

THE NORTHWEST CAUCASIAN LANGUAGES

Peter Arkadiev & Yury Lander

1. The languages and their speakers

The Northwest Caucasian (NWC) family, also known as West Caucasian or Abkhaz-Adyghe, comprises five languages, which are grouped into three branches:

- Abkhaz-Abaza:
 - Abkhaz (including the Sadz, Ahchypsy, Bzyp, Tsabal, and Abzhywa dialects),
 - Abaza (nominally including the Tapanta and Ashkharywa dialects),
- Ubykh,
- Circassian:
 - West Circassian (also known as Adyghe, including the Bzhedugh, Shapsugh, Abzakh/Abadzekh, and Temirgoy dialects),
 - Kabardian (also known as East Circassian and including the Besleney, Baksan, Mozdok, Malka, Terek, and Kuban dialects).

This conventional division is based on heterogeneous linguistic and sociolinguistic considerations and hence is a kind of simplification. For example, Abaza consists of two dialects, Tapanta and Ashkharywa, of which the latter is closer to Abkhaz than to Tapanta, West Circassian and Kabardian are often considered by their speakers to constitute a single Adyghe (or Circassian) language (despite the absence of mutual intelligibility), and some dialects of Abkhaz (e.g., Sadz) and West Circassian (e.g., Shapsugh) may be treated as separate languages. Nonetheless, below we use the language list as given above with a proviso that whenever it is possible we will try to overtly mark the variety referred to – with the exception of Abaza, whose examples always belong to the Tapanta dialect.

During the centuries, the speakers of the languages of the family inhabited areas to the North and partly to the South of the Western part of the Caucasian Ridge including the Northeast coast of the Black Sea. The situation changed drastically in the middle of the 19th century, when many Circassian, Abkhaz-Abaza and Ubykh communities had to migrate to the Ottoman Empire after their lands were occupied by the Russian Empire. As a result, currently we find speakers of NWC languages not only in the Northwest Caucasus per se (primarily in the Russian regions of Adyghea, Karachaevo-Cherkessia, Kabardino-Balkaria and Krasnodarski Krai and in the de facto independent Republic of Abkhazia), but also within a massive diaspora living mainly in Turkey, Syria, Jordan and Israel. Outside of the Caucasus, the people of this diaspora are commonly referred to as “Cherkes”, i.e. Circassians, irrespectively of their actual origin. According to the Great Russian Encyclopedia and the 2010 Russian census, in Russia, West Circassian has no less than 117.500 speakers, Kabardian has more than 515.700 speakers, Abaza has about 38.000 speakers, and the number of speakers of Abkhaz both in Abkhazia and in Russia is about 100.000. There are no parallel data for the diaspora, mainly because of the complicated status of the NWC languages in Turkey (see below). For Ubykh, it is commonly accepted that Tevfik Esenç, the last competent speaker of the language, died in Turkey in 1992.

The sociolinguistic picture varies in different countries. In Russian Federation, West Circassian is one of the official languages in the Republic of Adygea, and is also used to some extent in Krasnodarski Krai, where its position is much less healthy. Kabardian is one of the official languages in Kabardino-Balkaria and in Karachaevo-Cherkesia, and the latter is also home to Abaza. All of these languages are taught at school, are represented in local media and have literature, mostly published in partly standardized varieties which use the Cyrillic-based orthography with many digraphs and even trigraphs (see below §2.1). Abkhaz is the state language of the de facto independent Republic of Abkhazia, where it is represented in media and literature (including academic publications). The orthography of Abkhaz is also based on the Cyrillic script but includes a considerable number of special symbols. Despite the apparently optimistic picture, all of these languages undergo considerable pressure of Russian, both in Russian Federation and in Abkhazia, especially in the urban areas.

In Turkey, where the number of the representatives of the NWC peoples exceeds their number in Russia, the use of their languages was much more restricted for political reasons. That is why Ubykhs, who mostly migrated to the Ottoman Empire, have lost their language completely – note, however, that they were mostly bilingual in Circassian even before migration. Other NWC languages are still spoken in the diaspora in Turkey, Syria, Jordan, and Israel, albeit less by the younger generation. Outside of Turkey, the Abkhaz-Abaza communities have largely shifted to Circassian or Arabic. Still, during the last decades there have been numerous attempts to revive NWC languages in all of these countries.

The external relations of the family are highly debatable. During much of the Soviet times it was believed that NWC, Northeast Caucasian and South Caucasian constitute a single “Ibero-Caucasian” family (cf. Chikobava 1979). Although this view is now mostly abandoned (Tuite 2008), it is still held and being developed in Georgian linguistics (see, for instance, Kurdiani 2007, Shengelia 2006). In the late 1980s Sergei Starostin and Sergei Nikolayev argued that Northwest Caucasian and Northeast Caucasian together form the North Caucasian family, and this view took shape in Nikolayev & Starostin’s (1994) “North Caucasian Etymological Dictionary” and has also been developed in Chirikba (1996). Yet the North Caucasian hypothesis (like further hypotheses relating North Caucasian with Yenisean and Sino-Tibetan languages) is currently well-accepted only within a fairly restricted scientific community.

The scientific study of the NWC languages started at least in the 19th century by Peter Uslar, who wrote a grammar of Abkhaz and left a number of insightful notes on other NWC languages including Ubykh (Uslar 1887). In the 20th and 21st centuries, the NWC languages (especially their standardized varieties) obtained a number of detailed grammatical descriptions, mainly in Russian but also in some other European languages (as well as in NWC languages themselves). Cf. the Russian grammatical descriptions Jakovlev & Ashkhamaf (1941), Rogava & Kerasheva (1966), Zekokh (2004) for West Circassian, Turchaninov & Tsagov (1940), Jakovlev (1948), Abitov et al. (1957), Bagov et al. (1970), Kumakhov et al. (2006) for Kabardian, Jakovlev (2006; dated from 1951), Aristava et al. (1968) for Abkhaz, Tabulova (1976), Lomtadze (2006, also in Georgian, which is the original version of her paper published in English in 1989) for Abaza. The descriptions in other languages include several essays in Hewitt (1989), namely Charachidzé (1989) on Ubykh, Colarusso (1989) on Kabardian, Hewitt (1989) on Abkhaz, Lomtadze et al. (1989) on Abaza, Paris (1989) on Abzakh West Circassian, Abkhaz grammars by Hewitt (1979a) and Chirikba (2003), Kabardian grammars by Colarusso (1992, 2006) and Matasović (2008), and Ubykh grammars by Dirr (1928), Dumézil (1931), von Mészáros (1934) and especially by Fenwick (2011), who summarized the previous research. In

addition to these sources, there are quite a number of papers and monographs devoted to specific aspects of NWC languages, as well as numerous descriptions of dialects and local varieties of the languages of the family. Further, while the comparative-historical linguistics of the NWC family is not very well developed (besides the above-mentioned works, see especially Shagirov's (1977) Circassian etymological dictionary), there are many works comparing various NWC languages, such as Dumézil (1932), Shakryl (1971), Colarusso (1988), a series of monographs by Kumakhov (1964, 1971, 1981, 1989) and Kumakhov & Vamling (2009) on Circassian, Chkadua (1970) on Abkhaz-Abaza, to mention just a few.

The electronic corpora of NWC languages include an Abkhaz non-annotated corpus but also a West Circassian annotated corpus allowing search based on specific morphological information (cf. Arkhangel'skiy & Lander 2015 for discussion). For examples given below, whenever a source is not explicated, the example is either elicited by the authors (as marked) or taken from some text including one of the corpora mentioned above (otherwise).

2. Phonetics and phonology

Since more detailed information and an extensive bibliography on segmental inventories is provided in Beguš (this volume), here we will just briefly outline the most important facts as well as the conventions of phonological representation we adhere to. For a detailed description based on instrumental analysis see Colarusso (1988) on the family in general, Applebaum & Gordon (2013) on Circassian in general, Höhlig (2003) on West Circassian, Paris (1974) and Gordon & Applebaum (2006) on Turkish Kabardian and Vaux (2012) on Abkhaz.

2.1. Consonants

The consonant inventories of NWC languages are among the richest in the world, ranging from about 50 in standard Kabardian to more than 80 in Ubykh. This is primarily due to a large number of sibilant fricatives and affricates as well as to secondary articulations such as labialization and palatalization (and, in Ubykh only, pharyngealization). The typical system of plosives distinguishes three series, i.e. voiced, ejective and voiceless (often with a non-distinctive aspiration), but Bzhedugh and Shapsugh dialects of West Circassian feature a four-way system contrasting plain and aspirated plosives, which is reconstructed to the proto-Circassian (Kuipers 1963: 69–71, Kumakhov 1981: 121–141, Chirikba 1996: 109–117), cf. Bzhedugh *tʰəke* 'given' vs. *take* 'sun'. Interestingly, the contrast is observed not only in stops and affricates, but in fricatives as well, cf. Bzhedugh *šʰe* 'milk' vs. *še* 'sell'. Ubykh has a probably unique twenty-term system of uvular stops and fricatives distinguishing plain, palatalized, labialized, pharyngealized and pharyngo-labialized series.

The systems of sonorants are, by contrast, poor, being limited to just /j/, /w/, /n/, /m/ and /r/, with /l/ present only in Abkhaz-Abaza and Ubykh, and /ʈ/ only in Abkhaz and possibly also in some varieties of Abaza. In Circassian, except for the Shapsugh varieties near the Black Sea and possibly some other varieties in closer contact with Russian, the voiced lateral is a fricative /ɮ/ rather than an approximant.

The systems of sibilant fricatives and affricates in NWC are particularly rich distinguishing four points of articulation (only the eastern dialects of Kabardian as well as the standard language have reduced the system to just three points), whose characterization is not uncontroversial (see e.g. Ladefoged & Maddieson 1996: 161–163). Traditional (Russian-oriented) grammars (e.g. Rogava & Kerasheva 1966: 30–34, 38–40) distinguish between dental s /s/, c /ts/, alveolar (the so-called "hissing-hushing sounds", Ladefoged & Maddieson 1996: 161,

with reference to Catford) \hat{s} / ς /, \hat{c} / $\tau\varsigma$ /, plain postalveolar \check{s} / ζ /, \check{c} / $\tau\zeta$ / and palatalized postalveolar \check{s}' / ζ^j /, \check{c}' / $\tau\zeta^j$ / series, cf. also Höhlig (2003). Colarusso (1988: xxvi, 18, 33) identifies these as lamino-dental, alveo-palatal, apico-palato-alveolar and lamino-palato-alveolar, respectively, while Hewitt (2005: 94–98) calls them alveolar, alveolo-palatal, retroflex and palato-alveolar; yet a different classification is proposed by Catford (1977) and uncritically accepted by Beguš (this volume). Given the dearth of fully reliable and comparable instrumental studies for all NWC varieties and a discrepancy between different sources, we refrain from using IPA symbols, reverting to the traditional Caucasological phonemic transcription employed in Smeets (1984) and Testelec (ed.) (2009). The tables below represent consonantal systems of Standard West Circassian, Standard Kabardian, Standard Abkhaz, Tapanta Abaza and Ubykh, together with the mapping from the respective traditional Cyrillic-based orthographies (in <>) to the transcription system used in this chapter (in the absence of an orthography for Ubykh, we use the transcription in Fenwick (2011) as a reference point; Fenwick's symbols are shown only when different from ours). Phonemes attested only in loans are parenthesized.

Table 2.1. Consonants of Standard West Circassian

	plosives			fricatives			sonorants	
	–voice	+ glottal	+ voice	–voice	+ glottal	+ voice	nasals	resonants
labial	p <п>	p̣ <п̣>	b <б>	f <ф>		(v <в>)	m <м>	w <у>
labialized		p̣ ^w <п̣ʲ>						
dental	t <т>	ṭ <т̣>	d <д>				n <н>	r <р>
labialized		ṭ ^w <т̣ʲ>						
affricates								
“hissing-hushing”	c <ц>	ç <ц̣>	ʒ <дз>	s <с>		z <з>		
labialized	ç ^w <цу>		ʒ ^w <дзу>	ʃ <ш̣>	ʃ̣ <ш̣̣>	ʒ̣ <ж̣>		
palato-alveolar	č <ч̣>	č̣ <ч̣̣>	ʒ̣ <дж̣>	š <ш̣>		ž <ж̣>		
palatalized	č' <ч̣'>	č̣' <ч̣̣'>	ʒ̣' <дж̣'>	š' <ш̣'>		ž' <ж̣'>		
lateral				λ <л̣>	λ̣ <л̣̣>	ɭ <л̣>		
palatal								j <й>
velar	k <к>	ḳ <к̣>		x <х>		γ <г>		
labialized	k ^w <ку>	ḳ ^w <к̣ʲ>	g ^w <гу>					
uvular	q <к̣̣>			χ <х̣>		ʁ <г̣>		
labialized	q ^w <к̣̣ʲ>			χ ^w <х̣ʲ>		ʁ ^w <г̣ʲ>		
pharyngeal				h <х̣̣>				
laryngeal	ʔ <І>							
labialized	ʔ ^w <Іʲ>							

Table 2.2. Consonants of Standard Kabardian

	plosives			fricatives			sonorants	
	–voice	+ glottal	+ voice	–voice	+ glottal	+ voice	nasals	resonants
labial	p <п>	p̣ <пI>	b <б>	f <ф>	f̣ <фI>	v <в>	m <м>	w <у>
dental	t <т>	ṭ <тI>	d <д>				n <н>	r <р>
affricates	c <ц>	c̣ <цI>	ʒ <дж>	s <с>		z <з>		
“hissing-hushing”				ʃ <щ>	ʃ̣ <щI>	ʒ̣ <жь>		
palato-alveolar	č <ч>	č̣ <чI>	ʒ̣ <дж>	ʃ̣ <ш>		ʒ̣ <ж>		
lateral				λ <лб>	λ̣ <лI>	ɭ <л>		
palatal								j <й>
velar	k <к>	ḳ <кI>		x <х>		ɣ <г>		
labialized	kʷ <кы>	ḳʷ <кы> <кIy>	gʷ <гы>	xʷ <ху>				
uvular	qˤ <кхъ>	q̣ˤ <къ>		χ <хъ>		ʁ <гъ>		
labialized	qˤʷ <кхъу>	q̣ˤʷ <къу>		χʷ <хъу>		ʁʷ <гъу>		
pharyngeal				h <хь>				
laryngeal	ʔ <I>							
labialized	ʔʷ <Iy>							

