type of affix also accompanies the identity copula(s) in Abkh-Aba. Examples:

- (49) sə(.)'b^Wa sə.dz.ʎ//sə.'dza.jt' (Ub) vs sə.w.a.r(.)ap (Shap) vs
 I I.be.Stat(-Pres)//I.be.Stat(-Past) I.you.to.be-identical.not(-Stat-Pres)
 'It is/was I' 'I am not you'
 la('ra) l.a.w.p'//l.a(.)k^Wə.n//l.a(.)k^W.dza.m (Abkh)
 she she.be.Stat.Fin(-Pres)//she.be.Fin(-Stat-Past)//she.be.Emph.not(-Fin-Stat-Pres)
 'It is/was/is not she'

When the subject is 3rd person, Circ uses not the normal Col II affix but the demonstrative /a:z-/. There is no specific role-copula (Abkh using any of the aforementioned strategies).

4.24. The languages incorporate within the verb's pre-radical structure Relational Particles (governing Col II agreement-affixes) to express the ideas: 'with' (Ub /-dʒə-/; Abkh-Aba /-c(ə)-/; Circ /-d(a)-/); 'for' (Ub /-ʎʰa-/; Abkh-Aba /-z(ə)-/ (Bz /-z(ə)-/); Tem /-f(a)-/; Kab /-x^W(a)-/); 'to the detriment of, from' (Ub = Abkh /-tə^W(ə)-/ vs Aba /-tʃ^W(ə)-/; Tem /-ʎ^W(a)-/; Kab /-f'(a)-/); 'to' (Abkh-Aba /-a-/; Ub /-a-/—cf. the a-grade analysis of Circ Col II affixes); 'by means of' (Abkh-Aba /-la-/). In Abkh-Aba the Benefactive and Instr particles can stand outside the verbal complex as normal postpositions.

Also included in the verb's post-radical complex are various suffixes that qualify the action in some broadly adverbial sense (e.g. 'regularly', 'to an excessive degree', 'most certainly', etc.).

5. Syntax

5.1. The family is exclusively postpositional, whilst word-order is rigidly GN and predominantly NA (certain classes of adjectives, such as ethnonyms and ordinals, preceding their heads) and SOV, subordinate clause-equivalents (rarely full clauses in the Indo-European sense) usually standing before the sentence's main verb. Examples:

- (50) sə.n'k'la.ʔaɣ'a ø.'y.aw.q^Wa.na a.'y.aw.tɕ^Wja.da.'k'j'a (Ub)
my.friend.esteemed his.Poss.Pl.son.Obl-Pl their.Poss.Pl.house.towards
'towards the houses of the sons of my esteemed friend'
- (51) ɦa:ʔəv^Wə.j.bʔə.ra pʈsa.zəja t'ak^Wə.ra (Tem)
loaf.its.7.& fish.tiny few.&
'7 loaves and a few little fish' (Mt. 15:34)
- (52) a.'rə.j 'a.u.ba.t^Wə.j sə.'j^Wq^Wə a.la (Abkh)
this the.2.Class[ifier].Ord[inal] my.book it.by
'by/with/according to this 2nd book of mine'

NP coördination is achieved by suffixing identical markers to each conjunct: Abkh uses either /-j -j/ (Aba /-(j.ʃtə.)j -j/) or /-g^jə -g^jə/ (Aba /-g^jə.j -g^jə.j/); either /-g^jə -g^jə/ or /-ala -ala/, which latter causes any Obl case-ending to drop, are used in Ub; the Circ choice is either /-j -j/ or /-ra -ra/, the latter preceded by /-m/ for definiteness, thereby neutralising the opposition Absol vs Obl.

5.2. Case-marking and/or patterns of verbal agreement indicate that the languages are essentially ergative in character, though some bivalent verbs are 'inverted' in the sense that their Obl argument (sc. referent of the Col II affix) equates to the typically Indo-European subject.

The following Abkh examples exemplify not only the relevant patterns (with ergativity indicated exclusively by cross-referencing) but also how some roots can be categorised in more than one verb-class depending on the number of arguments they take:

- (53) a.'la ø.tʃɦa.'wa.jt' vs a.'la a.tsg^Wə.k^Wa jə.rə.tʃɦa.wa.n vs
the.dog it.bite.Dyn.Fin(-Pres) the.cat.Pl it.them.bite.Dyn.Fin(-Imperf)
'The dog bites' (Class A) 'The dog was biting the cats' (Class B)
a.'p^hwəs a.'la ø.l.ba.ø.jt' vs
the.woman it.she.see.Past.Fin(-Aor) 'The woman saw the dog' (Class C)
a.'p^hwəs a.'la a.tsg^Wə.k^Wa jə.də.l.'rə.tʃɦa.ø.jt'
it.them.she.Caus.bite.Past.Fin(-Aor)
'The woman made the dog bite the cats' (Class D)

Roots that can appear in both Trans and Intrans guises are styled 'labile' in the native Caucasian tradition, though I have argued (1982) that the term is meaningless unless it is specified whether the root is A[gent]-deleting or O[bject]-deleting (cf. 'cook' and 'sew', respectively below):

- (54) a.'χats'a a.k^Wats ø.jə.'ʒ^Wə.ø.jt' vs a.k^Wats ø.'ʒ^Wə.ø.jt' vs
the.man the.meat it.he.cook.Past.Fin(-Aor) it.cook.Past.Fin(-Aor)
'The man cooked the meat' (Class C) 'The meat cooked' (Class A)
'a.dzəab a.k^Wəm'ʒ^Wə ø.l.dzaχ.'wa.jt' vs
the.girl the.cherkesska it.she.sew.Dyn.Fin(-Pres)
'The girl is sewing the cherkesska [= traditional male costume]' (Class C)
'a.dzəab də.dzaχ.'wa.jt' (Abkh)
she.sew.Dyn.Fin(-Pres)
'The girl is sewing' (Class A)

Ub combines case-marking with affixal cross-referencing, has some roots fluctuating between Classes A and B as well as some A-deleting labiles, though it uses its non-specific Obj-prefix for the O-deleting type:

- (55) 'a.ɸja a.z.'z^Wa.n.ø vs 'a.ɸja a.'z^Wa.n.ø vs
 the.meat(-Absol) it.I.boil.Dyn.Pres
 'I boil the meat' (Class C) vs 'The meat boils' (Class A)
 a.z.'d^Wə.n.ø vs ja.z.'d^Wə.n.ø vs
 it.I.sew.Dyn.Pres
 I sew it' (Class C) vs 'I am sewing (unspecified)' (Class C)
 sət^W tʃ'a.n a.'məɸa.n.ø vs a.'tətə.n a.'tʃə
 my.father good.Adv he.read.Dyn.Pres the.man.Obl the.horse(-Absol)
 (jə).ø.'bja.n.ø (Ub)
 (it.)he.see.Dyn.Pres
 'My father reads well' (Class A) vs 'The man sees the horse' (Class C)

Like Ub, Circ combines verbal cross-referencing with case-marking, but, like Abkh-Aba, has valency-shifting roots, often with the extra morpho-phonemic feature that the Intrans variant will end in the open vowel to contrast with the close vowel for the Trans equivalent:

- (56) tʃ'a:ʃa.m pɸa:ɸa.m jə.nəbdʒaɸ^W(ə.r) ø.r.j.a.ɸa.ɸa.k^W'a.ø vs
 boy.the-Obl girl.the-Obl X's.friend(-Absol) Y.her.he.Dyn.Caus.Caus.go.Pres
 'The boy makes the girl make his/her friend go' (Class D)
 ʃəpɸ^Wə.r ma:.da.ø vs ʃəpɸ^Wə.m sə.j.dʒa:na:(r)
 sister.the-Absol she-Dyn.sew-Intrans.Pressister.Obl my.Poss.shirt(-Absol)
 ø.j.a.də.ø vs
 it.she.Dyn.sew-Trans.Pres
 'The sister is sewing' (Class A) vs 'Sister is sewing my shirt' (Class C)
 ʃə.r ma:.'z^Wa.ø vs ɸ'ə.m ʃə.r
 meat.the-Absol it-Dyn.cook.Pres man.the-Obl meat.the-Absol
 ø.j.a.ɸa:.'z^Wa.ø (Tem)
 it.he.Dyn.Caus.cook.Pres
 'The meat is cooking' (Class A) vs 'The man cooks the meat' (Class C but
 Causative!)