Table 2.3. Consonants of Standard Abkhaz

	plosives			fricatives			sonorants	
	–voice	+ glottal	+ voice	–voice	+ glottal	+ voice	nasals	resonants
labial	p <п>	p̣ <п>	b <б>	(f <ф>)		(v <в>)	m <м>	w <у>
dental	t <т>	ṭ <т>	d <д>				n <н>	r <р>
labialized	tʷ <тə>	ṭʷ <тə>	dʷ					
affricates			<дə>					
“hissing-hushing”	c <ц>	c̣ <ц>	ʒ <з>	s <с>		z <з>		
labialized	čʷ <цə>	č̣ʷ <цə>	ʒʷ <зə>					
palato-alveolar	č̣ <ч>	č̣̣ <ч>	ʒ̣̣ <ч>	ʃ̣̣ <ш>		ʒ̣̣ <ж>		
palatalized	čʷ <ч>	č̣ʷ <ч>	ʒ̣ʷ <чъ>	ʃ̣ʷ <шъ>		ʒ̣ʷ <жь>		
labialized				ʃ̣ʷ <шə>		ʒ̣ʷ <жə>		
lateral								l <л>
palatal								j <и>
								ɥ <ə>
velar	k <к>	ḳ <к>	g <г>					
palatalized	kʷ <къ>	ḳʷ <къ>	gʷ <гъ>					
labialized	kʷ <кы>	ḳʷ <кы>	gʷ <гы>					
uvular		q̣ <к>		χ <х>		ʁ <г>		
palatalized		q̣ʷ <къ>		χʷ <хъ>		ʁʷ <гъ>		
labialized		q̣ʷ <кы>		χʷ <ху>		ʁʷ <гу>		
pharyngeal				h <х>				
labialized				hʷ <хə>				

Table 2.4. Consonants of Tapanta Abaza

	plosives			fricatives			sonorants	
	-voice	+ glottal	+ voice	-voice	+ glottal	+ voice	nasals	resonants
labial	p <п>	p̣ <пІ>	b <б>	(f <ф>)	(f̣ <фІ>)	(v <в>)	m <м>	w <у>
dental	t <т>	ṭ <тІ>	d <д>				n <н>	r <р>
affricates	c <ц>	c̣ <цІ>	ʒ <дз>	s <с>		z <з>		
“hissing-hushing”	č <чв>	č̣ <чІв>	ʒ̣ <джв>	š <шв>		ž <жв>		
palato-alveolar	č̣ <тш>	č̣̣ <шІ>	ʒ̣̣ <дж>	ṣ̌ <ш>		ẓ̌ <ж>		
palatalized	č' <ч>	č'̣ <чІ>	ʒ'̣̣ <джъ>	š' <щ>		ž'̣̣ <жъ>		
lateral				(λ <тл>)	(λ̣ <лІ>)	(ʎ' <лъ>)		l <л>
palatal								j <й>
velar	k <к>	ḳ <кІ>	g <г>					
palatalized	k' <къ>	k'̣ <кІъ>	g' <гъ>					
labialized	k ^w <кв>	<кІв>	g ^w <гв>					
		ḳ ^w <кІв>						
uvular	q <хъ>	q̣ <къ>		χ <х>		ʁ <гъ>		
palatalized		q̣' <къ>		χ' <хъ>		ʁ' <гъ>		
labialized	q ^w <хъв>	<къъ>		χ ^w <хъв>		<гъъ>		
		q̣ ^w <къъв>				ʁ ^w <гъъв>		
pharyngeal				h <хІ>		ʕ <гІ>		
labialized				h ^w <хІв>		ʕ ^w <гІв>		
laryngeal	ʔ <ъ>							

Catford (1997: 99–102) argue for a three-vowel system in Circassian, and the same does Fenwick (2011: 24–27) for Ubykh. Two-vowel analyses for Circassian, collapsing /e/ and /a/, have also been proposed, see Jakovlev (1923), Halle (1970) and Colarusso (1988: 294, 312–329). However, any theory positing less than three vowel phonemes is falsified by the existence of *prima facie* minimal pairs, cf. Besleney Kabardian *šxə* ‘eat it!’ ~ *šxe* ‘eat! (antipassive)’ ~ *šxa* ‘s/he ate (antipassive)’, or Ubykh *asš’ən* ‘I reap it’ ~ *asš’én* ‘I milk it’ ~ *asš’án* ‘I milk/rip them’ (Fenwick 2011: 25 after Dumézil 1965: 202); doing away with such pairs can only be achieved by postulating covert consonants and *ad hoc* phonological rules. It must be admitted, however, that such analyses are not entirely unmotivated, since the distribution of vocalic contrasts in NWC is fairly restricted. Thus, in Circassian and Ubykh /a/ and /e/ are neutralized to /a/ word-initially (in Ubykh also word-finally, Fenwick 2011: 26–27), and in Circassian /a/ is mainly derived from /e/ by a morphophonological rule (see §2.5), with “stable *a*” restricted to a few morphemes. Even so, this does not justify the exclusion of one of the vowels from the surface phonological system, and anyway the contrast between /ə/ and /a/ (in Abkhaz-Abaza) and /e/ (in Circassian and Ubykh) is unequivocally functionally loaded for both lexical roots and affixes; importantly, as Colarusso (1988: 350–372) argues, it is impossible to predict the occurrence of /ə/ on the basis of syllable structure or morphological environment.

Not uncontroversial has also been the identification of the basic contrasts even by the proponents of the more realistic three-vowel systems, especially concerning /e/ and /a/, which are characterized by many, e.g. Jakovlev (1923), Colarusso (1988) and Hewitt (2005), as a quantitative opposition between, respectively, /a/ and /a:/. Such an analysis, at least for Circassian, is invalidated not only by instrumental studies, most notably Choi (1991), cf. also Catford (1997: 100–101), but also by the existence of genuine, if marginal, quantitative contrasts, e.g. in Bzhedugh West Circassian, cf. *q-a-kʷe* CISL-DYN-go ‘s/he comes’ vs. *q̇a-kʷe* CISL-go(IMP) ‘come!’ (Sitimova 2004: 26, 100–101; Paschen 2014).

Despite the dearth of phonological vocalic contrasts, phonetically NWC languages possess almost all possible vowel qualities due to “colouring” of vowels by adjacent consonants (see e.g. Colarusso 1988: 295–304 in general and Moroz 2018a on Abaza). Thus, in Circassian /e/ and /ə/ are realized close to [o] and [u] after labialized consonants, while /e/ becomes almost indistinguishable from /a/ when adjacent to laryngeals. Special behaviour show the combinations of vowels with glides /w/ and /j/: *we* / *ew* and *wə* / *əw* tend to be realized as [o] and [u], while *je* / *ej* and *jə* / *əj* as [e] (as opposed to more open [ɛ] in other environments) and [i]. Word-initially and intervocalically, glides are preserved. These processes work differently across languages and dialects, thus, in Temirgoy West Circassian *ew*, *ej* and *əw*, *əj* tend to be left intact, while in Kabardian and Abkhaz-Abaza they undergo monophthongization. In some cases it can be argued that this monophthongization has given rise to new phonemes, facilitated by the influx of borrowings, mainly from Russian.

Nasalized vowels are reported for Bzhedugh and Shapsugh dialects of West Circassian (Rogava & Kerasheva 1966: 24; Kerasheva 1957a/1995: 231), cf. Bzhedugh *psã* vs. Temirgoy *psə* ‘water’. Their origin from original combinations with nasal consonants does not seem to be obvious, since the cognates of the very few forms nasalized vowels are reported in do not show any traces of final nasal consonants in other NWC varieties, and neither is nasal drop with vowel nasalization a synchronic phonological process in Bzhedugh and Shapsugh.

2.3. Phonotactics and syllable structure

NWC languages show considerable variation in their phonotactics and allowed syllable structures (cf. e.g. Moroz 2018b on West Circassian), the only general rule being the ban on vocalic hiatuses (at least in the inherited layer of the lexicon). While the most common syllable type is C(C)V, complex onsets and complex codas are well-attested. Among consonant clusters it is useful to distinguish those which are attested intramorphemically, i.e. in roots and affixes, and those created when morphemes are combined. Intramorphemic initial clusters are in most cases biconsonantal and decessive with all members sharing the features of voice and glottalization, e.g. West Circassian *pχe* ‘wood’ ~ *bβe* ‘breast’ ~ *tχ^wə* ‘melt’ or Abaza *ʒɬ^wa* ‘shoulder’ ~ *ʃχə* ‘carrot’. Accessive clusters are diachronically secondary, cf. West Circassian *λfe* vs. Kabardian *λx^we* ‘give birth’. Intramorphemic triconsonantal clusters are rare, cf. West Circassian *pske* ‘cough’ or Ubykh *tχre* ‘break’ (Fenwick 2011: 27). At least in Circassian, most affixes have a CV structure, and those which feature consonant clusters, such as certain preverbs, clearly go back to lexical roots.

Syllable- and word-final clusters usually result from the dropping of final /ə/, cf. West Circassian *je.pλ* ‘look at it!’ ~ *je.pλə.β* ‘s/he looked’. The range of consonant sequences created by morphological rules is much greater and includes typologically quite non-trivial instances, cf. Besleney Kabardian *fe-v-bz-t* MAL-2PL.ERG-cut-IPF ‘you were slaughtering it’ from the root *bzə* or *je-t-t-t-jə* DAT-1PL.ERG-give-IPF-ADD ‘because we gave it to him/her’ from *tə* ‘give’, or the Abaza tongue-twister *h-qk-χ-bq^wəl-k* 1PL.IO-cream-three-barrel-INDF ‘our three barrels of cream’. Such complex clusters, especially the ones containing both voiced and unvoiced consonants, normally do not arise in Ubykh and West Circassian; at least in the latter this is surely due to the preservation of /ə/. In Abkhaz-Abaza, in contrast to the other NWC languages, non-syllabic sonorants can occur in word-initial clusters, cf. Abaza *mɬ^wa* ‘road’ or *j-s-taqə-ḡ* 3SG.N.ABS-1SG.IO-want-NPST.DCL ‘I want it’, but not in word-final clusters, cf. Abaza *sə-ĉ-t* 1SG.ABS-sleep(AOR)-DCL ~ *sə-ĉə-n* 1SG.ABS-sleep-PST.DCL ‘I slept’.

The occurrence of vowels in word-peripheral positions is fairly restricted. Thus, /ə/ is generally banned word-initially across the whole family, with the exception of certain West Circassian dialects. It has been already noted that of /e/ and /a/ only the latter is admitted word-initially in Circassian and Ubykh, its occurrence being mainly restricted to a few grammatical morphemes. For Circassian, it can probably be argued that all *a*-initial roots actually have a prothetic glottal stop; in Kabardian, *a*-initial prefixes receive a prothetic /j/ word-initially, cf. Besleney Kabardian *w-a-λeβ^w-a* 2SG.ABS-3PL.ERG-see-PST ‘they saw you’ ~ *ja-λeβ^w-a* 3PL.ERG-see-PST ‘they saw it’. Likewise, in Kabardian /ə/ does not occur word-finally except for monosyllables and the additive suffix *-jə*.

2.4. Stress and prosody

All NWC languages have dynamic stress, although its perceptual salience differs across languages (e.g. the stress in West Circassian has proved to be quite weak, cf. Paris (1989: 165), and even native speakers do not always agree on where it falls); we are aware of only two acoustic studies of stress, Gordon & Applebaum (2010a) on Turkish Kabardian and Paschen (2010) on Temirgoy West Circassian. With regard to stress assignment, there is a major division between the mobile morphologically-determined stress in Abkhaz-Abaza and Ubykh vs. largely fixed stress in Circassian. In West Circassian, the position of stress varies across dialects: in Abzakh stress generally falls on the last syllable of the word (Paris 1989: 165–166), while in Shapsugh stress is bound to the last two syllables of the stem (which includes some of the

grammatical suffixes and excludes others, the so-called endings; Smeets 1984: 128–129), and the same is generally true of Kabardian. Thus, in Besleney Kabardian (Moroz 2012) stress generally falls on the penultimate syllable of the stem if the last syllable is open and on the last syllable otherwise, cf. *má-kʷe* ‘s/he goes’ vs. *me-báb* ‘s/he flies’; the open last syllable can be stressed in certain morphological environments, e.g. the preterite suffix *-a* is always stressed, cf. *báb-á* ‘s/he flew’. It should be kept in mind that closed syllables can be considered as derived by the deletion of stem-final /ə/, which surfaces before stem-extending suffixes and word-final sonorants, cf. *çəxʷ* ‘man’ ~ *çəxʷǝ-be* ‘humanness’. The so-called endings, i.e. suffixes not forming part of the stem by a number of morphophonological criteria (see e.g. Smeets 1984: 206, 282–287; §2.5), are extrametrical, cf. *çáxʷ|-xe-m-č'-jə* man-PL-OBL-INS-ADD ‘for all the people’, *kʷé-ne|-xe-te-qəm* go-FUT-PL-IPF-NEG ‘they would not have gone’. By contrast, prefixes can be stressed by the general rule, cf. *s-jǝ-šə|-m* 1SG.PR-POSS-brother-OBL ‘my brother’. On prosodic word in Kabardian and its (mis)alignment with grammatical word see Gordon & Applebaum (2010b), Applebaum (2013).

Stress in Abkhaz-Abaza and Ubykh is markedly different, being mobile, distinctive and determined by inherent properties of morphemes, cf. minimal pairs from Abaza *ʃá-j-ra* CISL-come-MSD ‘to come’ ~ *ʃa-j-rá* CISL-grow-MSD ‘to grow’ (Moroz 2017) and Ubykh *a-sə-bələ-n* 3.ABS-1SG.ERG-(CAUS)swallow-PRS ‘I swallow it’ ~ *á-sə-bələ-n* 3PL.IO-1SG.ERG-(CAUS)swallow-PRS ‘I make them swallow it’ (Fenwick 2011: 140 after Dumézil & Esenç 1977a: 21). The only comprehensive description of stress exists for Abkhaz (Spruit 1985, 1986: 37–79), drawing upon and complemented by a synchronic and historical-comparative analysis in Dybo (1977, 1989, 2000, 2007, 2011), where it is shown that Abaza and Ubykh have stress systems basically identical to that of Abkhaz (on Abaza see also Moroz 2017, 2018a). Dybo and Spruit distinguish two classes of (monosyllabic) morphemes: dominant (D) and recessive (R), and formulate the following rule of stress placement (Spruit 1986: 38):

- (2.1) a. The stress falls on the first D in the word not followed by another D;
 b. if the word consists only of Rs, its stress has to be stated for each morphological type.

Disyllabic morphemes can be analyzed as combinations of monosyllables, however, Moroz (2017, 2018a) argues that some disyllabic roots in Abaza should be analysed as having fixed stress. In Abkhaz and Abaza, the unstressed /ə/ is deleted unless phonotactically required. The accentual class is a lexical property of each morpheme not correlating with any synchronic phonological or grammatical properties. Dybo et al. (1978) propose that such a system of stress assignment can have a tonal origin, claiming that Tapanta Abaza distinguishes high (dominant) and low (recessive) tone on stressed syllables; this, however, has not been confirmed by independent evidence. The working of the system is shown in the following examples.

Abaza (Moroz 2017)

- | | | | |
|----------|---|----|--|
| (2.2) a. | <i>s_D-lá_D</i>
1SG.PR-dog
‘my dog’ | b. | <i>sá_D-la_R</i>
1SG.PR-eye
‘my eye’ |
| (2.3) a. | <i>la_D-kʷá_D</i>
dog-PL
‘dogs’ | b. | <i>la_R-kʷá_D</i>
eye-PL
‘eyes’ |

- (2.4) a. ca_D-ra_D
go-MSD
'to go'
- b. pa_R-ra_D
jump-MSD
'to jump'
- (2.5) a. $s_R-ca_D-d_R$
1SG.ABS-go(AOR)-DCL
'I went'
- b. $s_R-pa_R-d_R$
1SG.ABS-jump(AOR)-DCL
'I jumped'
- (2.6) a. $s_R-z_R-d_R$
1SG.ABS-roast(AOR)-DCL
'I roasted'
- b. $s_R-z_R-d_R$
1SG.ABS-vanish(AOR)-DCL
'I vanished'

Ubykh (Dybo 1989: 40–41)

- (2.7) a. s_D-ps_D
1SG.PR-fish
'my fish'
- b. s_D-ne_R
1SG.PR-mother
'my mother'
- (2.8) a. $a_D-d''_D-be_D$
DEF-outside-LOC
'outside'
- b. $a_D-tx''_R-be_D$
DEF-field-LOC
'in the field'
- (2.9) a. $a_R-s_D-bx''_D-n_R$
3.ABS-1SG.ERG-open-PRS
'I open it'
- b. $a_R-s_D-bz''_R-n_R$
3.ABS-1SG.ERG-(CAUS)melt-PRS
'I dissolve it'

The situation in Ubykh, however, might be more complex than described by Dybo, since disyllabic roots show three stress patterns when prefixed (Fenwick 2011: 30–31): (i) with the fixed stress on the first syllable (= DR) (px''_R-edak'' 'young woman' ~ $a-px''_R-edak''$ 'the young woman'), (ii) showing stress retraction from the second syllable to the prefix (= RX) ($g''amé$ 'cow' ~ $a-g''me$ 'the cow'), and (iii) showing stress retraction to the first syllable rather than to the prefix (dax''_R 'mouse' ~ $a-dax''_R$ 'the mouse'). In addition to the general accent rule there are more particular processes which can be described as changing the accentual value of a particular morpheme depending on context or meaning; see e.g. Dybo (2000: 708–713) on Abaza preverbs and Dybo (2000: 733–734) on Abkhaz in general. For a metrical grid analysis of Abkhaz stress see Kathman (1991).

Sentence intonation is one of the most under-investigated fields of NWC grammar. Some instrumental work has been recently done on the Kabardian varieties spoken in Turkey, see Applebaum & Gordon (2007), Applebaum (2010, 2013). These are in many respects inconclusive, primarily because they do not take into account the syntactic encoding of focus, on which see e.g. Sumbatova (2009) and Rygaev (Ms). On sentence intonation in Abkhaz, see Hewitt (1979a: 97, 264–265). Some observations on affirmative and interrogative intonation in West Circassian are contained in Tov (2005: 70–78, 119–131), however, they are apparently based on introspection and are not supported by instrumental evidence.

2.5. Most important (morpho)phonological processes

Although phonological processes play an important role in NWC phonology and morphology, these languages are not as rich in such processes as e.g. some polysynthetic languages of North America, and these generally do not result in fusion and obliteration of morphemic boundaries. Most processes not pertaining to surface phonology, as e.g. the already mentioned colouring of vowels by adjacent consonants, are at least partly morphologically conditioned.

The phonological processes common to all NWC languages are consonant assimilation, mainly affecting personal prefixes, and vowel hiatus resolution. Personal prefixes consisting of a single obstruent (i.e. those belonging to the non-absolutive series, see § 5.2) regressively assimilate their laryngeal features to those of the following consonants (it is unclear, however, whether the following ejectives induce glottalization of the prefix or only its devoicing), cf. Besleney Kabardian *t-λeβ^w-a* 1PL.ERG-see-PST ‘we saw it’ vs. *d-βe-k^w-a* 1PL.ERG-CAUS-go-PST ‘we sent him/her’, Ubykh *a-s-q^wén* 3.ABS-1SG.ERG-seize-PRS ‘I seize it’ vs. *a-z-bjé-n* 3.ABS-1SG.ERG-see-PRS ‘I see it’ (Fenwick 2011: 28). In Abkhaz-Abaza all series of personal prefixes including the absolutive one can consist of a single consonant, however, assimilation does not occur in the absolutive position, cf. Abaza *j-ʒ-ʒ-əj-t* 3SG.N.ABS-1PL.ERG-boil-PRS-DCL ‘we boil it’ vs. *h-ʒ-əj-t* 1PL.ABS-dig-PRS-DCL ‘we dig’ (Tabulova 1976: 114; Hewitt 1979a: 265–266).

Akin to this assimilation is the intervocal voicing of indirect object and ergative personal prefixes in Kabardian, cf. Besleney Kabardian *wə-s-λeβ^w-a* 2SG.ABS-1SG.ERG-see-PST ‘I saw you’ vs. *wə-z-o-λaβ^w* 2SG.ABS-1SG.ERG-DYN-see ‘I see you’ or *f-je-ʒ-a* 2PL.ABS-DAT-wait-PST ‘you.PL waited for him/her’ vs. *qə-v-e-ʒ-a* CISL-2PL.IO-DAT-wait-PST ‘s/he waited for you.PL’. Otherwise there is no intervocal voicing of consonants in Kabardian, cf. *qə-fe-xe-r* CISL-dance-PL-ABS ‘those who dance’. Besides that, in West Circassian the prefixes of 1SG *s-* and 1PL *t-* fuse with the following sibilants yielding affricates, sometimes not attested otherwise, cf. Temirgoy *ʃe-r-ep* < *s-ʃe-r-ep* 1SG.ERG-know-DYN-NEG ‘I don’t know’ (Smeets 1984: 118–119).

The only instance of progressive assimilation is found in Abkhaz-Abaza and concerns the adverbial question prefix *-ba*, which turns into *-pa* after voiceless consonants, cf. Abkhaz *d-a-bá-ca-wa* 3SG.H.ABS-REL.LOC-QADV-go-IPF ‘where does he go?’ vs. *wə-ʃ-pá-qə-w* 2SG.M.ABS-REL.MNR-QADV-live-PRS.NFIN ‘how are you?’ (Spruit 1986: 123–124).

Vowel sequences on morpheme boundaries are normally disallowed except recent borrowings and resolved by the general principle deleting the higher of the two vowels, i.e. *a* > (*e* >) *ə*, cf. West Circassian *q-a-ʃe* < {*qe-a-e-ʃe*} CISL-3PL.ERG-DYN-know ‘they know’, *ʃ’ə-t-ep* < {*ʃ’ə-tə-ep*} LOC-stand-NEG ‘s/he does not stand’, Ubykh *bz-anté* < {*bzə-anté*} water-snake ‘river eel’ (Fenwick 2011: 28 after Vogt 1963: 92). The general rule, however, has exceptions, e.g. in Temirgoy West Circassian the /e/ of the cislocative preverb deletes before the 3SG.ERG prefix *ə*: *q-ə-ʔ^wa-β* < {*qe-ə-ʔ^we-βe*} CISL-3SG.ERG-say-PST ‘s/he said’. In Abaza it is simply the second of the two vowels that is preserved, cf. *a-h^w-əj-t* < {*a-h^wa-əj-t*} 3SG.N.ERG-say-PRS-DCL ‘it says’.

Besides the automatic resolution of vocalic hiatuses there exist instances of vowel coalescence bound to particular morphemes; thus, in Abkhaz and Abaza the imperfective suffix *-wa* coalesces with the final /a/ of the preceding morpheme, cf. Abkhaz *s-co-jt* < {*s-ca-wa-jt*} 1SG.ABS-go-IPF-DCL ‘I am going’ (Hewitt 1979a: 267), Abaza *j-bzazu-ʃ-t* < {*j-bzaza-wa-ʃ-t*} 3PL.ABS-live-IPF-FUT-DCL ‘they will live’; this does not happen word-finally and before some non-finite endings, cf. Abaza *h-ca-wa* 1PL.ABS-go-IPF ‘for us to go’.

A number of morphophonemic processes relates to affixes containing /j/. In Circassian vowels are deleted if followed by /jV/, cf. West Circassian *q-j-e-ʔ^wate* < {*qe-j-e-ʔ^wate*} CISL-3SG.ERG-DYN-tell ‘s/he tells’, *ə-ʔ-jə* < {*ə-ʔe-jə*} 3SG.PR-hand-ADD ‘and the hand’. In Kabardian this rule normally applies only to unstressed vowels, cf. Besleney Kabardian *χ^w-á-jə* become-PST-ADD ‘it happened, and’; stem-internal vowels are preserved, cf. West Circassian *de-k^we-ja-β* LOC-go-up-PST ‘s/he went up’. When two *j*-prefixes occur in a sequence, the first one dissimilates to /r/ in Circassian, cf. West Circassian *r-jə-ʔ^wa-β* < {*j[e]-jə-ʔ^wa-β*} DAT-3SG.ERG-say-PST ‘s/he said to him/her’, and is dropped in Abkhaz-Abaza, cf. Abkhaz *jə-l-t-o-jt* < {*jə-jə-l-ta-wa-jt*}

[3SG.N.ABS-]3SG.M.IO-3SG.F.ERG-give-IPF-DCL ‘she gives it to him’ (Hewitt 1979a: 267); however, the absolutive relative prefix is preserved, cf. Abkhaz *jə-j-h^wa-z* REL.ABS-3SG.M.ERG-say-PST.NFIN ‘that which he said’ (Hewitt 1979a: 267). In Circassian, when the 3PL.IO prefix *a-* is combined with a *j*-prefix not transformed into *r-*, metathesis occurs, cf. West Circassian *a-r-jə-tə-ɤ* 3PL.IO-DAT-3SG.ERG-give-PST ‘s/he gave it to them’ vs. *j-a-s-tə-ɤ* DAT-3PL.IO-1SG.ERG-give-PST ‘I gave it to them’.

Another instance of consonant dissimilation concerns the allomorphy of the 3PL non-absolutive prefix in Abkhaz-Abaza, which is normally *r(ə)-*, but changes to *d(ə)-* before the homophonous causative prefix, cf. Abkhaz *jə-r-bo-jt* 3SG.N.ABS-3PL.ERG-see-IPF-DCL ‘they see it’ vs. *jə-r-də-r-bo-jt* 3SG.N.ABS-3PL.IO-3PL.ERG-CAUS-see-IPF-DCL ‘they show it to them’ (Hewitt 1979a: 266). This dissimilation is not automatic: when two 3PL prefixes cooccur, both surface as *r(ə)-*, cf. Abkhaz *jə-rə-r-to-jt* 3SG.N.ABS-3PL.IO-3PL.ERG-give-IPF-DCL ‘they give it to them’ (ibid.); the doubling of the causative prefix itself does not result in dissimilation, either, cf. Abaza *j-wə-sə-r-r-cu-št* 3SG.N.ABS-2SG.M.IO-1SG.ERG-CAUS-CAUS-go-IPF-FUT-DCL ‘I won’t let you lead it’ (Tabulova 1976: 181).

Instances of haplology include the deletion of the ergative relativizer *d(ə)-* before the homophonous causative prefix in Ubykh, cf. *sə-[də-]də-pč²-ewt-ə* 1SG.ABS-[REL.ERG-]CAUS.SG-guest-FUT-NFIN ‘the one who will give me hospitality’ (Fenwick 2011: 29 after Dumézil 1957: 64) and the optional deletion of one of the causative prefixes in double causatives in Circassian (Letuchiy 2009a: 400–407), cf. (2.10).

Temirgoy West Circassian (Letuchiy 2009a: 401)

- (2.10) *s-jə-(ɤe-)ɤe-č’anə-ɤ*
 1SG.IO²-3SG.ERG-(CAUS-)CAUS-sharp-PST
 ‘S/he made me sharpen it.’

A peculiar case of metathesis is found in Ubykh with the plural possessive prefix *ew-* prefixed to *a*-initial nouns (Fenwick 2011: 29, 49–50), cf. *s-ew-č’ə* 1SG.PR-PL-horse ‘my horses’ vs. *s-a <w> b^ɛé < {s-ew-ab^ɛé}* 1SG.PR-PL-sick ‘my sick people’. Other apparent instances of metathesis involving /ə/ in Ubykh and Abkhaz-Abaza can rather be analyzed as “variant realizations of multiple instances of underlying” /ə/ (Fenwick 2011: 29), cf. Abaza *bzə* ‘tongue’ vs. *á-bəz* DEF-tongue < {*bəzə*}.

Circassian languages show two important vocalic alternations determined by, and indicative of, morphological structure. The first one is the dissimilation *e-e > a-e* in the last disyllabic foot of the stem, which is the clearest indication of the stem boundary in West Circassian (see Smeets 1984: 206–211, Arkadiev & Testelefs 2009: 122–131); in Kabardian the alternation is closely tied to stress, which in such contexts falls on the penultimate /a/ (</e/) of the stem, see above. Examples in (2.11) show the basic working of the alternation; stem boundary is indicated by |. In nominal complexes (see Lander 2017 and §6.1) the alternation normally occurs only once at the right boundary (2.11d), showing that such complexes are single words.

Besleney Kabardian (elicited)

- (2.11) a. *ž’ane|-xe-r < {ž’ene}*
 dress-PL-ABS
 ‘dresses’

² Corrected instead of erroneous “ABS” in the original.

- b. $\check{z}'ena-\check{c}'e < \{\check{z}'ene-\check{c}'e\}$
 dress-new
 'a new dress'
- c. $\check{z}'ene-\hat{z}\partial|-r < \{\check{z}'ene-\hat{z}\partial\}$
 dress-old-ABS
 'the old dress'
- d. $j\partial-\check{z}'ene-\check{s}\chi^wente-daxe|-r$
 POSS-dress-blue-beautiful-ABS
 'her beautiful blue dress'

The alternation affects most prefixes containing /e/, e.g. the cislocative, the applicatives and the word-initial *me*-allomorph of the dynamic prefix, cf. (2.12), but does not affect others, e.g. the word-internal *e*-allomorph of the dynamic prefix and the *je*-allomorph of the dative preverb, cf. (2.13).