However, Circ has an extra dimension to patterns of actant-marking insofar as some roots (usually, but not always, accompanied by the vowel-gradation illustrated above) can either take their agent in the Obl with patient in the Absol or place the agent in the Absol with the patient in the Obl, exemplified here in Kab:

- (57) ɸ'a:ʃa.r ma:.dʒa.ø vs
 boy.the-Absol he-Dyn.read-Intrans.Pres 'The boy is reading'
 ɸ'a:ʃa.r txəɸə.m ø.j.aw.dʒa.ø vs
 boy.the-Absol book.the-Obl he.it.Dyn.read-Intrans.Pres
 'The boy is reading the book' (the usual bivalent Intrans pattern for 'read X')
 ɸ'a:ʃa.m txəɸə.r ø.j.a.dʒ.ø (Kab)
 boy.the-Obl book.the-Absol it.he.Dyn.read-Trans.Pres
 'The boy is reading to completion the book'

- (68) $t\chi\theta\text{.}a.m$ $s.j.a.d\text{3}a.n.aw$ $s\theta.qa.k^{W\prime}a.u$ (Tem) \Rightarrow
 book.the-Obl I.it.IO.read.FutI.Abs I.hither.come.Past
 'I came to read the book'
 $t\chi\theta\text{.}aw$ $s.z.a.d\text{3}a.n.aw$ $s\theta.q\theta.z.fa.k^{W\prime}a.u.a.r$
 book.Adv I.which.IO.read.FutI.Abs I.hither.which.for.come.Past.the-Absol
 $\theta.w\theta.\text{t}a\text{u}^{W\prime}.\theta.a:$
 it.you.see.Pres.Qu 'Do you see the book which I came to read?'

(In Abkh these translate respectively as /a.'j^Wq^W'\theta 's.a.p\chi^ja.r.ts (a.'z\theta) s.a.z.\theta.jt'/ \Rightarrow /s.a.p\chi^ja.r.ts//s.z\theta.'p\chi^ja.r.ts s\theta.z.z.a:\theta.z a.'j^Wq^W'\theta \theta.w\theta.ba.'wa.ma/.)

5.5. Noun-clause complementation (including speech-reporting, where the basic NWC, if not indeed Caucasian, strategy is to repeat the words spoken/thought followed by a part of the verb 'say' cf. Hewitt and Crisp (1986)) can be expressed in Abkh by a variety of constructions depending on the lexical verb, whether the expression functions as S or Obj, and whether the semantics are factive or non-factive (see Hewitt, 1987: 234ff): (i) Non-Fin verb containing pre-radical /-a\chi^j(\theta)/ 'where \Rightarrow that'; (ii) Non-Fin verb containing pre-radical /-s(\theta)/ 'how \Rightarrow that'; (iii) Fin verb + speech-particle /h^Wa/ 'having said' (all fearing-clause strategies contain this speech-particle coupled with: (a) protasis-form, (b) appropriate Indicative tense, (c) interrogative + suffix /-j/ for greater urgency, (d) Neg Opt, (e) Neg Subjunctive); (iv) an amalgam of option (ii) + /h^Wa/; (v) Non-Fin verb suffixed with /-j^Wa/ 'as if, allegedly that'. Ub and Circ employ their general Sub, and Circ makes wide use of the Abs of the appropriate tense, just as certain verbs in Abkh too may take an Abs as complement (possibly plus speech-particle):

- (69) 'aq^W.a.q'a ha.'s\theta.r\theta.ft.wa (h^Wa) $\theta.z.'$ d\theta.r.w.a.n
 Sukhum.to us.that.they.send.Dyn(-Non-Fin-Pres) (having-said) it.I.know.Dyn.
 Fin(-Imperf)
 'I knew that they would send us to Sukhum' (Abkh)
- (70) w\theta.s \theta.a'\chi^j\theta.j.h^Wa.\theta.z \theta.mts\theta.w.p'
 that.as it.that.he.say.Past.Non-Fin(-Past-Indef) it.lie.Stat.Fin(-Pres)
 'It's a lie that he spoke thus' (Abkh)
- (71) d.'k'a.m.ha.nda(z) h^Wa s.j^Wa.wa.n
 X.down.not.fall.Opt having-said I.fear.Dyn.Fin(-Imperf)
 'I was afraid that X would fall' (Abkh)
- (72) j^W\theta.z\theta.'ra \theta.s.ta'\chi\theta.w.j^Wa
 your(-Pl).deceive.Abstr[act] it.I.want.Stat(-Non.Fin-Pres).as-if
 j^W.\chi.a.'t\theta'\theta j.a:z^W\theta.m.'ga.n/
 your(-Pl).head.it.in it.hither.you(-Pl).not.bring.Proh
 'Don't get into your head the wrong idea that I want to deceive you' (Abkh)
- (73) \theta.q\theta.j.faf.\theta.aw // \theta.q\theta.j.faf\theta.n.aw // \theta.q\theta.j.faf\theta.u.aw
 Y.Prev.X.buy.Pres.Abs Y.Prev.X.buy.FutII.Abs Y.Prev.X.buy.Past.Abs
 \theta.j.a.\text{r}^{W}a.\theta
 it.X.Dyn.say.Pres 'X says that (s)he is buying//will buy//bought Y' (Tem)

5.6.2. Ub developed four special Conv suffixes that correlate with different formants in the sisters: /-ɕa/, usually added to the verb-stem, marks an ongoing situation concomitant with the main action and sometimes serves as the Obj-complement of ‘see’. The equivalents are normally an Abkh-Aba and Circ Abs. The Ub suffix also attaches to the Past and Fut tense. As equivalent to the latter coupling Abkh can use its Result, formed by suffixing /-t^Wə/ to the Non-Fin Fut I in /-ra/ to give either /-ra.t^Wə/ or /-r.t^W/ (the suffix, when added directly to the verb-root, produces the Gerundive ‘that which is to be VERBed: /jə.q’a.ts’a.t^Wə.w.p’/ ‘it is to be done’):

- (76) ø.a.'mə.bja.w.t.ɕa za.'q'ala a.də.'qarda (Ub)
 X.they.not.see.Fut.II.Conv a.place X.Caus.hide(-Imper)
 'Hide X (in such) a place that they won't see it'
 (Cf. Abkh /jə.rə.m.'ba.r.t^W/ ([a.]aj.pɕ) a.'təp a.'tɕ'ə jə.tɕ^W'a'χə/)

5.6.3. Ub /-gʲ/ (/-/ post-vocally), signifies a momentary action accompanying another:

- (77) wə.kʲ'a.gʲə.'wə.j.dʒ.gʲə 'wə.ʔaq'a.n
 you.go.Conv.you.Prev.come.Conv your.track.Obl
 sə.ø.'gʲə.t^W.fa.w.mə.t, wə.'t^W'a(.)s (Ub)
 I.it.Prev.be-located.Pot.Fut.not.II you.sit(-Imper)
 'I can't keep up with your comings and goings, sit down!'
 (Cf. Abkh /a'na.χʲ a.'ra.χʲ wə.'nəq^W'a.wa.(nə) 'wə.ʃta.z.aa.ra ø.'sə.l.ɕa.wa.m,
 wə.'t^W'a/).

Sometimes it seems to function as an Infin-substitute; it also serves as complement to ‘begin’, for which the Obl case of the Fut II is also used. Circ in general employs an Abs or quite separate forms in /-za/, /-pa.t.aw/, /-pa.tə.za/ (/w.ra/ and /-pa.t.(ra)/ in E. Circ), whilst Abkh has its Abs, the conjunctive prefix /-ɕ(ə)-/ ‘as’, or the special suffix /-na.ts'ə/ for ‘while’.