Temirgoy West Circassian (elicited)

- (2.12) a. $ma-k^we < \{me-k^we\}$
 DYN-go
 's/he goes'
- b. $q\partial-sfa-k^we|-re-r < \{qe-s-fe-k^we|-re\}$
 CISL-1SG.IO-BEN-go-DYN-ABS
 'the one who goes to me'
- c. $q\partial-s-a\check{z}e|-re-r < \{qe-s-e\check{z}e|-re\}$
 CISL-1SG.IO-DAT-wait-DYN-ABS
 'the one who waits for me'
- (2.13) a. $q-e-k^we$
 CISL-DYN-go
 's/he is coming'
- b. $q-je-\check{z}e|-\check{s}'t\partial-B$
 CISL-DAT-wait-IPF-PST
 'they were waiting for it'

In West Circassian the *e~a* alternation is in the counterfeeding relation with the rule deleting the final /e/ in some environments, cf. $qe-k^wa-B < qe-k^wa-be$ CISL-go-PST 's/he came'. The alternation is the source of most, but clearly not all, occurrences of /a/ in Circassian.

Another vocalic alternation in Circassian applies to prefixes with the structure /Ce/ and changes this /e/ to /ə/ if the prefix is followed by another prefix in a particular morphological slot (Smeets 1984: 215–217, Arkadiev & Testelefs 2009: 131–139). In West Circassian the alternation concerns the cislocative and applicative prefixes and is triggered by subordinators (for the cislocative only) (2.14a) and applicatives (2.15a,b), but not by the ergative prefix, the dynamic prefix and the causative prefix (2.14b), (2.15c). In Kabardian the range of alternation triggers is broader and includes the dynamic prefix (2.16a) as well as the ergative reciprocal prefix (2.16b), but again excludes the causative (2.16c).

Temirgoy West Circassian

- (2.14) a. $q\partial-z-e-k^we-xe-m$
 CISL-REL.TEMP-DYN-go-PL-OBL
 'when they came'

- (2.15) b. *sə-qe-w-e-λeβ^w-a?*
1SG.ABS-CISL-2SG.ERG-DYN-see-Q
'Do you see me?'
- a. *qə-f-a-β^wetə-n*
CISL-BEN-3PL.ERG-find-MSD
'that they could find it'
- b. *w-a-də-de-č'ə-β*
2SG.ABS-3PL.IO-COM-LOC-exit-PST
'you quit (the village) with them'
- c. *sə-z-fe-b-βe-k^we-š'tə-r*
1SG.ABS-REL.IO-BEN-2SG.ERG-CAUS-go-FUT-ABS
'the one to whom you will send me'

Besleney Kabardian

- (2.16) a. *q̇-a-x^wə-v-o-ɾ^wete-ž'-q̇e*
CISL-3PL.IO-BEN-2PL.ERG-DYN-narrate-RE-EMP
'but you tell them stories'
- b. *q̇ə-zerə-š'-a-xe-r*
CISL-REC.ERG-lead-PST-PL-ABS
'husband and wife', lit. "those who have led each other"
- c. *q̇ə-s-x^we-b-βe-n-a-q̇əm*
CISL-1SG.IO-BEN-2SG.ERG-CAUS-remain-PST-NEG
'you haven't left (anything) for me'

The phonological motivation and historical sources of this alternation are unclear.

3. Lexical classes

The NWC systems of lexical classes (parts-of-speech) are different from Standard Average European systems in various respects, partly because of the large amount of morphology that can determine the syntactic distribution of a word but is almost non-selective with respect to bases. Of course, like other languages, NWC languages display the most basic distinction between major lexical classes (content words) and minor lexical classes (grammatical words, particles, ideophones, etc.). The distinctions within the class of content words are complex, though. NWC languages belong to languages with flexible word classes (van Lier & Rijkhoff (eds.) 2013). Nouns in these languages can function as predicates and take morphology typical for predicates, and verbs apparently can constitute referring expressions (sometimes without any traces of nominalization). Cf. example (3.1).

West Circassian

- (3.1) *a-š'ə-psew-xe-re-r* *adəge-š't-x-ep*
3PL.IO-LOC-live-PL-DYN-ABS Circassian-FUT-PL-NEG
'It will not be Circassians who (will) live there.'

However, in the argument position, nouns and verbs can be distinguished, as the latter do not allow modification by adnominal possessors or by other relative clauses. In Abkhaz-Abaza, verbs further take articles, and nouns demonstrate some specifics when occurring as predicates as well: in particular, nouns can lack absolutive cross-reference where it is expected for predicates (see also Jakovlev 1951/2006: 133):

Abaza (elicited)

- (3.2) (j-)ɣʷaʒ'-p awəj
 (3SG.N.ABS-)yellow-NPST.DCL DIST
 'It is yellow.'

Property words (as a semantic class) constitute a subclass of nouns and have the same distribution. When combining with words denoting typical “nouny” concepts, property words usually follow them, yet since the latter may combine with each other as well, there are no formal grounds on which we can contrast nouns and adjectives. Adjectival expressions more easily participate in comparative constructions and/or combine with various markers of intensity, but some nominal concepts allow this as well. Still, there are sometimes minor classes of words which may be considered adjective-like but are used in specific attributive constructions. E.g., in Circassian these are words like ‘yesterday’s’, which may modify the noun outside of the nominal complex (see §6.1). Relational adjectives (like ‘stony’) are almost absent, although all NWC words are reported to use various caritive (‘without’) suffixes and Abkhaz has a suffix deriving the description of the material (Hewitt 1979a: 117).

Non-derived adverbs also constitute a closed class. Most adverbials are derived by highly productive adverbial affixes which may attach to all kinds of predicates; cf. (3.3a) with the adverbial suffix attached to a noun, (3.3b) with the adverbial suffix attached to a property word, and (3.3c) with the same suffix attached to a verb. Presumably, these adverbials can be treated as nouns and verbs in the adverbial function rather than constitute a separate part-of-speech.

Ubykh

- (3.3) a. ɤ-éw-êêê-ne χ'əɬ'ésš'e-n a-ǵá-ɤ-ǵe
 3SG.PR-PL-people-OBL.PL capital-ADV 3PL.OBL-LOC-be.hanging-PST
 ‘his people had it as [their] capital’ (Fenwick 2011: 42, after Dumézil & Esenç 1975a: 44)
- b. ag'é-n
 bad-ADV
 ‘badly’ (Fenwick 2011: 95)
- c. šʷə-déxe-ne-n šʷə-qʷmále-n
 2PL.ABS-stand.up.PL-PL-ADV 2PL.ABS-dance(IMP)-PL
 ‘stand up and dance!’ (Fenwick 2011: 162, after Dumézil 1967: 54)

Grammatical words primarily include postpositions (§4.4), which are, however, typically only few, many of functions typical for such items being fulfilled by verbal morphology (§5.3). There are also conjunctions, which are even fewer than postpositions, since subordination usually involves either exclusively morphological marking or nominalized structures introduced by postpositions. However, European-style coordinating conjunctions are also found (§7.2). Of course, the distinction between content words and grammatical words may be blurred because content words sometimes obtain grammatical functions.

4. Nominal morphology

Nominal morphology of NWC languages is rather “poor” if compared to the verbal morphology of the same languages or to the Northeast Caucasian nominal morphology, however, it possesses its own complexities and typological quirks. Given the rather elusive distinction between the major word classes in NWC (§3), we treat as “nominal” those morphological features that prototypically apply to “thing-denoting words” and occur on (heads of) argument and adjunct phrases rather than on predicates, e.g. possession, number, case and definiteness. It

has to be kept in mind, however, that most of such features are applicable to genuine verbs, which freely attach most of the relevant morphological markers.

4.1. Nominal inflection

NWC languages show considerable variation both in the nominal inflectional features available in individual languages and in their formal expression, though some common patterns may be observed as well. Table 4.1 summarizes the distribution of nominal inflectional categories across the five NWC languages.

Table 4.1. Nominal categories in NWC

	Abkhaz	Abaza	Ubykh	West Circassian	Kabardian
gender	+	+	–	–	–
possession	+	+	+	+	+
alienability distinctions	–	–	–	+	–
number	+	+	+	+	+
definiteness	+	+	+	(+)	(+)
grammatical cases	–	–	+	+	+
peripheral cases	+	+	+	+	+

Gender is attested only in Abkhaz and Abaza and manifests itself mainly in personal indexing (Ubykh shows a vestigial optional distinction in the 2nd singular possibly characterizable as “polite feminine” vs. “default”, Dumézil & Esenç 1975b: 76–79, Fenwick 2011: 47–48). The Abkhaz-Abaza gender system is “nested”, with a primary opposition between human vs. non-human, and a subordinate distinction between masculine and feminine in the former. In sharp contrast to the Northeast Caucasian languages, there is no gender agreement of nominal modifiers in Abkhaz and Abaza; moreover, being formally expressed only in the head-marking morphology, gender can be considered a subfeature of person. This is supported by the fact that both person and gender are determined strictly on the semantic basis, so no nominal classification can be postulated. We will describe the formal exponence of gender below together with possession.

Given the pronounced preference of NWC languages for head-marking, it is not surprising that all the languages of the family express adnominal possession by means of personal prefixes on nouns. While Abkhaz, Abaza and Ubykh attach the personal prefixes directly to the nominal stem (4.1), Kabardian uses the possessive applicative *jə-* to host the personal prefixes (4.2), while West Circassian employs both strategies, marking inalienable possession directly and alienable possession by means of the possessive applicative (4.3).

Abaza (elicited)

- (4.1) a. **s-psə**
 1SG.PR-soul
 ‘my soul’
 b. **j-aš’á**
 3SG.M.PR-brother
 ‘his brother’

Besleney Kabardian (elicited)

- (4.2) a. **w-jə-wəne**
2SG.PR-POSS-house
‘your house’
- b. **s-jə-šəpχ^w**
1SG.PR-POSS-sister
‘my sister’

Temirgoy West Circassian (elicited)

- (4.3) a. **p-šhe**
2SG.PR-head
‘your head’
- b. **w-jə-č’ezəw**
2SG.PR-POSS-time
‘your time’

Table 4.2 lists the possessive prefixes in Abaza, Ubykh and West Circassian.

Table 4.2. Possessive prefixes

	Abaza	Ubykh	West Circassian	
			inalienable	alienable
1Sg	s-	sə-	s(ə)-	s-jə-
2SgM	w-	wə- ~ χe-	p- / wə-	w-jə-
2SgF	b-			
3SgM	j-	ke-	ə-	Ø-jə
3SgF	l-			
3SgN	a-	šə-	t(ə)-	t-jə-
1Pl	h-			
2Pl	š-	š ^w ə-	š ^w (ə)-	š ^w -jə-
3Pl	r-	ake-	a-	j-a-

It is clear that Kabardian has extended the common-Circassian alienable strategy of encoding possession at the expense of the inalienable strategy, which is already fairly restricted and lexically determined in West Circassian (Rogava 1980, Gorbunova 2009). For instance, while most body part terms such as ‘arm’ or ‘head’ employ the inalienable model, less prototypical body part terms such as ‘moustache’ as well as body-internal organs show variation. Of kinship terms, the more archaic nouns for ‘son’ and ‘daughter’ employ the inalienable model (4.4a), while the more commonly used novel terms with the basic meanings ‘boy’ and ‘girl’ predictably use the alienable strategy (4.4b).

Temirgoy West Circassian (Gorbunova 2009: 156)

- (4.4) a. **s-q^we**
1SG.PR-son
‘my son’
- b. **s-jə-č’at**
1SG.PR-POSS-boy
‘my son’, lit. ‘my boy’

Besides the personal possessive prefixes, the relevant slot can be also occupied by the relative prefix (see §7.3), as well as by reciprocal possessive markers indicating a mutual relationship between the possessor and the possessed (4.5).

Ubykh (Fenwick 2011: 52 after Vogt 1963: 58)

(4.5) *a-blə-ze~~xew~~-ž'əλe*

DEF-seven-REC.PR-brother

‘the seven brothers (i.e. the seven people who are brothers to each other)’

All NWC languages express nominal determination (definiteness and/or indefiniteness) by morphological means, albeit in different ways (see e.g. Khalbad 1975). In Abkhaz, Abaza and Ubykh, there is a prefixed “definite” article *a-* occupying the same slot as the possessive prefixes. In Abkhaz, the prefix has become a generic article and no longer signals definiteness or even specificity (4.6); notably, in Abkhaz dictionaries nouns and adjectives are commonly listed with initial *a-*. In Abaza, the prefixed article is less advanced in its functional bleaching and signals specificity rather than just definiteness, and in Ubykh, according to Dumézil (1931: 13) and Fenwick (2011: 45), the prefixed article is used with definite nominals.

Abkhaz (Shakryl 1970: 8)

(4.6) *a-škol* *s-ta-le-jt* *w-h^wa-ma?*

ART-school

1SG.ABS-LOC-enter-AOR.DCL

2SG.ERG-say-Q

‘Did you say you started school?’

Both Abkhaz and Abaza mark specific indefinite (but not non-specific) nominals by the suffix *-k*, going back to the numeral ‘one’ (Aristava et al. eds. 1968: 44; Tabulova 1976: 46) (4.7). Ubykh and Circassian languages use the numeral ‘one’ when introducing referents into the discourse (4.8). In Circassian, such use is optional; although the sources on Ubykh do not state explicitly that such use of ‘one’ is obligatory, both Dumézil (1931: 15) and Fenwick (2011: 45) treat it as “indefinite article” (cf. also Khalbad 1975: 19–20). The Circassian languages have no dedicated grammaticalized markers of (in)definiteness, although they mark nonspecificity and indefiniteness by omission of grammatical case markers (see below).

Abaza

(4.7) *j-aʔa-n* *j-bzaz-wə-n* *taʔ-k-əj* *laʔaʔ-k-əj.*

3PL.ABS-be-PST 3PL.ABS-live-IPFV-PST old.woman-INDF-ADD old.man-INDF-ADD

‘Once upon a time there lived an old woman and an old man.’

Ubykh (Fenwick 2011: 201, 204)

(4.8) *fax'e* *ze-pχ'és^w-jeb'e-n* *še-pχ'édə^k' qə-κ-qé.*

long.ago

one-woman-widow-OBL.SG

three-girl

PVB-be.hanging.SG-PST

‘Long ago, there was a woman who had three daughters.’

As a mirror-image of the varying degrees of generalization of the prefixed definiteness/specificity markers in Abkhaz, Abaza and Ubykh, bare nominals have more or less restricted use in the three languages. In Abkhaz, bare nominals occur just in a few contexts (cf. Khalbad 1975: 128–153; Hewitt 1979a: 153–154), e.g. as predicates, in combination with numerals and, when non-specific, under direct scope of verbal negation, as in (4.9). In Abaza, bare nominals are admitted in a much broader range of contexts (cf. Khalbad 1975: 128), including specific indefinite (4.10a), which can be contrasted with (4.10b), where the same referent is encoded by the prefixed nominal in the second mention. In Ubykh, bare nominals can even be definite when modified by a preposed relative clause (Charachidzé 1989: 418) (4.11).