5.6.4. Ub /-msa/ (cf. Aba /-mtsə(.ra)/-mtsə.ra/) underlines that the concomitant activity is repeated:

- (78) a.'q'ə.msa a.kʲ'a.'q'a (Ub)
 X.run.Conv X.go.Past(-Fin) 'X went off running the while'

The Ub combination /-gʲə.msa/ has the force of ‘by dint of’ (cf. Abkh-Aba /m a'tsara/, Tem /ə.ɕa.ɕxa.(g^Wa.)zə/, Kab /jə.ɕa.ʃxa.za.pə.tə.w.ra/).

5.6.5. Ub uses forms in-/ʃa/ as complement for its verb ‘want’, Circ the nominalised form of its Fut I, and Abkh its Purp in /-r.ts/, protasis in /-(za.r)/, or (for less complex structures) the Masd. Ub combines the suffix with /-gʲə/ for indefinite expressions, paralleling Circ /-mə.j/ or /-ma.tʃ'/ and Abkh /-(z.a:).la.k'.gʲə/, corresponding to Aba /-la.k'.gʲə.j/—N.B. suffix /-la.kʲ'/ (/z.a:'.la.kj'/ for Stats) added directly to a Dyn root (=Aor-stem) provides Abkh with a kind of general Non-Fin form of non-specific time-reference (/d.an.tsa.'la.kʲ'/ ‘whenever X goes/went’).

5.6.6. Purpose-expressions. In addition to its Purp in /-r.ts/ or /-ra.tsə/, where the final element might, as Lomtatidze has suggested, derive from the Adv marker /-s/ (hence the parallelism to the Circ Abs with /-(a)w/ added to the Fut I), Abkh can use its postposition /-zə/ ‘for’ as 2nd element here to give /-ra.zə/ (the full postpositional phrase /a.'zə/ ‘for it’ can accompany the first Purp for purpose-expressions); the Masd (minus article) can serve with verbs of motion, and also possible is Fin verb + speech-particle; Ub places /-b̄a.fə/ ‘for’ after either of its Futs or attaches the Obl case-ending to either of its Fut tenses—with verbs of motion the bare stem can be used; for W. Circ Jakovlev/Ashkhamaf (1941: 194) quote a variety of alternatives: Fut I Abs (with or without pre-radical /-za.ra-/); Fut I in the Instr (±pre-radical/-za.ra-/), the Instr-marker being preceded by the definite suffix when the pre-radical element is present; Fut II with the same pre-radical element and Obl case-marker followed by /ø.paʔ.ja/ ‘for it’—the bare stem may be used with verbs of motion. Examples:

- (79) 'txə-məca ø.'s.tə'a.w.tə.n 'a.məca.ɸ^Wa.ɸa s.k^la.n.ø (Ub)
 write-read(-Absol) it.I.study.Fut.II.Obl the.school.to I.go.Dyn.Pres(-Fin)
 'I go to school in order to learn to read & write'
 (Cf. Abkh /a.ɸ.'ra.'a.pχ^la.ra ø.s.ts'a.wa.jt' h^Wa/ø.s.ts'a.ra.'zə/ø.s.ts'a.r.ts (a.'zə)
 a.'šk'awl [a.]ax^l s.tsa.wa.jt'/)
- (80) bdza(.)zaj ø.j.a.ɸa ma:k^Wa.ø (Kab)
 fish(-Absol) it.X.Dyn.catch X(-Dyn).go.Pres 'X goes fishing'
 (Cf. Abkh /'psədz.k'.ra də.tsa.'wa.jt'/)

5.6.7. Conditions: Abkh /-(za.)r/ or /-z.t.g^lə/ are attached to the Non-Fin Aor, though /-za.r/ is obligatory for Stats, attaching to the Pres (minus /-w/), and is also found with the Perf (again minus /-w/); in Aba /-(z.a.)r.k^W(')ə.nə.(z)/ and /-(z.)tə.n/, attached to the bare stem, are the commonest endings; Ub marks protases by /-ba/ or /-b̄a.la/, Tem by /-ma/ (or /-ja.ma/ [e:ma] in unreal protases), Kab by /-m(a)/ (possibly coupled with a form of /-ɸə.t/ ‘stand’ preceded by an Abs form of the lexical verb); Ub uses /-da.(n)/ ‘if then’—where /-da/ is found for ‘if’ in Abkh I have argued that it is a borrowing from Mingrelian (Hewitt, 1991). Examples:

- (81) g^Wə.r ø.mə.p⁺a.ma na.r ø.p⁺a.r.q'əm (Kab)
 heart.the-Absol it.not.see.if eye.the-Absol it.see.Pres.not
 'If the heart does not see, neither does the eye'
 (Cf. Abkh /a.'g^Wə 'j.a.m.ba.wa.za.r 'a.la.g^lə j.a.ba.'wa.m/)
- (82) sə.bədz a.w.m.dz^Wa.q'a.jt'.ba wə.s.f.aw.t^W.q'a (Ub)
 my.breast it.you.not.suck.Past.Plup.if you.I.eat.Fut.II.Past(= Condit)
 'If you had not sucked at my breast, I'd have eaten you'
 (Cf. Tem /sə.bədz wə.j.mə.ɸ^Wa.ɸ.ja.me wə.s.ɸxə.ftə.ɸ/)

5.6.8. Concessions: Abkh either adds the clitic /-g^lə/ ‘and, even’ to a protasis-form or this same suffix combines with the conjunctive prefix /-s(ə)-/ ‘how’ (5.6.10); Aba often combines the ending /-z.t'/ with the speech-particle /h^Wa/, though this latter can simply stand alongside a regular Fin verb for this meaning; also found in Aba are the sequences

/-(z.(l)a).r.g^Wə(j)/ and /-(z.)tə.n.g^jə.j/; Ub adds /-g^jə/ to its protases in /-da/, whilst Circ similarly adds its conjoiner /-j/ to protases in /-m(a)—Jakovlev/Ashkhamaf (p. 203) also quote a combination of root plus /-j/ followed by /çħa:t.tj'a/ for Tem; for the meaning 'although' Tem adds /-za/ or /pa.t.ze/ to the verb. Examples:

- (83) fə.la.'mə.xaj.fa.na.w.t.da.g^jə (Ub) = tə.mə.psa.wə.ʒə.ɸ^Wə.mə.j (Tem) =
 we.Prev.not.exist.Pot.Pl.Fut.II.if.even we.not.live.more.Pot.if.even
 də.mə.psa.wə.ʒə.fə.mə.j (Kab) = wa'ħa ħa.'zə.q'a.m.la.wa.za.r.g^jə (Abkh)
 more we.Pot.Prev.not.exist.Dyn(-Pres-Non-
 Fin).if.even
 'Even if we can't exist any longer'
 (cf. Abkh /ħa.ɸ.'zə.q'a.m.la.wa.g^jə/ 'although we can't...')

5.6.9. Unreality 'as if' is shown by Abkh-Aba /-j^Wa/ (also used in the sense of 'allegedly that'), attached to the appropriate Non-Fin tense (minus /-w/ in the Aba Stat Pres, though this element can be present in Abkh); W. Circ employs /fa.da.w/ = E. Circ /x^Wa.da.w/ 'like'. Dumézil (1959: 4) quotes an Ub example which seems to capture the sense: the root 'be' is coupled with the Abs of (here) the Non-Fin Aor:

- (84) a.w.a.mə.q^W.q'a.n(ə) wə.fə (Ub) = jə.b.m.a(.)ħa.'dza.ə.z.j^Wa
 it.you.to.not.audible.Aor.Abs you.be(-Imper) X.you(-Fem).not.to(.)audible.
 Emph[atic].Past.Non-Fin(-Past.Indef).as-if
 ə.q'a.'ts'a (Abkh)
 it.Prev.do(-Imper) 'Be(have) as though/Pretend that you didn't hear it'

5.6.10. Subordinate expressions of manner in Abkh employ the pre-radical conjunctive affix /-s(ə)-/ and this may be reinforced by the postpositional phrase /[a.]aj.pɸ/ 'like it'; Ub combines its general Sub with a tensed form plus Obl case-ending, this structure itself being followed by /-g^jətç'/ (itself possibly Obl case-marked); W. Circ places /fa.da.w/ (E. Circ /x^Wa.da.w/) after an Obl case-marked form containing the general Sub /-za(.)ra./-. Examples:

- (85) ə.za(.)ra.p'.?^Wa:ɸa.m ə.fa.da.w/ ə.za(.)ra.p'.?^Wa:ɸa.w ə.s.ɸ'ə.ɸa (Tem) =
 it.Sub.you.say.Aor.Obl it.as it.Sub.you.say.Aor.Abs it.I.do.Past
 jə.'sə.w.ħ^Wa.ə.z ([a.]aj.pɸ) jə.q'a.s.'ts'a.ə.jt'
 it.how.you(-Masc).say.Past.Non-Fin(-Past-Indef) ([it.]as) it.Prev.I.do.Past.
 Fin(-Aor)
 'I did it as you(-Masc = Abkh) said' (in Tem and Abkh)
 (86) d(.)ɸa.ə.la.xa.q'a.na.n.g^jətç' (Ub) = jə.'sə.q'a.z ([a.]aj.pɸ)
 Sub.X.Prev.be(-Pl).Past.Pl.Obl.like they.how.be.Non-Fin(-Stat-Past) ([it.]like)
 'As they were' (in Ub and Abkh)

5.6.11. Expressions of cause in Abkh-Aba insert the prefix /-aχ^j(ə)-/ into a Non-Fin form, and this may be followed by the phrase /a-'zə/ 'for it'; Ub's suffix /-ɸa.fa(n)/ 'for' attaches to the appropriate tense-form prefaced by the general Sub, or the connective /-aχ/

‘and so’ attaches to the verb expressing the cause after the pattern ‘X-and.so Y’ = ‘because of X, Y’; Circ juxtaposes /paː.ja/ or /paːp’tj’a.tj’a/ (E. Circ /paːp’ɕ’a(.tj’a)/) to an Obl case-marked form with general Sub /-za(.)ra-/—Jakovlev/Ashkhamaf (p. 191) also quote /ø.k^W.a.ɕ/ ‘as ~ since X goes’ for Tem. Examples:

- (87) d(.)*ʋ*a.ø.k^la.'q'a.ʋa.fɑ.(n) (Ub) = ø.za(.)ra.k^Wa.*ʋ*a.m ø.pap'tj'a.tj'a/ø.paː.ja (Tem) =
 that.X.go.Past.for.(Obl) X.that.go.Past.Obl it.for/it.for
 d.aχ^l.tʃa.ø.z (a.'zə/a.'q'ən.t^W)/ də.'tʃa.ø.jt'
 X.that.go.Past.Non-Fin(-Past-Indef) (it.for/it.from) X.go.Past.Fin(-Aor)
 a.'zə/a.'q'ən.t^W (Abkh)
 it.for/it.from 'Because X went'

5.6.12. Temporal expressions meaning ‘when’. Abkh-Aba basically use a conjunctive pre-radical affix, though the postpositional phrase /[a].aː.mta[a].zə/ ‘at its time’ can be adjoined; Ub’s general Sub can combine with the suffix /-aw.na/ attached to the bare stem for a Plup sense—the ending /-t’ə.n/ serves for a non-durative past, whilst the general Sub combines with the converb /-ɕa/ for Imperf, Pres and Fut reference; W. Circ associates the prefix /-za/ə-/ with Obl /-m/ or Instr /-tj’a/ after the stem—E. Circ has prefix /-ɕə-/. Examples:

- (88) 'd(.)*ʋ*a.ø.k^la.'t'ə.n/ d(.)*ʋ*a.ø.k^la.w.na (Ub) = ø.za.k^Wa.m (Tem) =
 Sub.X.go.Past.Obl Sub.X.go.?Non-Fin.?Obl
 ø.ɕə.k^Wa.m (Kab) = d.an.'tʃa.ø (Abkh)
 X.Sub.go.Obl X.when.go.Past(-Non-Fin-Aor) 'When X had gone'

5.6.13. The temporal notion ‘as soon as’ can be marked in Abkh by optionally placing the intensifying suffix /-tɕ^W.q^la-/ in a Non-Fin verbal complex containing either conjunctive prefix /-ɕ(ə)-/ ‘as’ or /-an(ə)-/ ‘when’; as intensifier with the basic manner-expression Aba uses either /bər.dza.k’/ or /a.sahat/ ‘(at) the hour’; Ub combines the suffix /-g^latɕ’/ with the appropriate tense-form plus Obl case-marker, the complex possibly prefaced by the general Sub /d(ʋ)a-/; Circ combines /-za(.)ra-/, its general Sub, with the Obl suffix and postposition ‘like it’ (Tem /ø.fɑ.da.w/ = Kab /ø.x^W.a.da.w/). Jakovlev/Ashkhamaf (p. 188) also quote Sub + Abs suffix /-(a)w/ following the root (-suffix), e.g. /ø.za(.)ra.k^W.a.w/ ‘as soon as X goes’. Examples:

- (89) d(.)*ʋ*a.ø.k^la.'q'a.n.g^latɕ’ (Ub) = ø.za(.)ra.k^Wa.*ʋ*a.m ø.fɑ.da.w (Tem) =
 Sub.X.go.Past.Obl.Conv X.Sub.go.Past.Obl it.like
 d.an.'tʃa.ø.tɕ^W.q^la (= də.ɕ.'tʃa.ø.z(.tɕ^W.q^la) (Abkh)
 X.when.go.Past(-Non-Fin-Aor).Emph 'As soon as X left'

5.6.14. For the temporal expression ‘after’ Abkh combines a form containing the prefix for ‘when’ with the postpositional phrase /a.fta.[a.a]χ^l/ ‘after it’ (=Aba /‘a.m.fta.[a.a]χ^l/); in W. Circ either /-(na).wəz(ə.m)/ or /-(na).wəz.tj’a/ replaces the Obl ending used for

‘when’—E. Circ uses such a Conv/postposition without subordinating prefix within the complex; Dumézil (1959) cites for Ub /-ʔaqʔa.la/ and in 1931 stated that it is used with various tense-stems or in combination with a protasis in /-ba/—N.B. /('a.)ʃta/, /wəzə/ and /ʔa'q'a/ each mean ‘track, trace’ in the respective languages. Examples:

- (90) d(.)ʃa.ø.za.ja.na.t'ə.n.ʔaq'ala (Ub)
Sub.X.Recip.hit.Pl.Past.Obl.after 'After they fought'
- (91) d.an.a:ø.'la.kʰ' a.ʃta.[a.a]χʰ (Abkh)
X.when.come.Past(-Non-Fin-Aor).Indef it.after.[it.]to 'After X comes/came (as a rule)'
- (92) ø.q'a.k^Wa.ʒa ø-na.wəz (Kab)
X.hither.come.back it-after 'After X comes/came back'

5.6.15. For ‘since the time that’ /-j.ʒta.j/‘ʔ&.now.&’ attaches to the appropriate Non-Fin form in Abkh (=Aba /-j.ʒta.ra)—Abkh also uses /-a:.'xə.s/, /-na.'xə.s/ or /jə.na. [a.]r.k'.'nə/ added to a past protasis, bare Aor stem, or a form meaning ‘when’; Ub suffixes /-daq^W'a/ or /('a.)'zlaq'a.la/ (/ʔzlaq'a/ = ‘interval’) to the bare-stem; W. Circ combines its general Sub /-za.ra-/ with the suffix /-ra (q'a:zə.fa:g^W)/, whilst E. Circ combines the prefix with suffix /-ʔa:ndara/. Examples:

- (93) a.kʰaj.daq^W'a (Ub) = ø.za(.)ra.k^Wa.ʒə.ra ø.qa:zə.fa:g^W (Tem) =
X.depart.since X.Sub.go.again.Pres(-Non-Fin) since
ø.za(.)rə.k^Wa.ʒ.ʔa:ndara (Kab) = d.aj(.)'ta.tsa.ø.j(.)ʒta(.)j (Abkh)
X.Sub.go.again.since X.again.go.Past(-Non-Fin-Aor).since
'Since (the time that) X left again'.

5.6.16. For ‘while’ /-na.ts'ə/ is associated in Abkh with the Non-Fin Pres; Aba places /-dza/ ‘upto’ after its pre-radical affix /-ʔa-/ in a Pres or Past Non-Fin form; Ub attaches /-fə.sə.n/ to the bare stem (/fə.s-/ , Pl /fə.ʒ^W'a-/ = ‘be engaged in’); W. Circ has /-pa.t.aw/ (/pa.tə/ ‘be in front of’), /-t.aj.t.aw/ (/t.ja.tə/ ‘be in’), /-fa/, /-za/ (cf. E. Circ /pa.t.(ra)/) with the bare stem. Examples:

- (94) ø.fə.s.aw/ø.fə.s.za ø.txa.ʃtəʋ (Tem) = də.t^W'a.ø.'nə/
X.Prev.sit.Abs/X.Prev.sit.Conv X.write(-Intrans).Imperf sit.Stat(-Non-Fin-
Pres).Abs
də.'g.t^W'a.z/də.t^W'a.ø.na(.)'ts'ə də.ʋ.'wa.n (Abkh)
X.as.sit.Non-Fin(-Stat-Past)/X.sit.Stat(-Non-Fin-Pres).while X.write.Dyn.Fin(-
Imperf)
'(While) sitting, X was writing'

5.6.17. The temporal notion ‘as long as’ is expressed in Abkh either by the suffixal /-na.ts'ə/ ‘while’ or by inserting /-aχʰə.ndza/ ‘where.upto’ into a Non-Fin verb; Ub employs /-aw.n.dza/ with the bare-stem (N.B. Ub /-aw.n.dza/ vs Abkh /-ndza/); Circ treats this like ‘while’. Examples:

- (95) sə.'psa ø.ø.'fa.ʋ.aw.n.dza (Ub) = sə.psa ø.ø.pa.tə.fa (Tem) =
 my.soul(-Absol) it.it.to.attach.until my.soul(-Absol) it.it.before.stand.
Conv
 sə.'psə ø.a'χʲə.ndza.ø.ta.w(.z.a:lak'.gʲə) (Abkh)
 my.soul it.where.upto.it.in.Non-Fin(-Stat-Pres)(.Indef) 'As long as I am alive'

5.6.18. For 'before; until' Abkh suffixes /-a:(.)n.dza/ to the Non-Fin Aor; Aba has the suffix /-n(a).ts'(ə)kʲ'(.ra)/; Ub attaches /-ʃaχʲa/ to the bare stem for 'until' or associates /ʋ.ʌntɕ^wə.n/ with a Neg Conv in /-ɕa/ for 'before'; for W. Circ Paris (1989) reports Ab(d)z as either attaching one of the suffixes /-pa.w/ or /-ra:l.p'ɕ'a.w/ to a (pre-radically) Neg bare stem (Dumézil's, 1975 example has the suffix /-dʒəɕ'a/, and in his 1963 article with Alparslan on Bes quoted for Kab /ø.ɕə.mə.lʒa:za.dʒəɕ'ə.w/ with an additional Abs suffix for the meaning 'before X worked there') or juxtaposing /jə.pa.w/ (=Kab /ja:l.pa.w/ or /ja:l.pa.tʃ'a/) to a form with the Obl case-ending attached to the appropriate tense for 'before' (Jakovlev/Ashkhamaf (p. 189) quote a variant for Tem with general Sub: /ø.zə.k^w.a.ra.m ə.pa.tʃ'a/ 'before X goes/went')—for 'until' Tem has /-fa (na.sa/na.s.tʃ'a)/ or /na.s.tʃ'a/(=Kab /na:s.tʃ'a/) alone (e.g. Tem /a:r ø.qa.k^w.a.ʒə.fa txa.g^w/ 'until X returns, be writing the while' from Jakovlev/Ashkhamaf (p. 304))—Dumézil (1975) illustrates with /-fa(.tʃ'a)/ for Tem = Kab/-x^w(.tʃ'a)/, each splittable by the pluralising suffix, attached to the bare stem ± pre-radical Sub. Examples:

- (96) sə.'ʋ^wə.mət^w.ɕa ʋʌntɕ^wə.n (Ub) = sə.j.mə.tʃ'.gʲəɕ'a (Tem) =
 I.Prev.not.go-out.Conv before.Obl I.Prev.not.go-out.Conv
 s.'d^wə.k^w.l[a].ø.a:(.)ndza (Abkh)
 I.field.on.go.Past(-Non-Fin-Aor).before 'Before I go/(went) out'
 (97) 'sə.j.dʒ.ʃaχʲa wə.s.'falə.pʰa (Ub) = sə.qa.k^w.a.ʒə.fa(.tʃ'a)
 I.Prev.return.Conv you.me.Prev.wait(-Imper) I.Prev.come.back.Conv
 qə.s.pa:l.pʰ (Tem) = s.χən.'h^w.a:(.)ndza wə.s.ʒə.pʒə (Abkh)
 Prev.me.Prev.wait(-Imper) I.Prev.return.until you(-Masc).me.for.wait(-Imper)
 'Wait until I return'.

5.6.19. The notion 'every time that' in Abkh has /-tsə.pχʲadza/(/-tsə-/drops in Aba) suffixed to the Non-Fin Aor or to a Non-Fin Stat (minus /-w/ in the Pres); Ub suffixes /-ʃaʂən/ to verb-stems; W. Circ attaches /-qa.sa/ (E. Circ /-q'a:z.s/) to the bare stem—Jakovlev/Ashkhamaf quote (p. 187) a form in /-tə.j/ for Tem (/ø.k^w.a.tə.j/ 'every time that X goes/went'). Examples:

- (98) a.'kʲa.ʃaʂə.n (Ub) = ø.k^w.a.q'a.s (Kab) = də.'tsa.tsəpχʲadza (Abkh)
 'Every time X goes'

5.6.20. To express 'any more than/let alone VERB' Abkh attaches /-aħa/ to a Non-Fin Pres or protasis in /-(za.)r/ or /-χʲa.za.r/, e.g.:

- (99) 'a.mza.[a.a]χʲ s.tsa.ø.'r.aħa [a.]'aps.ʃ^wa.gʲə
 the.moon.[it.]to I.go.Past.if.Conv [the.]Abkhaz.language.even
 ø.sə.z.ts'a.'wa.m (Abkh)
 it.I.Pot.learn.Dyn.not(-Pres-Fin)
 'I can't learn Abkhaz any more than/let alone fly to the moon'

5.7. For Results Abkh makes use of its Result or Non.Fin Pres \pm /[a.]aj.pɕ/ 'like it', Ub its Conv /-ɕa/, Circ its Abs ending. Examples:

- (100) a.ɸ^Wənə.ø ø.fa.nə.mə.q'.fa.ɕa a.f.q'a (Ub) = tɕ'əyə.r
 the.tree.Absol it.Prev.they.not.cut.Pot.Conv it.be.Aor tree.the-Absol
 ø.p.a.m.wəp'tj'a.ɕ^W.aw ø.χ^Wə.ɸa (Tem)
 it.Prev.they.not.cut.Abs it.become.Pot.Past
 'It happened that they were such as to be unable to cut the tree'
- (101) a.r.t 'a.ɸ.aj.l.k'a:.ra.k'
 these.the.2.Recip.from-in.grasp.Suff.Abstr(=concept).one
 ø.wə.'z.aj.q^Wə.m.tχa.r(.)t^W ([a.]aj.pɕ)/
 them.you(-Masc).Pot.Recip.Prev.not.split.Result ([it.]like)
 ø.wə.'z.aj.q^Wə.m.tχa.wa (?[a.]aj.pɕ)
 them.you(-Masc).Pot.Recip.Prev.not.split.Dyn(-Non-Fin-Pres) ([it.]like)
 j.aj.'cə.w.p' (Abkh)
 they.Recip.with.Stat.Fin(-Pres)
 'These 2 concepts go together in such a way that one cannot split them'