Abkhaz (Hewitt 1979a: 154)

(4.9) **ž^wə sə-m-be-yt.**

cow 1SG.ERG-NEG-see-AOR.DCL

‘I didn’t see a cow / any cows.’

Abaza

(4.10) a. **ĉamlā-awəra r-č’pa-wa j-a-la-ga-ṭ.**

stairs-tall

3PL.ERG-make-IPFV

3PL.ABS-3SG.N.IO-LOC-begin-AOR.DCL

‘They began to build a tall staircase.’

b. **a-ĉamlā r-č’pa-ṭ.**

DEF-stairs

3PL.ERG-make-AOR.DCL

‘They built the staircase.’

Ubykh (Fenwick 2011: 45 based on Hewitt’s unpublished fieldnotes)

(4.11) **d-ḡa-t^w dəwe-qé mǝzǝ**

REL-3SG.PR-father

die-PST

child

‘the child whose father has died’

Somewhat surprisingly, the definite/generic and the indefinite markers in Abkhaz and Abaza are not mutually exclusive, which is perhaps facilitated by the fact that they occur on different sides of the nominal word. The combination of the definite and indefinite markers is used to refer to one element of a contextually given set, as in (4.12).

Abaza (Tabulova 1976: 46)

(4.12) **a-č’k^wən <...> a-ĉ-k aʔa-xə-m-k^wa j-ba-ṭ.**

DEF-boy

DEF-ox-INDF

be-RE-NEG-CVB

3SG.M.ERG-see-AOR.DCL

‘The boy saw that one of the (two) oxen was no longer there.’

In the domain of number, NWC languages show both consistency in the functional distinction between an unmarked singular and a marked plural (no grammaticalized expression of any other possible number features such as dual is attested) and considerable variation in the formal expression as well as interaction with other nominal features. The simplest system is attested in Kabardian, where the plural is consistently marked by the suffix *-xe* with all nominals. Already in its sister West Circassian, in addition to the same dedicated marker *-xe* plurality can be expressed cumulatively with the oblique case, and sometimes both the dedicated and the cumulative markers are used in the same word, cf. the following variants of ‘man.PL.OBL’: *çəf-xe-m* man-PL-OBL, *çəf-me* man-OBL.PL, *çəf-xe-me* man-PL-OBL.PL. Abaza and Abkhaz distinguish between the default plural suffix *-k^wa* and the human plural suffix *-ĉ^wa* ~ *-ĉa*. Notably, this dichotomy is not fully parallel to the distinction between human and non-human genders. First, the human plural suffix is no longer productive, e.g. does not attach to borrowed nouns denoting humans, which all take the default suffix, cf. Abaza *a-student-k^wa* ‘the students’ vs. *a-nxaŋ^w-ĉá* ‘the workers’. Second, in many cases the human plural suffix is followed by the default pluralizer, e.g. Abaza *j-ájš^w-ĉa-k^wa* ‘his brothers’. Both Abkhaz and Abaza (but not the Circassian languages) have suppletion for number in some nouns denoting humans, cf. Abaza *a-ŋ^wǝ* ‘human.SG’ ~ *a-wǝǝ* ‘human.PL’ (Genko 1955: 124), Abkhaz *a-ph^wás* ‘a woman’ ~ *á-h^wsa* ‘women’ (Hewitt 1979a: 149); such plural stems nevertheless can attach the regular plural suffixes, cf. Abkhaz *a-h^wsa-k^wa* DEF-woman.PL-PL.

Abkhaz and Abaza also have collective suffixes forming grammatically plural nominals: the Abkhaz *-aa*, Abaza *-(r)ǝa* used for ethnic groups and family names (4.13), and *-(a)ra*

restricted to a closed set of nouns with the singulative suffix *-s* and mostly restricted to young animals, cf. Abaza *çəj-s* ‘sparrow’ vs. *ç-ara* ‘sparrows’; the latter suffix can attach the default plural marker as well.

Abkhaz (Hewitt 1979a: 151)

- (4.13) *x-ɣə-k kʷətaɔl-aa a-maʃina j-a-zə-pšə-w-p̃.*
 three-CLH-INDF Kwitolian-COLL DEF-bus 3PL.ABS-3SG.N.IO-BEN-wait-PRS-ST.DCL
 ‘Three Kwitolians are waiting for the bus.’

An expression of associative plurality is found in Abkhaz-Abaza (Hewitt 1979a: 152), cf. Abkhaz *Zaúra-raa* ‘Zaira and friends’, as well as in Circassian, cf. Kabardian *sofjat same* ‘Sofiyat and others’ (Kumakhov 1971: 25).

The most intricate system of nominal number marking among the NWC languages is attested in Ubykh. This language does not have a default dedicated morphological expression of plurality, number being expressed cumulatively with the oblique case: *-n* OBL.SG vs. *-ne* OBL.PL (4.14). The absolutive case is unmarked and does not distinguish number. Suppletion for number is also attested, cf. *pχ’ésʷ* ‘woman’ vs. *šʷəmçé* ‘women’, *məzə* ‘child’ ~ *çʷəçə* ‘children’ (Fenwick 2011: 34).

Ubykh (Fenwick 2011: 33)

- (4.14) a. *sə-pχ’ésʷə-n jə-dʷə-n*
 1SG.PR-woman.SG-OBL.SG 3SG.ABS-sew-PRS
 ‘My wife is sewing it.’ (based on Hewitt’s unpublished fieldnotes)
- b. *a-šʷənž’ešʷe-ne wəbáx a-bjé-be*
 DEF-Abdzakh-OBL.PL Ubykh 3PL.ERG-see-COND.IRR
 ‘If the Abdzakhs see an Ubykh...’ (after Vogt 1963: 52)

The oblique plural suffix *-ne* can also co-occur with the 2nd person plural possessor prefix, redundantly marking the plurality of the possessor and appearing even in absolutive positions (Fenwick 2011: 48) (4.15); this is a manifestation of the general rule triggering pluralization whenever 2PL is present, see also § 5.2.

Ubykh (Fenwick 2011: 48 based on Dumézil & Esenç 1975a: 44)

- (4.15) *šʷeɬé šʷə-χ’əšʷ-ne á-čʷe-qe*
 2PL 2PL.PR-reign-PL 3SG.ABS-end-PST
 ‘Your (pl.) reign has come to an end.’

Moreover, Ubykh has a special prefix *ew-* marking the plurality of the possessed in possessive constructions (Fenwick 2011: 49–51), cf. *šʷ-ew-čʷə* 1PL.PR-PL-horse ‘our horses’.

In all NWC languages overt marking of plurality normally implies specificity. For Abkhaz and Abaza this is formally manifested in the ban on the occurrence of plural morphemes on bare common nouns (cf. Testelets 2017). Note that in these languages plural suffixes are compatible with both the generic/specific and the indefinite article, cf. Abaza *a-çla-kʷa* ‘the trees’ vs. *çla-kʷa-k* ‘some trees’. This is paralleled by the virtually obligatory use of overt grammatical case marking with plural nominals in Circassian languages, on which see below. Bare nominals in both Abkhaz-Abaza and Circassian are usually number-neutral, cf. (4.16).

Temirgoy West Circassian (Arkadiev & Testelets submitted)

- (4.16) *stoɬə-m txəɬ tje-λ*
 table-OBL book LOC-lie
 ‘There is a book on the table / There are books on the table.’

The situation in Ubykh is different, given that number marking is restricted to the oblique case; anyway, the available sources do not comment on the interaction between case/number and definiteness.

There is a major split between Abkhaz-Abaza and the other NWC languages with respect to the presence of grammatical case marking. While the former lack any flagging of argument nominals, relying exclusively on pronominal head-marking for identification of their syntactic and semantic roles, both Ubykh and Circassian, in addition to the systems of head-marking almost as elaborated as those of Abkhaz and Abaza, flag their argument nominals by means of case suffixes, thus exhibiting rather consistent double-marking. The grammatical case systems of Ubykh and Circassian are very simple, distinguishing between just two cases: the absolutive and the oblique (often somewhat misleadingly called “ergative” in traditional grammars, cf. the critique of such practice in Kumakhov 1967). It has already been mentioned that in Ubykh the absolutive case is unmarked and does not distinguish number; by contrast, in Circassian languages, the absolutive has an overt suffix *-r*, in the plural following the suffix *-xe*. Table 4.3 summarizes the main formal exponents of the core cases across the two numbers in Ubykh and Circassian (the special allomorphs of the oblique case found with pronouns in Circassian will be discussed separately in section 4.2; on the case systems of the Circassian languages see Shagirov 1961, Kuipers 1962, Taov 1967, Zekokh 1969, Kumakhov 1971, Arkadiev 2014a).

Table 4.3. Grammatical case markers in Ubykh and Circassian

		Ubykh	West Circassian	Kabardian
Sg	Abs	∅	<i>-r</i>	<i>-r</i>
	Obl	<i>-n</i>	<i>-m</i>	<i>-m</i>
Pl	Abs	∅	<i>-xe-r</i>	<i>-xe-r</i>
	Obl	<i>-ne</i>	<i>-xe-m, -me, -xe-me</i>	<i>-xe-m</i>

On the functional side, there is a considerable asymmetry in the distribution of the grammatical cases. The absolutive is restricted to marking the S of intransitive verbs (4.17a), and the P of transitive verbs (4.17b). The oblique, by contrast, covers a very wide range of grammatical roles, including the ergative A of transitive verbs (4.18a), indirect objects with both transitive and intransitive verbs (4.18b,c), including indirect objects introduced by specialized applicative prefixes (4.18d), adnominal possessors (4.18e) and objects of postpositions (4.18f), and certain locative and temporal adjuncts (4.18g). Though we provide only West Circassian examples here, the distribution of grammatical cases is largely the same in Kabardian and Ubykh.

Standard West Circassian

- (4.17) a. *the-r adəye-ba?*
 God-ABS Circassian-EMP
 ‘Isn’t God a Circassian?’
- b. *nəbž’ə-č’e-maqe-r ze-x-jə-xə-βe amdexan.*
 age-young-voice-ABS REC.IO-LOC-3SG.ERG-carry-PST Amdekhan
 ‘Amdekhan heard a young voice.’
- (4.18) a. *adəye-m a-r-jə-ɭ^wa-β.*
 Circassian-OBL 3PL.IO-DAT-3SG.ERG-say-PST
 ‘The Circassian told them.’

- b. *jane z-jə qə-r-jə-ɭ^we-ž'ə-ɤ-ep a-nahə-č'e-m.*
 mother one-ADD CISEL-DAT-3SG.ERG-say-RE-PST-NEG 3PL.PR-COMP-young-OBL
 'Mother didn't say anything to the youngest (son).'
- c. *č'əte-r zeweλ-me ja-žə-ɤ.*
 village-ABS warrior-OBL.PL 3PL.IO+DAT-wait-PST
 'The village waited for the warriors.'
- d. *č'əte-m ja-λəχ^wəžə-me w-a-də-de-č'ə-ɤ*
 village-OBL POSS-hero-OBL.PL 2SG.ABS-3PL.IO-COM-LOC-go.out-PST
 'You went out of the village together with its heroes.'
- e. *pəjə-m ə-pse*
 enemy-OBL 3SG.PR-soul
 'the enemy's soul'
- f. *χ^wəɭfəɤ-jə-š'-me a-wəž jə-t-ew*
 man-LNK-three-OBL.PL 3PL.PP-after LOC-stand-ADV
 'following the three men'
- g. *nefsə^we-m <... > zeč'e de-č'ə-ɤ.*
 dawn-OBL all LOC-go.out-PST
 'At dawn everybody left (the village).'

Overt marking for grammatical case in Circassian languages is normally not used with proper names (except for recent Russian loans) and with possessed nouns; by contrast, nouns marked for plural usually inflect for case, at least in written sources. With plural possessed nouns, the rule requiring overt case markers after the plural suffix wins, contrast (4.18e) above with (4.19).

West Circassian

- (4.19) *ə-nape-xe-r ze-tər-jə-λha-ž'ə-ɤe-x.*
 3SG.PR-eyelid-PL-ABS REC.IO-LOC-3SG.ERG-put-RE-PST-PL.ABS
 'he closed his eyelids'

A notable and typologically non-trivial feature of the grammatical cases in Circassian languages is the fact that indefinite and especially non-specific nominals usually lack case markers and cannot inflect for number as well, as in (4.16) above. Though reminiscent of the well-known phenomenon of differential object marking (Comrie 1979, Bossong 1985, de Swart 2007), the alternation of overt vs. zero case marking in Circassian is not restricted to a particular value of case or a particular syntactic position. Bare nominals in Circassian can be both absolutive (4.20a) and oblique (4.20b), and can occupy any of the syntactic positions available to these two cases. For more details see Arkadiev & Testelelets (submitted).

Besleney Kabardian

- (4.20) a. *ž'em qe-s-š'ex^wə-ne-w s-o-ḱ^we ž'-jə-ɭ-a.*
 cow CISEL-1SG.ERG-buy-FUT-ADV 1SG.ABS-DYN-go LOC-3SG.ERG-say-PST
 'He said: I'm going in order to buy a cow.'
- b. *č'ete-ɤe-s-a apx^wede-pisme jə-txə-ne-qəm.*
 boy-CAUS-bring.up-RES such-letter 3SG.ERG-write-FUT-NEG
 'No well-behaved boy will write such a letter.' (elicited)

In addition to grammatical cases, Circassian and Ubykh have a small number of peripheral cases marking adjunct nouns; such peripheral cases are found in Abaza and Abkhaz as well; see Table 4.4 for the overview.

Table 4.4. *Peripheral cases*

	Abkhaz	Abaza	Ubykh ³	West Circassian	Kabardian
Instrumental	<i>(-la)</i>	<i>-la</i>	<i>-ale, -onə</i>	<i>-č'e, -ž'e, -g'e</i>	<i>-č'e</i>
Adverbial	<i>-s</i>	<i>-ta</i>	<i>-n(ə)</i>	<i>-ew</i>	<i>-we ~ -u</i>
Locative	–	–	<i>-be</i>	–	–
Limitive ‘until’	<i>-nza</i>	<i>-za</i>	–	–	–
Comparative ‘than’	–	–	<i>(-q'e)</i>	–	–

Some peripheral case markers go back to postpositions. This is clearly seen for the Abkhaz and Abaza instrumental, which in Abaza grammars (e.g. Tabulova 1976: 273–274) is treated as a suffix and attaches directly to the nominal form, while its cognate in Abkhaz is rather a free standing postposition with possessive prefixes indexing its nominal complement (see e.g. Genko 1955: 119), cf. (4.21) vs. (4.22).

Abaza (Genko 1955: 119)

- (4.21) *χán-la j-a-ŋʷə-r-χ-əj-d*
 saw-INS 3SG.N.ABS-3SG.N.IO-LOC-3PL.ERG-saw-PRS-DCL
 ‘They saw with a saw.’

Abkhaz (Aristava et al. 1968: 193)

- (4.22) *a-čada a-ləmχa-kʷa rə-la*
 DEF-donkey 3SG.N.IO-ear-PL 3PL.IO-by
 ‘donkey [is recognized] by its ears’

Likewise, the Ubykh comparative marker *-q'e* is suffixed to nouns but behaves as an inflecting postposition with pronouns and may even stand on its own (Fenwick 2011: 53–54). The postpositional origin of the Circassian instrumental is evident from the fact that it can attach to the oblique case and participate in the definiteness-based case alternation discussed above, cf. Kabardian *qate-m-č'e* ‘with the pencil’ vs. *qate-č'e* ‘with a pencil’.

A notable feature of the NWC peripheral case systems is the lack of dedicated spatial cases. The only exception is Ubykh, where the locative *-be* serves as the general spatial marker not limited to any particular function, cf. its use as both allative (4.23a) and ablative (4.23b) depending on the verb.

Ubykh (Fenwick 2011: 41)

- (4.23) a. *səbʷá čán-be s-k'e-qe-jt.*
 1SG China-LOC 1SG.ABS-go-PST-RS.SG
 ‘I had gone to China.’ (based on Hewitt’s unpublished fieldnotes)
- b. *šʷešenž'e-be a-le-tʷ-qe-jλ.*
 Istanbul-LOC 3.ABS-PVB-leave-PST-RS.PL
 ‘They had come from Istanbul.’ (after Dumézil & Namitok 1955: 441)

This lack of spatial cases is compensated by a highly elaborated system of verbal spatial marking (§ 5.3). Spatial and temporal meanings are also encoded by the oblique (see above) and

³ The system of peripheral cases in Ubykh remains unclear, since different sources give different inventories of markers. Thus, Fenwick (2011: 40, 43–45) lists only *-ale* as the marker of “comitative-instrumental”, not commenting on the suffix *-onə* described for more or less the same range of functions by Dumézil (1931: 27–29) and Charachidzé (1989: 370–371); von Mészáros (1934: 49, 51) assigns the first of these suffixes to the “comitative” and the second to the “instrumental”.

the instrumental cases. The latter is highly polyfunctional, especially in Circassian, where it comprises a very wide range of functions (see Serdobolskaya 2011 on West Circassian and Ryzhova et al. 2016 on Kabardian). Interestingly, only in Ubykh does the instrumental case also mark comitative relations (cf. Dumézil 1931: 27; Fenwick 2011: 43–44).

An important feature of all NWC case systems is the presence of an adverbial case whose function can be broadly described as turning a nominal into a secondary predicate and whose marker usually coincides with one of the converbs (see e.g. Shagirov 2001). When attaching to adjectives, the adverbial case turns them into adverbs (= predicate modifiers) or depictive expressions, see ex. (3.3b) above. The adverbial form of nouns is mainly used in expressions of being or becoming, ex. (3.3a) above; on its use in internally headed relative clauses, see §7.3. A typologically peculiar use of the Circassian adverbial case together with the manner relativizer *zerV-* conveys holistic quantification (Arkadiev & Gerasimov 2011, 2012) (4.24).

Besleney Kabardian

- (4.24) *adaγjeja-r* *ten-č'-ja* *zerə-mir-əw* *ze-λə-r-a-ka-še.*
 Adygeya-ABS where-INS-ADD REL.MNR-world-ADV REC.IO-LOC-DAT-3PL.ERG-CAUS-know
 ‘They let the whole world know about Adygeya.’

Besides the inflectional features mentioned above NWC languages have morphological means for marking coordination of nominals (see e.g. Kumakhov 1971: 170–183 on Circassian). In Abaza and Abkhaz these coincide with the more general additive markers, but Circassian languages have the dedicated coordinating affix *-re* appearing on all conjuncts. The most peculiar feature of this affix is that the nominal preceding it usually occurs in the oblique case regardless of its actual syntactic position, as in (4.25), where the conjoined NP is clearly absolutive. For a more detailed analysis of NP coordination in West Circassian see Ershova (2011).

Temirgoy West Circassian

- (4.25) *č'emə-m-re* *bəx^wə-m-re* *ze-də-de-č'ə-me...*
 cow-OBL-COORD bull-OBL-COORD REC.IO-COM-LOC-go.out-COND
 ‘if a cow and a bull go together...’

In Ubykh, nominal coordination is expressed by means of the abovementioned instrumental/comitative case (Vogt 1963: 84; Fenwick 2011: 44–45), regardless of the actual syntactic position (4.26).

Ubykh (Vogt 1963: 84; Fenwick 2011: 45)

- (4.26) *sə-n-ale* *sə-t^v-ale* *sə-ná-qe-qe.*
 1SG.IO-mother-INS 1SG.IO-father-INS 1SG.IO-3PL.ERG-say-PST
 ‘My mother and my father said it to me.’

4.2. Morphology of pronouns

Morphology of pronouns in NWC languages shows certain peculiarities. In table 4.5 the basic forms of the personal pronouns for the five languages are given; cf. Table 4.2 above with the possessive prefixes.

Table 4.5. Personal pronouns

	Abkhaz	Abaza	Ubykh	West Circassian	Kabardian
1Sg	sa(rá)		s(ə)ɸʷé	se	
2Sg	wa(rá) (m), ba(rá) (f)		w(ə)ɸʷé	we	
3Sg	ya(rá) (m,n), la(rá) (f)		aɸʷé	demonstratives	
1Pl	ha(rá)	ha(rá)	š'əɸʷéɭe	te	de
2Pl	šʷa(rá)	ša(rá)	šʷəɸʷéɭe	šʷe	fe
3Pl	dará		aɸʷéɭe	demonstratives	

As can be seen, the most complex system is found in Abkhaz-Abaza, with a gender distinction in the singular 2nd and 3rd persons⁴. By contrast, the other branches of NWC show only the most basic contrast between three persons and two numbers, with Circassian arguably lacking genuine 3rd person pronouns using demonstratives instead (in fact, the speakers of Abaza also tend to employ demonstratives instead of 3rd person pronouns; see below). The cognacy between the 1st and 2nd person pronouns of all five languages is apparent, with the exception of 1Pl. However, the morphological makeup of pronouns is different in different branches of NWC.

While in the Circassian languages free pronouns occur just as bare stems, which is also possible in Abkhaz-Abaza, pronominal stems can be extended by suffixes. The suffixes *-ra* in Abkhaz-Abaza and *-ɸʷe* in Ubykh can be considered synchronically as markers of free stressed pronouns, while the *-ɭe* in Ubykh is clearly a specialized plural suffix, generalized from the 3rd person and the demonstrative system, where it is non-redundant. The *-t* suffix of the Abkhaz exclusive pronouns is also used to mark plural of the demonstratives (see below). The pronouns of the Circassian languages also have a *-r* formative in certain forms, cf. the instrumental *se-r-čʷe* 1SG.INS; this element also shows up in the adverbial form of demonstratives, cf. West Circassian *a-r-ew* ‘thus’, as well as in emphatic reduplicated pronouns, cf. West Circassian *se-r-se-r-ew* ‘I myself’ (Rogava & Kerasheva 1966: 88). It is not clear whether this element is cognate with the Abkhaz-Abaza *-ra*, see Smeets (1992a).

The common feature of all 1st and 2nd person pronouns in NWC is the lack of grammatical case marking (this works trivially for Abkhaz and Abaza, which lack core cases altogether). By contrast, 3rd person pronouns in Ubykh and demonstratives in Circassian consistently distinguish between absolutive and oblique cases. While in Ubykh 3rd person pronouns employ the same markers as nouns, the Circassian pronouns feature special morphology (see below). In West Circassian 1st and 2nd person pronouns can take the oblique case suffix when governed by a postposition, cf. *se-šʷ paje* ‘for me’; the suffix is the same as that found with demonstratives.

Perhaps the most striking feature of the NWC personal pronouns is their ability to function as predicates and attach verbal morphology. In Abaza and Abkhaz pronominal roots can be directly inserted into the appropriate verbal morphology (4.27a), although normally the construction with the copula is used instead (4.27b).

⁴ Hewitt (1979a: 156) also postulates an inclusive vs. exclusive distinction in the plural pronouns of the 1st and 2nd person (sic!), but other authors, e.g. Chirikba (2003: 32), reject this idea.

Abaza (elicited)

- (4.27) a. *sará g'-sá-m-ma j-w-á-z-h^wə-z?*
 1SG NEG-1SG-NEG-Q 3SG.N.ABS-2SG.M.IO-DAT-REL.ERG-say-PST.NFIN
 b. *sará g'-s-ák^wə-m-ma j-w-á-z-h^wə-z?*
 1SG NEG-1SG.IO-COP-NEG-Q 3SG.N.ABS-2SG.M.IO-DAT-REL.ERG-say-PST.NFIN
 'a=b Wasn't it me who told you that?'

In Circassian, personal pronouns and demonstratives always attach the predicative marker *-rə*, Kabardian *-ra*, cf. Smeets 1992a); this complex can then function as a verbal stem to which the appropriate prefixes and suffixes are added (4.28), (4.29).

Temirgoy West Circassian

- (4.28) *we-rə-š a-rə zə-çe r-a-ŋ^wa-be-r.*
 2SG-PRED-CS DEM-PRED REL.PR-name DAT-3PL.ERG-say-PST-ABS
 '...because you are the one who was named.'

Besleney Kabardian (elicited)

- (4.29) *sə-we-ra-te-me apx^wed-əw s-ŋe-ne-te-qəm.*
 1SG.ABS-2SG-PRED-IPF-COND such-ADV 1SG.ERG-do-FUT-IPF-NEG
 'If I were you, I would not do that.'

The systems of demonstratives in NWC vary considerably; what they have in common is special morphology. Abkhaz and Abaza distinguish three degrees of distance while Ubykh and Circassian only two. However, Circassian languages have four rather than just two demonstratives; in addition to the deictic demonstratives *mə* or *wə* (proximal) and *mwe* (distal) Circassian languages have two demonstratives which can be best characterized as anaphoric, viz. *a* and *ž'a*. Of these, *a* is by far the most frequent and serves as the default 3rd person pronoun. Table 4.6 shows the singular and plural demonstratives of Abaza and Ubykh.

Table 4.6. *Demonstratives of Abaza and Ubykh*

	Abaza			Ubykh	
	singular	plural		singular	plural
proximal	<i>arəj</i>	<i>arat</i>	proximal	<i>jənέ</i>	<i>jə λέ</i>
medial	<i>anəj</i>	<i>anat</i>	distal	<i>wenέ</i>	<i>we λέ</i>
distal	<i>awəj</i>	<i>awat</i>			

As can be seen from Table 4.6, Abkhaz-Abaza and Ubykh demonstratives have overt marking of the singular number, in contrast to (almost) all other nominals in NWC, as well as special plural suffixes. The Circassian pronouns are regular in terms of number marking, but show special suffixes of the oblique case: West Circassian *-j* or *-š'*, Kabardian *-bə*. In Kabardian, this *-bə* can mark oblique case alone or together with the regular oblique suffix *-m*, cf. *a-bə* ~ *a-bə-m*; moreover, the suffix can serve as a stem extension to which the plural marker attaches yielding forms such as ObIPl *a-bə-xe-m* and even AbsPl *a-bə-xe-r* (cf. Arkadiev 2014a).

Besides independent use, demonstratives can function as determiners modifying noun phrases. In Abkhaz and Abaza determiners are clearly free and stressed forms requiring the definite form of the following NP and agreeing with it in number (4.30). In Circassian, determiners are uninflected and arguably phonologically bound, while Ubykh determiners show mixed behaviour, being at the same time bound (according to Fenwick 2011: 79), incompatible with the definite article, and still inflecting for number (4.31).

Abaza

- (4.30) **awa-t j-ʕa-n-xa-z a-wʕa-kʷa**
 DIST-PL REL.ABS-CISL-remain-INC-PST.NFIN DEF-people-PL
 ‘The remaining people.’

Ubykh (Fenwick 2011: 80)

- (4.31) a. **we-λé-məz**
 DIST-PL-child
 ‘those children (absolutive)’ (after Dumézil & Esenç 1987: 4)
- b. **jə-λé-məz-ne**
 PROX-PL-child-OBL.PL
 ‘these children (oblique)’ (based on Hewitt’s unpublished field-notes)

Possessive pronouns are typically formed on the basis of bound roots with the meaning ‘belong to’ which takes the necessary possessive morphology – a prefix indexing the possessor (and in Circassian, also the possessive applicative); cf. Abkhaz *s-tʷə* 1SG.IO-belong ‘mine’ (Hewitt 1979a: 161). In standard Circassian varieties, whenever the possessor is of the 1st or the 2nd person, such formations are normally accompanied by pronouns (presumably because of the inherent emphasis on the possessor), the resulting combination being written and commonly treated as a single word, cf. West Circassian *se-s-jə-j* 1SG-1SG.IO-POSS-belong ‘mine’.

Both reflexivity and reciprocity in NWC languages are primarily encoded by means of morphology (see §5.2). However, all NWC languages have free standing reflexive and reciprocal elements; on reciprocals and reflexives in the Circassian languages, see Kazenin (2007) and Letuchiy (2007). Ubykh seems to have a dedicated reflexive pronoun *g’e* occurring with a possessive prefix; otherwise, all NWC languages employ the noun ‘head’ in the reflexive function, cf. Abaza *qa* (4.32) or Circassian *šhe*.

Abaza (Tabulova 1976: 188)

- (4.32) **z-qa j-a-z-a-z-ga-wa d-hʷənapə-ḡ.**
 REL.IO-head 3SG.N.ABS-3SG.N.IO-BEN-DAT-REL.ERG-carry-IPFV 3SG.H.ABS-mouse-NPST.DCL
 ‘Who saves for oneself is a mouse.’ (a proverb)

Reciprocal elements are based on the words for ‘one’ and involve doubling, cf. Circassian *zə-m zə-r* one-OBL one-ABS, Abkhaz *á-k-əj á-k-əj* DEF-one-ADD DEF-one-ADD (Hewitt 1979a: 89) or Ubykh *z-alé z-alé* one-INS one-INS (Fenwick 2011: 83).