5.8. Examples of indefinite expressions:

- (102) 'mɔk'la.f^Wabla.ɸa ɕ^Wə.ø.ɸa.k'la.na.fa.g'ə ɕ^W.k'la.n (Ub) =
 where.country.to you(-PI).X.Caus.go.Pl.Conv.Indef you(-PI).go.Pl(-Imper)
 təda.ra xabag^W ɕ^Wə.j.ɸa.k^Wa.mə.j ɕ^Wə.k^W (Tem) =
 where.?ever-is land you(-PI).X.Caus.go.if.even you(-PI).go(-Imper)
 (t^Wəla.s) j^W.axl'd^Wə.k^Wə.j.ts'a.wa.z.a:.la.k'.g'ə/
 (country.as) you(-PI).where.field.on.he.set.Dyn(-Non-Fin-Pres).Indef
 j^W.axl'd^Wə.k^Wə.j.ts'a.wa
 you(-PI).where.field.on.he.set.Dyn(Non-Fin-Pres)
 j.arban.'t^Wəla.z.a:.la.k'.g'ə j^W.tsa (Abkh)
 it.which.country.Indef you(-PI).go(-Imper) 'Go wherever X/he sends you'

Note the Abkh construction with /j.a.'g'la/ 'no matter': usually found with a protasis in /-(za.)r/ + /-g'ə/, if reference is to the past, the Opt may replace the protasis-form:

- (103) j.a.'g'la ø.b.'wə.ø.r.g'ə/ ø.b.'wə.nda(.z).g'ə
 whatever it.you(-Fem).do.Past.if.even it.you(-Fem).do.Opt.even
 bə.s.'mə.ftə.ø.jt' (Abkh)
 you(-Fem).I.not.send.Past.Fin(-Aor) 'No matter what you did, I didn't let you go'

6. Lexis

6.0. The systems presented below, apart from their intrinsic interest, demonstrate in a readily comparable way, typical NWC patterns of word-formation.

6.1. Cardinals

	<u>Abkhaz</u>	<u>Abaza</u>	<u>Ubykh</u>	<u>Temirgoi</u>	<u>Kabardian</u>
1	a.'k'ə	z.a.'k'ə	za	zə	zə
2	ɥ(ə).ba	ɣʷə.'ba	t'qʷ'a	tʷ'ə	t'əw
3	χ.pa	χ.pa	əa	ʃə	əə
4	pʃ.ba	pʃ.ba	p'ɬ'ə	p'ɬ'ə	p'ɬ'ə
5	χʷ.ba	χʷ.ba	ʃxə	tfə	txʷə
6	f.ba	ts.ba	fə	xə	xə
7	bɜ.ba	bɜ.ba	blə	bʃə	bʃə
8	a.:.'ba	aɣ.'ba	ɸʷa	jə	jə
9	ʒʷ.ba	ʒʷ.ba	bɸ'ə	bɸʷ'ə	bɸʷ'ə
10	ʒʷa.'ba	ʒʷa.'ba	ʒʷə	p'ɤ'ə	p'ɤ'ə
11	'ʒʷa.j.za	ʒʷə.j.z	'ʒʷə.za	p'ɤ'ə.kʷ'ə.zə	pɤə.kʷ'ə.z
12	'ʒʷa.ɥa	ʒʷə.ɣʷ	'ʒʷə.t'qʷ'a	p'ɤ'ə.kʷ'ə.tʷ'ə	pɤə.kʷ'ə.t'
13	'ʒʷa.χa	ʒʷa.χ	'ʒʷə.əa	p'ɤ'ə.kʷ'ə.ʃə	pɤə.kʷ'ə.ə
14	ʒʷə/a.j.pʃ	ʒʷə.j.pʃ	ʒʷə.p'ɬ'	p'ɤ'ə.kʷ'ə. p'ɬ'ə	pɤə.kʷ'ə.p'ɬ'
15	ʒʷə/a.χʷ	ʒʷə.χʷ	ʒʷə.ʃx	p'ɤ'ə.kʷ'ə.tfə	pɤə.kʷ'ə.txʷ
16	ʒʷə/a.f	ʒʷə.j.ts	ʒʷə.f	p'ɤ'ə.kʷ'ə.xə	pɤə.kʷ'ə.x
17	ʒʷə/a.j.bɜ	ʒʷə.j.bɜ	ʒʷə.bl	p'ɤ'ə.kʷ'ə. bʃə	pɤə.kʷ'ə.bʃ
18	ʒʷ.a:	ʒʷ.aɣ	'ʒʷə.ɸʷa	p'ɤ'ə.kʷ'ə.j	pɤə.kʷ'ə.j
19	za.j.ʒʷ	ʒʷa.j.ʒʷ	'ʒʷə.bɸ'	p'ɤ'ə.kʷ'ə. bɸʷ'ə	pɤə.kʷ'ə.bɸʷ
20	ɥa.'ʒʷa	ɣʷa.ʒʷ	t'qʷ'a.tʷ'ə	tʷ'a.tʃ'ə	t'aw.ɤ'
21	ɥa.'ʒʷə.j a.k'	ɣʷa.'ʒʷə.j z.a.k'	't'qʷ'a.tʷ'.əla z.əla	tʷ'a.tʃ'ə.ra zə.ra	t'aw.ɤ'.ra zə.ra
30	ɥa.'ʒʷə.j ʒʷa.'ba	ɣʷa.'ʒʷə.j ʒʷa.'ba	t'qʷ'a.tʷ'.əla ʒʷ'.əla	ʃa.tʃ'ə	əa.ɤ' = t'aw.ɤ'.ra p'ɤ'ə.ra
31	ɥa.'ʒʷə.j 'ʒʷa.j.za	ɣʷa.'ʒʷə.j ʒʷə.j.z	t'qʷ'a.tʷ'.əla ʒʷə.z.əla	ʃa.tʃ'ə.ra zə.ra	əa.ɤ'.ra zə.ra = t'aw.ɤ'.ra pɤə.kʷ'ə.z.ra
39	ɥa.'ʒʷə.j za.j.ʒʷ	ɣʷa.'ʒʷə.j ʒʷa.j.ʒʷ	t'qʷ'a.tʷ'.əla ʒʷə.bɸ'əla	ʃa.tʃ'ə.ra bɸʷ'ə.ra	əa.ɤ'.ra bɸʷ'ə.ra = t'aw.ɤ'.ra pɤə.kʷ'ə.bɸʷ. ra
40	ɥə.n.ɥa.'ʒʷa	ɣʷə.n.ɣʷa.'ʒʷa	t'qʷ'a.mɤ'ə. t'qʷ'a.tʷ'ə	tʷ'a.tʃ'ə.j.tʷ'	p'ɬ'ə.ɤ' = t'aw.ɤ'.j.t'
50	ɥə.n.ɥa.'ʒʷə.j ʒʷa.'ba	ɣʷə.n.ɣʷa. 'ʒʷə.j ʒʷa.'ba	t'qʷ'a.mɤ'ə. t'qʷ'a.tʷ'.əla ʒʷ'.əla = 'jʷa.za. (n)dʒa	əa.nəqʷa	txʷə.ɤ' = p'ɬ'ə.ɤ'.ra p'ɤ'ə.ra = əa.nəqʷ'a = t'aw.ɤ'.j.t'.ra p'ɤ'ə.ra

60	χə.n.ɥa.'ʒ ^W a	χə.n.ɥ ^W a.'ʒ ^W a	ɕa.mtɕ'a. t'q ^W a.t'w'ə	t ^W a.tʃ'ə.j.ʃ	xə.ɕ' = t'aw.ɕ'ə.j.ɕ
70	χə.n.ɥa.'ʒ ^W ə.j ʒ ^W a.'ba	χə.n.ɥ ^W a.'ʒ ^W ə.j ʒ ^W a.'ba	ɕa.mtɕ'a. t'q ^W a.t'w'.ɟala ʒ ^W .ɟala	t ^W a.tʃ'ə.j.ʃ.ra p'ɕ'ə.ra	bʃə.ɕ' = xə.ɕ'.ra p'ɕ'ə.ra
80	pʃə.n.ɥa.'ʒ ^W a	pʃə.n.ɥ ^W a.'ʒ ^W a	p'ɕ'ə.mtɕ'a. t'q ^W a.t'w'ə	t ^W a.tʃ'ə.j.p'ɕ'	p'ɕ'a.j = jə.ɕ' = t'aw.ɕ'ə.j.p'ɕ'
90	pʃə.n.ɥa.'ʒ ^W ə.j ʒ ^W a.'ba	pʃə.n.ɥ ^W a. 'ʒ ^W ə.j ʒ ^W a.'ba	p'ɕ'ə.mtɕ'a. t'q ^W a.t'w'.ɟala ʒ ^W .ɟala	t ^W a.tʃ'ə.j.p'ɕ'.ra p'ɕ'ə.ra	bɕ ^W ə.ɕ' = p'ɕ'a.j.ra p'ɕ'ə.ra
100	ʃ ^W .k'ə	ʃ ^W .k'ə	ʃ ^W a	ɕa	ɕa
101	ʃ ^W ə.j a.'k'ə	ʃ ^W ə.j z.a.'k'ə	ʃ ^W .ɟala z.ɟala	ɕa.ra zə.ra	ɕa.ra zə.ra
200	ɥə.ʃ ^W	ɥ ^W ə.ʃ ^W	t'q ^W a.ʃ ^W a	ɕə.j.t ^W	ɕə.j.t'
1,000	z.k'ɟə	z.k'ɟə	(za.)b/məjn	məjn	məjn
2,000	ɥə.'nə.z(ə).k'j	ɥ ^W ə.n zə.k'j	t'q ^W a.məjn	məjnə.j.t ^W	məjnə.j.t'
mill- ion	million.k'	million	za.'ʒ ^W ə.ʃ ^W a. məjn	million	million

In the Caucasus as a whole most counting-systems (at least up to 99) are based on multiples of 20 rather than 10. The table demonstrates that, whilst Abkh-Aba and Ub adhere to this pattern, Circ would seem to be in the process of abandoning it; Colarusso (1989) states that Kab no longer has any trace of the vigesimal system (though my informant allows '20 + 10' as a variant to '3 × 10' for '30'), whereas Jakovlev (1948) includes the selection of forms presented above (cf. Dzhanashia, 1976: 144–163), noting that the vigesimal system is fully preserved in Bes. For the Ab(d)z dialect of W. Circ Paris (1989) gives /t^Wa.ɟ'ə.ra p'ɕ'ə.ra/, viz. '20 + 10' as opposed to the equivalent of the '3 × 10' in the Tem table from Jakovlev/Ashkhamaf (1941); Paris also offers for '50' the vigesimal /t^Wa.ɟ'ə.j.t^Wə.ra p'ɕ'ə.ra/ as an alternative to Jakovlev's compound 'half 100', which latter exists as an option also in E. Circ and Ub. Note how the a-grade appears in such forms as the Circ decimal-system choices for '30', Circ multiplicatives, and the Abkh-Aba element for '2' in '20' and its compounds. On the other hand, Ub for '300' is /ɕə.ʃ^Wa/, regardless of accent-placement. The Ub-Circ lexeme for '1000' is a Turkic borrowing—Uslar noted /ʒ^Wə.ʃ^Wa/ '10.100' as a variant; were one to conclude that the parent-NWC tongue lacked such an etymon, would it be legitimate to suggest that Abkh-Aba /k'j/ might be connected with Ancient Greek *χιλίοι* [khilíoi]? Differently from the sister-tongues, Abkh-Aba differentiates between counting humans and counting non-humans (including in the abstract). The N-Hum (abstract) marker is /-ba/; from '3' upwards it is replaced by /-ɥə(.k')/ (Aba /-ɥ^Wə/) for humans, which latter formant is simply added to those cardinals lacking the /-ba/—for /-ɥə/ compare the lexeme for 'man, person' /a.wa.'ɥə/ (Pl /a.'w[a].a:/ 'people'); in Aba 'person' is just /ɥ^Wə/. The first two cardinals in Hum counting are: /a.'dʒ^Wə/ (Aba /za.'dʒ^Wə/) '1', /ɥə.dʒa(.j^Wə(.k'))/ (Aba /ɥ^Wə.dʒ(ə.ɥ^Wə/) '2'.

6.2. Ordinals

6.2.1. Abkh suffixes /-t^Wə.j/, where /-t^Wə/ is the Stat root ‘belong to’, to the N-Hum cardinal; as a regular adjective, the sequence now will be preceded by the article (or a Poss prefix) (e.g. /a.k^W.t^Wə.j a.ph^Wəz.ba/ ‘the first young woman’; /a.ɥ.ba.t^Wə.j a.ʃ^Wq^Wə/ ‘the 2nd book’). Whilst Abkh does not distinguish for its ordinals between the Hum and N-Hum categories, Aba does: from ‘2’ upwards the cardinal is made the preverbal complement to the verbal root /χa/ ‘become’, the verb-form standing in its relativised form (i.e. with initial prefix /jə-/ ‘who/which’) and in the most appropriate tense (e.g. /jə.ʃ^Wə.dʒ(ə.ʃ^W).χa.wa.z sə.ph^Wə/ ‘my 2nd wife = my wife who became the 2nd’ vs /jə.ʃ^W.ba.χa.wa sə.tdzə/ ‘my 2nd house = my house which becomes the 2nd’)—note that ‘1st’ is /j.apχ¹a.χa.wa/ for non-humans vs /j.apχ¹a.ʃ^W.χa.wa/ for humans, both based on /apχ¹a/, ‘before, in front’.

In Ub the root of the verb ‘belong to’ /χ/ is suffixed to the cardinal, which is itself preceded by the 3rd person Pl Poss prefix (e.g. /a.ɣa.ʒa.χ/ ‘the 3rd’); ‘first’ is based on /antɕ^W/ ‘before’ (viz. /antɕ^Wə.χ/).

In W. Circ the suffix /-ana/, itself followed by /-ra/, is attached to the cardinal, accompanied by the 3rd person Pl Poss prefix /j.aɾ-/ (e.g. /j.aɾ.p⁴.ana.ra(r)/ ‘(the) fourth’). For ‘(the) 1st’ /a:pa.ra(r)/ is used, where /a:pa/ means ‘before, in front’ (itself from /pa/ ‘nose’). The circumfix wraps around the final free-standing component in a complex numeral (e.g. /t^Wa.t^Wə.ra j.aɾ.ʃ.ana.ra(r)/ ‘(the) 21st’).

E. Circ employs the 3rd person Sing Poss prefix attached to the fractional form produced by suffixing /-a:na/; /-ra.j/ is then optional (e.g. /ja.tx^W.a:na(.ra.j)/ ‘5th’). Variants for ‘1st’ are: /j.a:pa(.ra.j)/ and /ja.z.a:pa(.ra.j)/.

Days of the week

English	Abkhaz	Ubykh	Temirgoi	Kabardian
Sunday	a.mʃə.ʃa	məʃ ^W a.mə.χ	t̪hɑː.w.maːfa	t̪hɑ.maːx ^W a
Monday	a.ʃ ^W a.χ ¹ a	wə.t ^W a.fɑ.q ¹ a	bʃə.pa	bʃə.ɕhɑ
Tuesday	a.ʔa.ʃa	ʔa.t ^W q ^W a.mɕ ^W a	ɸ ^W əbdʒə	ɸ ^W əbʒ
Wednesday	a.χa.ʃa	brɑːsk ¹ a	barask ¹ a.zəja	bara.zjaj
Thursday	a.pʃa.ʃa	wə.t ^W a.k ^W .atʃa	mafa.k ^W ə	max ^W a.k ^W
Friday	a.χ ^W a.ʃa	a.ʃχa.(mɕ ^W a)	barask ¹ a.ʃx ^W a	marjam
Saturday	a.sab.ʃa	ɕaːba	ʃambat	ɕabat
week	a.mʃə.bʒ	məʃ ^W a.ɣa	t̪hɑ.maːfa	t̪hɑ.maːx ^W a
day	a.mʃ	məʃ ^W a	maːfa	maːx ^W a

Abkh utilises its numerical system (each numerical base appearing in its a-grade, as also in Ub’s words for ‘Tuesday’ and ‘Friday’) for ‘Tuesday’ through ‘Friday’, though, whilst ‘Tuesday’ triggers enumeration by incorporating the element ‘2’, in South Caucasian it is ‘Monday’ that triggers the employment of this same numeral (e.g. Georgian /or.ʃabat.i/ ‘Monday’, cf. /or i/‘2’). Greek *παρασκευή* ‘preparation’ is source for both Ub-Circ ‘Wednesday’ (specifically ‘little preparation’ in Circ) and Tem’s ‘Friday’ (‘big preparation’). ‘Saturday’ is based on ‘sabbath’. For other aspects of the analysis see Dumézil (1974: 26–29).