Interrogative pronouns as such are attested in Circassian and Ubykh only, while Abkhaz and Abaza form content questions mainly by means of verbal constructions (see §§5.6, 6.9); Abkhaz has an interrogative root *-árban* functioning as the predicate of the clefted question and taking the absolutive person-number prefixes (4.33).

Abkhaz (Hewitt 1979a: 11)

- (4.33) **j-aa-z d-árban?**
 REL.ABS-come-PST.NFIN 3SG.H.ABS-INTRG
 ‘Who came?’

Circassian languages have three basic interrogative roots, cf. West Circassian *xet* ‘who’ (for humans), *səd* ‘what’ and *tV-* for adverbial questions, cf. *te/təde* ‘where’ and the composite *taw-š’tew* ‘how’; in the Kabardian dialects such forms for ‘what’ are found as the Besleney *si / sti* and the Kuban *λo*. The Ubykh system is richer (Fenwick 2011: 83–86), cf. *š’ə* ‘who’, *se /*

sák'e ‘what’, *šeb'é* ‘when’, *mák'e* ‘where’, *dkená* ‘how’. The peculiarity of Ubykh interrogative pronouns is their ability to procliticize to the verb (4.34).

Ubykh (Fenwick 2011: 85)

- (4.34) *má-š^wə-le-xe-ne-j?*
 where-2PL.ABS-PVB-stand(PL)-PL-Q
 ‘Where are you?’ (based on Hewitt’s unpublished field-notes)

Indefinite pronouns are either based on the interrogative ones (the option not available in Abaza and Abkhaz) or on other elements, most commonly the numeral ‘one’. The only NWC language whose indefinite pronouns have been studied in detail is West Circassian, cf. Kapitonov (2009). Circassian and Ubykh share the indefinite suffix *-g^were* ‘some’, often used in combination with the prefixed numeral ‘one’ and covering a wide range of indefinite contexts, both specific as in (4.35) and non-specific, as in (4.36).

Ubykh (Fenwick 2011: 46 after Dumézil 1961: 57)

- (4.35) *faχ'e adəke-ke ze-nejns^w-g^were le-t^w-qe.*
 long.ago Circassia-LOC one-young.man-certain LOC-stand(SG)-PST
 ‘Long ago, in Circassia, there was a certain young man.’

Besleney Kabardian

- (4.36) *fəhaftən-g^were-xe-r q-a-x^w-jə-š'ex^wə-n-u*
 present-certain-PL-ABS CISL-3PL.IO-BEN-3SG.ERG-buy-POT-ADV
 ‘in order to buy some presents for them’

In negative, free choice and generic contexts indefiniteness is conveyed by the combination of the interrogative pronouns or the numeral ‘one’ with the additive suffixes, as in (4.37) and (4.38). In addition to that, Kabardian has a specialized negative indefinite stem *par-* always used with the additive suffix and requiring the negative form of the predicate (4.39).

Ubykh (Fenwick 2011: 61 after Dumézil 1959a: 113)

- (4.37) *ze-laž'e-g'ə jə-sə-m-bje-λe-n*
 one-fault-ADD 3SG.ABS-1SG.ERG-NEG-see-LAT-PRS
 ‘I do not see any fault (in her).’

Temirgoy West Circassian (Kapitonov 2009: 44)

- (4.38) *a-r təd-jə š'ə-p-λeβ^wə-n p-λeč'ə-š't.*
 DEM-ABS where-ADD LOC-2SG.ERG-see-POT 2SG.ERG-can-FUT
 ‘You will be able to see him anywhere.’

Besleney Kabardian

- (4.39) *par-jə q-a-β^wet-a-qəm.*
 nothing-ADD CISL-3PL.ERG-find-PST-NEG
 ‘They did not find anything.’

In Abaza and Abkhaz the whole domain of indefiniteness is covered by the same pronominal elements based on the variants of the numeral ‘one’, cf. Abaza (*z*)*ažə* INDEF.H, *zakə* / *kará* INDEF.N; the additive suffix is optionally used under negation (4.40a,b). Emphatic reduplication of indefinite pronouns is also attested, cf. Abaza *zažə-zažə-k-g'əj* ‘not a single person’ (Tabulova 1976: 102).

Abaza (Tabulova 1976: 101–102)

- (4.40) a. *a-ŝ zažó j-ŝa-j-tó-t.*
 DEF-door INDEF.H 3SG.N.ABS-CISL-3SG.M.ERG-open-AOR.DCL
 ‘Somebody opened the door.’
- b. *zak-g’aj g’ə-r-m-aw-t.*
 INDEF.N-ADD NEG-3PL.ERG-NEG-find-AOR.DCL
 ‘They did not find anything.’

4.3. Numerals

NWC languages feature mixed decimal-vigesimal numeral systems, as can be seen in table 4.7 showing a sample of the cardinal numerals 1–100 in Temirgoy West Circassian (Moroz 2011), Ubykh (Dumézil 1931: 42; Fenwick 2011: 90) and Abaza (Genko 1955: 177–178).

Table 4.7. Basic numerals

	West Circassian	Ubykh	Abaza
1	<i>zə</i>	<i>ze</i>	<i>za-</i>
2	<i>tʷə</i>	<i>tqʷe</i>	<i>ŋʷə-</i>
3	<i>šə</i>	<i>še</i>	<i>χə-</i>
4	<i>pλə</i>	<i>pλə</i>	<i>pšə-</i>
5	<i>tfə</i>	<i>šʰxə</i>	<i>χʷə-</i>
6	<i>xə</i>	<i>fə</i>	<i>cə-</i>
7	<i>blə</i>	<i>blə</i>	<i>bžə-</i>
8	<i>jə</i>	<i>ɸʷe</i>	<i>aɸ-</i>
9	<i>bɸʷə</i>	<i>bɸʷə</i>	<i>žə-</i>
10	<i>pšə</i>	<i>žʷə</i>	<i>žə-</i>
11	<i>pšə-kʷə-z</i>	<i>žʷə-zə</i>	<i>žə-j-z</i>
12	<i>pšə-kʷə-tʷ</i>	<i>žʷə-tqʷe</i>	<i>žə-ŋʷ</i>
13	<i>pšə-kʷə-šʰ</i>	<i>žʷə-še</i>	<i>žə-χ</i>
20	<i>tʷe-čʰ</i>	<i>tqʷe-tʷə</i>	<i>ŋʷa-žə</i>
21	<i>tʷe-čʰ-jə-re zə-re</i>	<i>tqʷe-tʷə-alé z-alé</i>	<i>ŋʷa-žə-j-zə-k</i>
30	<i>šʰe-čʰ</i>	<i>tqʷe-tʷə-alé žʷ-alé</i>	<i>ŋʷa-žə-j-žə</i>
40	<i>tʷe-čʰ-jə-t</i>	<i>tqʷe-mçə-tqʷe-tʷə</i>	<i>ŋʷə-n-ŋʷa-žə</i>
50	<i>šə-nəqʷe</i> ‘half-hundred’	<i>tqʷe-mçə-tqʷe-tʷə-alé žʷ-alé / šʰé-ze(n)žʰe</i> ‘half-hundred’	<i>ŋʷə-n-ŋʷa-žə-j-žə</i>
60	<i>tʷe-čʰ-jə-šʰ</i>	<i>še-mçə-tqʷe-tʷə</i>	<i>χə-n-ŋʷa-žə</i>
70	<i>tʷe-čʰ-jə-šʰ-re pšə-re</i>	<i>še-mçə-tqʷe-tʷə-alé žʷ-alé</i>	<i>χə-n-ŋʷa-žə-j-žə</i>
80	<i>tʷe-čʰ-jə-pλ</i>	<i>pλə-mçə-tqʷe-tʷə</i>	<i>pšə-n-ŋʷa-žə</i>
90	<i>tʷe-čʰ-jə-pλ-re pšə-re</i>	<i>pλə-mçə-tqʷe-tʷə-alé žʷ-alé</i>	<i>pšə-n-ŋʷa-žə-j-žə</i>
100	<i>šə</i>	<i>šʰe</i>	<i>šə-</i>

The notable feature of numerals in NWC is the formal difference between numerals used independently and as modifiers of nominals. In the Circassian languages the numeral ‘one’ is prefixed to the nominal complex it modifies, cf. West Circassian *zə-nebyəre* ‘one person’, while the numerals 2–10 have suffixed non-syllabic forms with the addition of the linker *-jə-*, cf. West Circassian *haləžʰ-jə-tf* ‘five pancakes’. In Abkhaz-Abaza and Ubykh all lower numerals are prefixed, cf. Ubykh *we-še-mše* ‘those three days’ (Fenwick 2011: 91 after Dumézil 1957: 58); in Abaza and Abkhaz compounds with numerals take the indefinite/singulative suffix *-k*, cf. Abaza

pš'á-maz-k 'three months'. Besides that, in Abkhaz and Abaza most cardinals are not used independently and require a suffix indicating the human vs. non-human class of the referent, cf. Abaza *pš'-fʷə* 'four people' vs. *pš'-ba* 'four (animals/things)'. The independent numerals 'one' and 'two' are irregular, cf. Abaza *za-žə* 'one person' vs. *za-kə* 'one (thing)', *fʷə-ž* 'two people' vs. the regular *fʷə-ba* 'two things'.

Ordinal numerals are formed in different ways. Abkhaz uses the suffix *-tʷəj* and the definite prefix attached to the cardinal numeral with the non-human classifier suffix (Aristava et al. eds. 1968: 55–56), cf. *fʷə-ba* 'two things' ~ *a-fʷə-ba-tʷəj* 'second'. In Circassian and Ubykh ordinal numerals involve 3Pl possessive prefixes, cf. Ubykh *ake-tq'ə-χ* 'second', where *-χ* is the bound root of the verb 'to belong to' (Fenwick 2011: 92), and West Circassian *ja-š'a-ne-re* 'third', where *-re* is the adjectival suffix and *-ne* is the suffix forming fractions, while the numeral base is not the root but the form meaning 'X times'. The most peculiar way of forming ordinals is attested in Abaza, where they are relativized inceptive forms able to inflect for tense, cf. *j-za-k-χa-wa* REL.ABS-one-CLN-INC-IPFV 'first (non-human)', lit. 'that which becomes one' or *j-pš'ə-fʷə-χ-əw-š* REL.ABS-four-CLH-INC-IPFV-FUT 'the person who will be the fourth' (Tabulova 1976: 88). The numeral 'first' is normally suppletive, being based on the expressions meaning 'in front of', cf. Abkhaz *a-pχ'a-tʷəj* (Aristava et al. eds. 1968: 56) or West Circassian *a-pe-re*.

In Circassian notable are the formation of multiplicative numerals by ablaut, cf. *bta* 'seven' ~ *bte* 'seven times', as well as reduplicative distributive numerals, e.g. *bta-rə-bt* 'seven each'. Distributive numerals in Abkhaz and Abaza are formed by simple reduplication (Abaza *fʷə-ba~fʷə-ba* 'two each', Tabulova 1976: 89), and in Ubykh by the suffix *-dʷe* / *-be* (Fenwick 2011: 93).

4.4. Postpositions

Most postpositions in NWC are grammaticalized nouns, often retaining such elements of nominal morphology as possessive prefixes (e.g. Abaza *r-pnə* 'to them') or case markers (e.g. Kabardian *šha-č'e* 'because, for' < head-INS). In West Circassian, certain postpositions take special pronominal prefixes, cf. *ta-dež* 'to us, at our place' or *sa-pe* 'before me' (in contrast to *s-pe* 'my nose'). Some adpositions behave differently depending on the type of their complement; it is common even for those adpositions that take possessive prefixes with pronominal complements to lack them with nominal ones, especially if singular, cf. West Circassian *(j)a-dež* 'to them' vs. *wəne-m dež* 'at home, towards home' (Rogava & Kerasheva 1966: 92). In general, postpositions are not very numerous, and only a few of them are used frequently.

5. Verbal morphology

5.1. The general outline of verbal morphology

Verbal morphology constitutes the core of the grammatical structure of the polysynthetic NWC languages and is responsible for the bulk of their formal complexity. The most notable characteristics of the NWC verbal morphology are (i) the consistent encoding of argument structure by means of person-number-(gender) and valency-changing prefixes; (ii) the rich marking of spatial meanings by means of prefixes, suffixes and verbal roots; (iii) marking of clausal subordination, most importantly, relativization; (iv) a complex interplay of the rigid templatic affix ordering with the more flexible scope-driven layered organization, defying a description in terms of inflectional paradigms and rendering the division between inflection and derivation highly elusive. Noun incorporation, though not completely absent from NWC, is not a

systematic productive process, and neither is verb-verb compounding; auxiliary verb constructions, however, are particularly highly developed in the Circassian languages (see Kimmelman 2011, Arkadiev & Maisak 2018), less so in the other branches of the family.

Verbal morphology shows considerable variation among the three branches of NWC, however, a core common to all the languages can be identified and even putatively reconstructed (Chirikba 1996: Ch. 10; 2010). The schematic order of affixes (abstracting away from the peculiarities of individual languages) is represented in Table 5.1. The last line of the table specifies how many times a particular slot can be normally occupied in a given form.

Table 5.1. The common-NWC verbal template

prefixes				root		suffixes				
argument structure zone				pre-stem elements	stem (Σ)				endings	
absolu- tive	subor- dinators	applicatives and indirect objects	erga- tive	preradical negation	causative	root	aspectual, modal and evaluative operators	temporal operators	suffixal negation	illocutionary operators or subordinators
1	1	>1	1	1	1 or 2	may be complex	>1	>1	1	>1

The following examples show particularly complex verbal forms attested in texts. Note that (5.2) illustrates a unique case of complex verb with two stems projecting two syntactic clauses (see Panova 2018a).

Temirgoy West Circassian

(5.1) *wə-qə-š'ə-ze-č'e-mə-k'e-ž'ə-n-ew*

2SG.ABS-CISL-LOC-REC.IO-LOC:under-NEG-go-RE-MSD-ADV

‘so that you don’t retreat before him’

Abaza

(5.2) *s-z-á-la-naq'a-wa-žə-j-š'a-t*

1SG.ABS-POT-3SG.N.IO-LOC-pass -IPF-LOC-3SG.M.IO-seem(AOR)-DCL

‘It seemed to him that I would be able to pass there.’

Ubykh (Fenwick 2011: 127 after Dumézil & Esenç 1975b: 70)

(5.3) *jə-s-t''-əj-le-f-ew-mə-t*

3SG.ABS-(3SG.IO)1SG.ERG-give-RE-CMPL-HBL-FUT-NEG-FUT

‘I will not be able to give it back to him completely.’