6.3.1. Languages regularly betray their historical linguistic contacts by virtue of lexical items they adopt from (or conversely supply to) other languages; at a deeper level mutual influences can often be detected in morpho-syntactic structures too. Most recently within the Caucasus all autochthonous languages have been heavily penetrated by Russian. Previously the NWC family was strongly influenced by Turkish, and this has obviously been reinforced throughout the Turkey-centred diaspora (cf. Höhlig, 1998). By uncovering the layers of Kartvelian loans in (a) T'ap' Aba only (circa 20), (b) Ashkhar Aba only (less than 10), (c) the Abkhazian diaspora only (a few tens of items), (d) today's Caucasian Abkh (circa 200), Dzhonua not unreasonably argued (1992) that the most intense period of Abkh-Kartvelian symbiosis must have followed the mass-migrations of the late 19th century. Before the Seljuk Turks arrived, the Alan(-Scythian-Sarmatian) ancestors of the Ossetians had a significant presence in the general area of the (N)W Caucasus, and Abaev (1949: 309–322) suggested some possible borrowings into Abkh (and other Caucasian tongues) from such a source (e.g. Abkh /a.war'dən/ 'cart', 'car' for Turkish Abkhazians, cf. Ossetic /wærdo~un/ 'cart', clearly an Indo-European root; Abkh /'a.k'arax^W/ = Tem(-Kab)/tj'ara:χ^W(a)/ 'pistol', cf. Ossetic /gœrax/'shot', though Shagirov (1977: 133) views it as a borrowing into Ossetic; Abkh /'a.pj^Wma/, cf. Ossetic /fysym~fusum/ 'host' ⇐ Old Iranian /fšumant/ 'cattle-herd', the first element deriving from Indo-European /pasu/ cattle). Ancient Greeks had colonies in Abkhazia from circa 700 B.C., and possible loans to Abkh would be /'a.ləw/ 'millstone', cf. Ancient Greek *ἀλευρον* 'wheaten flour' (plus numerous other derivatives of *ἀλέω* 'I grind'); /a.nəʃ/ 'boat', cf. *ναῦς* 'ship', again of well-recognised Indo-European provenance, as proposed by Chirikba (reported by Dzidzarija, 1989). For a reverse exchange one is tempted to wonder whether the problematic rare synonym for *τυφλός* 'blind', namely *ἀλαός* (attested as early as the *Odyssey*), might not derive from Ab's standard word for this meaning /'a.la.ʃ^W/, where /'a.(b)la/ is 'eye', as equally for the /na-/ in Tem /na.ɛ^Wə/ and Kab /na.f/, the Circ verb /ɛ^Wə.n/ = /fə.n/ 'rot' (Shagirov, 1977: 280) explaining the final element /-ʃ^W/ (cf. Abkh /a.ʃ^W.ra/ 'fill with pus').

7. Recent developments

7.1. As early as the 1820s the French visitor Taitbout de Marigny proposed devising a roman script for Circ. And, although during the USSR's 'latinizacija'-drive of the 1920–1930s all that state's 'Young Written Languages' had roman orthographies devised for them, currently it is Cyrillic that forms the base for all the official NWC scripts. The marriage is not a happy one, and in 1983 the Circ specialist, Monika Höhlig, proposed reverting to a roman alphabet using the phonetic values employed in writing Turkish (see Höhlig, 1983, 1990). I myself took this as starting-point for suggesting a similar approach firstly for Abkh and then pan-North Caucasian (cf. Hewitt, 1995, 1999). One of the motives behind these proposals is to find a way of uniting the home- and diaspora-communities, most of which latter live in Turkey, where they are literate in Turkish but rarely in the ancestral language, for observers are keenly aware of the threat of extinction facing many Caucasian tongues (Hewitt, 1998; Höhlig, 1999). However, implacable opposition, particularly amongst writers, is voiced in the regional Caucasian capitals to any further changes to basic orthographies—even the relatively minor but eminently sensible adapta-

tion to the Abkh script which was recently introduced to standardise the representation of labialisation caused serious objections both before and after its introduction. Because of this reaction I have proposed that at least a common Cyrillic representation for the two Circ literary languages should be devised (cf. Hewitt, 2000), and the same applies to the divergent representations of Abkh and Aba according to current orthographic practice. It is a real pity that the home-intelligentsias seem not to concern themselves with the needs of the diaspora, paying no attention to the potentially huge benefits that might accrue from the creation of mutually accessible joint-representations of minority-status mother-tongues which are rapidly losing ground to local major languages (Russian, Turkish, Arabic) amongst the long-divided NWC speech-communities.

7.2. Soviet research into the indigenous Caucasian languages was marked by relatively little investigation into syntax—even monograph grammars regularly addressed only the very basic of questions. An exception was N. Jakovlev, perhaps the most talented of the early Soviet Caucasologists, and it is to be hoped that his unpublished manuscript of an Abkh grammar will eventually see the light of day. The greater involvement of Westerners during the closing decades of the 20th century in research with NWC speakers within the Caucasus has helped to correct this lack of interest in the domain (cf. Hewitt, 1979b, 1987; Kumakhov and Vamling, 1992, 1994, 1997, 1998; Kulikov, 1999), particularly for Abkh and Circ.

7.3. Georgian historian Ivane Dzhavakhishvili (1937) argued that all the autochthonous languages of the Caucasus derived from a common source, and there is a long tradition, still advocated in some quarters, of seeking Caucasian congeners for such language-isolates as Basque (less commonly Burushaski). Hardly anyone today would claim the Kartvelian (South Caucasian) family to be genetically related to the North Caucasian languages. But the relationship between the northern languages themselves is disputed. The conventional view remains that NWC is unrelated to Nakh-Daghestanian. However, proponents of the pan-North Caucasian hypothesis have been growing. Comparative-etymological dictionaries for clearly defined sub-groups (e.g. Kuipers, 1975; Shagirov, 1977 for Circ) provided a basis for the more radical proposal associated with such names as Abdokov (1976, 1981) and more especially Nikolayev and Starostin (1994), who have presented their findings in the guise of a 1406-page North Caucasian etymological dictionary. One of the problems with such reconstructions is that, given the phonetic complexity of the assumed reflex-languages, the putative proto-forms are often highly abstract, and the Nikolayev-Starostin proto-system contains no fewer than 35 distinct laterals! Chirikba (1996) is another adherent of the pan-North Caucasian theory, though his reconstruction of proto-NWC differs in details from that of his Russian colleagues. As for possible historical links, it has been suggested that the long extinct and poorly attested Asia Minor language Hattic may have belonged to the NWC family (Ardzinba, 1979; Braun, 1994; Chirikba, 1997: 406–432), on the basis of both material correspondences and the prevalence in Hattic of prefixation. The language of the contemporary Kasks is argued to have been related to Hattic, and the name has been linked with *Kasog/Kashak/Kasæg* (cf. Circassian/Cherkess), whilst the name of one of the related tribes, namely Abeshla, has similarly been connected with Apswa/Abaza (cf. the roots *apsil-/abazg-* in some historical documents—on etymological relations here cf. Hewitt, 1993). The linguistic consequences of (some hypothesised) relations with neighbouring, unrelated languages have been discussed in various works (Shagirov, 1989; Höhlig, 1998; Hewitt, 1992a,b, 2001).

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