In those slots of the verbal template where several elements can occur, e.g. in the domains of applicative prefixes and aspectual/evaluative suffixes, affix order is determined by semantic scope, see Korotkova & Lander (2010) and Lander (2016: 3519, 3522–3532) on West Circassian, as illustrated by the following examples of variable order:

Temirgoy West Circassian (Lander 2016: 3519, 3523)

(5.4) a. *a-də-f-je-z-be-txə-ɸ*

3PL.IO-COM-(3SG.IO-)BEN-DAT-1SG.ERG-CAUS-write-PST

‘I together with them asked him/her to write for him/her.’ (COM > CAUS > BEN)

b. *f-a-d-je-z-be-txə-ɸ*

(3SG.IO-)BEN-3PL.IO-COM-DAT-1SG.ERG-CAUS-write-PST

‘I asked him/her to write together with them for him/her’ (CAUS > COM > BEN)

- (5.5) a. $g^w\dot{a}\dot{s}^we-\dot{s}^we-\dot{z}'a-\textit{v}$
 be.glad-SML-RE-PST
 's/he pretended again that s/he was happy' (refactive > similitive)
- b. $g^w\dot{a}\dot{s}^we-\dot{z}'a-\dot{s}^wa-\textit{v}$
 be.glad-RE-SML-PST
 's/he pretended that s/he was happy again' (similitive > refactive)

Even some cases of rigid morpheme order can be explained by the fixed scopal relations, e.g. subordinators have wide scope over applicatives and hence precede them in the prefixal domain, while temporal suffixes have wide scope over aspectual ones and hence follow them in the suffixal domain. However, there are numerous exceptions to this, e.g. the causative marker always occupies the pre-root position even though it very often scopes over the combination of the root with one or more prefixes located further to the left, as in (5.4) above. Likewise, in Circassian the cislocative prefix $qV-$ normally occurs between the absolutive and any other prefixes, including subordinators, which always have it in their scope (5.6).

Temirgoy West Circassian

- (5.6) $q\dot{a}-z-e-k^we-xe-m$
 Cisl-REL.TEMP-DYN-go-PL-OBL
 'when they came back' (temporal relativization > cislocative)

Finally, in some cases variable morpheme order seems to be due to phonological or processing reasons with different orders in free variation; e.g. in Circassian the 3PL indirect object prefix $a-$ can be separated from the applicative introducing it by the subordinating or cislocative prefixes, cf. Besleney Kabardian $s\dot{a}-\dot{q}-a-de-k^w-a$ 1SG.ABS-Cisl-3PL.IO-COM-go-PST ~ $s-a-\dot{q}\dot{a}-de-k^w-a$ 1SG.ABS-3PL.IO-Cisl-COM-go-PST 'I came with them'.

While the morphotactics of NWC predicates is largely agglutinative with allomorphy mainly governed by (morpho)phonological processes and most exponents being suffixal or prefixal, the relation between form and meaning is often far from trivial, with some functions, e.g. negation, showing variable position of exponents depending on finiteness and tense as well as multiple exponence (see § 5.7), and certain affixes occurring in multiple hardly synchronically related functions. Such deviations from one-to-one mapping between meaning and form are particularly widespread in Abaza and Abkhaz, less so in Circassian and Ubykh.

One of the consequences of the partially templatic organization of NWC verbal morphology is the frequent occurrence of discontinuous lexical bases consisting of a (sometimes desemanticized) root and one or several lexicalized prefixes; the components of such complex stems can be separated by regular inflectional prefixes expressing negation, cross-reference or subordination, cf. the Abaza verb 'seem' in (5.2) above, whose components $z\dot{a}-$ and $-\dot{z}'a-$ do not seem to occur independently.

Of the instances of non-affixal exponence we should mention the alternation of the root-final vowels \dot{a} and e in Circassian employed for the expression of valency change (see § 5.2) and direction of motion (see § 5.3), cf. West Circassian $\dot{s}x\dot{a}$ 'eat it' vs. $\dot{s}xe$ 'eat (intransitive)' or $j\dot{a}-p\lambda\dot{a}$ 'look out of smth.' vs. $j\dot{a}-p\lambda e$ 'look into smth.' (see Kumakhov 1974, 1981: 229–255; Smeets 1984: 442–443, 1992b: 105–108; Chirikba 1996: 385–387). In Abkhaz and Abaza the $a\sim\dot{a}$ ablaut is used in some locative preverbs to express direction of motion, cf. Abaza $\dot{s}'ta-\dot{c}a-$ 'to put down' vs. $\dot{s}'ta-\chi-$ 'to raise' (Genko 1955: 171). Reduplication is attested in all NWC languages (see e.g. Bersirov (1988) to express intensity or temporal duration, cf. Ubykh $k'\dot{a}r-k'\dot{a}r\dot{a}-n$ 'neighs continuously' (Fenwick 2011: 30 after Dumézil & Esenç 1977a: 22) or West

Circassian *ʔagʷə-rəgʷə* ‘tremble’ (Bersirov 1969: 77). A special case is attested in Abkhaz and Abaza, where the first consonant of the verbal stem can be geminated for intensification or distributivity, cf. Abkhaz *ahʷara* ‘speak’ ~ *ahʷhʷara* ‘scream’ or *ašʷara* ‘crack’ ~ *ašʷšʷara* ‘crack in several places’ (Aristava et al. 1968: 160). Another peculiar case of reduplication is attested in Abaza, where applicative preverbs can be reduplicated to express reciprocity of the arguments they introduce, cf. *z-qaça-ra* BEN-believe-MSD ‘to believe someone’ ~ *azaz-qaça-ra* BEN~REC-believe-MSD ‘to believe each other’ (Tabulova 1976: 194). Finally, stem suppletion based on the number of the absolutive argument is found with a considerable number of verbs in Ubykh (Fenwick 2011: 135–136), cf. ‘stand’ SG *tʷə* ~ PL *xə*, ‘bring’ SG *wə* ~ PL *kʷə*, but not elsewhere.

5.2. Argument indexing and valency change

A large part of NWC verbal morphology serves the expression of argument structure. The markers from this domain, mostly prefixal, fall into two groups: argument indexes and valency operators, which interact with each other.

Argument prefixes signal the person, number and, in Abkhaz-Abaza, gender of the argument, as well as its grammatical role; the latter is primarily expressed by the position (see table 5.1 above) rather than the shape of the prefixes. Among the grammatical roles the major division is between absolutive (Abs) and non-absolutive, and in the latter between ergative (Erg) and indirect object (IO). In Abkhaz-Abaza the latter two are virtually non-distinct, while in Circassian and to a lesser extent in Ubykh Erg and IO differ at least in the 3rd person. To the same class as the genuine personal cross-referencing prefixes belong the reflexive, reciprocal and relative prefixes, which occupy the same position in the word. Table 5.2 shows the series of argument prefixes for Abaza and Table 5.3 for Ubykh and West Circassian. As is clearly seen, the major differences between the series are found in the 3rd person.

Table 5.2. Argument prefixes in Abaza

	Abs	IO, Erg
1Sg	<i>s(ə)-</i>	<i>s(ə)-/z-</i>
1Pl	<i>h(ə)-</i>	<i>h(ə)-/ʕ-</i>
2SgM	<i>w(ə)-</i>	<i>w(ə)-</i>
2SgF	<i>b(ə)-</i>	<i>b(ə)-/p-</i>
2Pl	<i>ʃ(ə)-</i>	<i>ʃ(ə)-/ʒ-</i>
3SgM	<i>d(ə)-</i>	<i>j(ə)-</i>
3SgF		<i>l(ə)-</i>
3SgN	<i>j(ə)-/∅</i>	<i>na-/a-</i>
3Pl	<i>j(ə)-</i>	<i>r(ə)-/d(ə)-</i>
Reflexive	<i>čə-</i>	–
Reciprocal	–	<i>aj-/aba-</i>
Relative	<i>j(ə)-</i>	<i>z(ə)-</i>

Table 5.3. Argument prefixes in West Circassian and Ubykh

	West Circassian			Ubykh (Fenwick 2011: 101)		
	Abs	IO	Erg	Abs	IO	Erg
1Sg	<i>sə-</i>		<i>s-/z-</i>	<i>s(ə)-</i>		<i>s(ə)-/z-</i>
1Pl	<i>tə-</i>		<i>t-/d-</i>	<i>š'(ə)-</i>		<i>š'(ə)-/ž'-</i>
2Sg	<i>wə-</i>		<i>w-/p-/b-</i>	<i>wə- ~ χe-</i>		<i>w(ə)- ~ χe-</i>
2Pl	<i>š^wə-</i>		<i>š^w-/ž^w-</i>	<i>š^w(ə)-</i>		<i>š^w(ə)-/ž^w-</i>
3Sg		Ø-	<i>jə-/ə-</i>	<i>a-/jə-/ə-/Ø-</i>	Ø-	<i>n(ə)-/Ø-</i>
3Pl	Ø-		<i>a-</i>		<i>a-</i>	<i>a-/na-</i>
Reflexive		<i>zə-</i>	–	–	<i>ze-</i>	–
Reciprocal	–	<i>ze-</i>	<i>zere-</i>	–		<i>ze-</i>
Relative	Ø-		<i>z(ə)-</i>	Ø-		<i>d(ə)-/t-</i>

The choice between the voiceless and voiced consonants in the prefixes depends on the following consonant (besides that, in Kabardian personal prefixes are voiced intervocally, see §2.5); by contrast, the allomorphy of the 3Abs marker in Ubykh is determined by complex morphological rules (Fenwick 2011: 103–104). Both in Ubykh and Abkhaz-Abaza the 3Abs prefix can be omitted if the corresponding full noun phrase immediately precedes the verb; in Abkhaz-Abaza this is limited to non-human and plural absolutes (5.7).

Abaza (O'Herin 2002: 64)

- (5.7) a. *a-ph^wəs d-ʃa-j-d*
 DEF-woman 3SG.H.ABS-CISL-go(AOR)-DCL
 'The woman came.'
- b. *a-mara (j-)ʃa-qal-ə-j-d*
 DEF-sun (3SG.N.ABS-)CISL-rise-PRS-DCL
 'The sun rises.'

Ubykh also has an “impersonal” absolutive prefix *je-* used with transitive verbs when the Abs object is unspecified, cf. *je-s-f-qé-me* IPS.ABS-1SG.ERG-eat-PST-NEG 'I have not eaten' (Fenwick 2011: 108).

Besides the cross-referencing prefixes which are available (even if zero) for all arguments, Abkhaz, Ubykh and Circassian have endings expressing the plurality of the absolutive argument. In Circassian this is *-x(e)* used normally only with the 3rd person, cf. West Circassian *s-e-λəɸ^wə* (3.ABS)1SG.ERG-DYN-see 'I see him/her' ~ *s-e-λəɸ^wə-x* (3.ABS)1SG.ERG-DYN-see-PL 'I see them'. In Ubykh the expression of plurality is more complex and involves the plural suffixes *-a* and *-ne* whose choice is dependent on tense (Fenwick 2011: 118), the retrospective shift markers *-jɬ* SG ~ *-jλ(e)* PL (Fenwick 2011: 121), the causative prefixes *də-* SG ~ *ɸe-* PL (Fenwick 2011: 138), as well as the aforementioned root suppletion. These markers often combine, as in (5.8). In Abkhaz, the plural ending is *-k^wa* (Chirikba 2003: 42), whose cognate in Abaza is only used in non-finite forms to express the plurality of the relativized argument.

Ubykh (Vogt 1963: 112)

- (5.8) *a-z-ɸe-dex-á-n*
 3PL.ABS-1SG.ERG-CAUS.PL-stand.PL-PL-PRS
 'I make them stand up.'

A peculiar property of Ubykh is that the 2PL prefix triggers pluralization in any position, not just in the absolutive (Dumézil & Esenç 1975b: 162; Fenwick 2011: 101), cf. *a-šʷə-s-tʷ-a-n* 3SG.ABS-2PL.IO-1SG.ERG-give-PL-PRS ‘I give it to you(pl)’, *a-sə-šʷ-tʷ-a-n* 3SG.ABS-1SG.IO-2PL.ERG-give-PL-PRS ‘you(pl) give it to me’ (Dumézil & Esenç 1975b: 90–91).

The patterns of verbal cross-reference define major valency classes in NWC (see §6.3) and are affected by valency-changing operations. Valency increase is much more widespread in NWC than valency decrease. All NWC languages have a productive causative as well as a considerable number of applicatives comprising many specialized locative preverbs (see § 5.3). The use of the causative is virtually unrestricted; it can apply to verbs of any valency, and double causativization is also attested (cf. Lander & Letuchiy 2010), as in (5.9).

West Circassian

- (5.9) *dʷembajə-r λə-m qʷašʷe-m r-a-r-jə-ke-ke-wəcʷ-a-ɬ*
 bison-ABS man-OBL boat-OBL LOC-3PL.IO-DAT-3SG.ERG-CAUS-CAUS-stand.up-LAT-PST
 ‘The man ordered them to put bison in the boat (lit. made them make it stand there).’

Causativization always transitivizes verbs and introduces its own Erg; when applied to transitive verbs, it displaces the original Erg to IO leaving all other arguments intact, as shown in (5.9). Causativization has extended uses, such as e.g. in hortative constructions (5.10).

Abaza (Tabulova 1976: 156)

- (5.10) *h-a-zə-r-qʷəc*
 1PL.ABS-3SG.N.IO-BEN-CAUS-think(IMP)
 ‘Let’s think about it’

Causativization has been described in most detail for West Circassian, see Letuchiy (2009a), Letuchiy (2015), cf. also O’Herin (2002: 125–166) on Abaza and Matasović (2010) for Kabardian.

Among the applicatives found in NWC, besides the cross-linguistically widespread benefactive, malefactive, comitative and instrumental, such less common specialized applicatives are found as the involuntative (in all languages) (5.11) and the judicantis (in Abaza), introducing the participant from whose point of view the predicate is evaluated (5.12). Detailed descriptions of NWC applicatives can be found in Letuchiy (2009b) for West Circassian, O’Herin (2001) for Abaza, and Fell (2012) for Ubykh.

Ubykh (Fenwick 2011: 114 after Dumézil & Esenç 1975b: 119)

- (5.11) *jə-χʷə-n ze-tət-gʷere qeɬe-kʷ-qe*
 this-prince-OBL.SG one-man-certain (3.ABS)(3SG.IO)INVOL[hand-from]-kill-PST
 ‘This prince accidentally killed a man.’

Abaza (Tabulova 1976: 184)

- (5.12) *a-čʰkʷən_a a-ləgaʒ_b d_b-ja_a-ma-laqərd-χa-n*
 DEF-guy DEF-old.man 3SG.H.ABS-3SG.M.IO-JUD-funny-INC-PST.DCL
 ‘The old man seemed funny to the guy.’

Some of the applicative markers in Abkhaz-Abaza may also function as postpositions (e.g. the benefactive *zə-* in Abkhaz, Hewitt 1979a: 113) or as static verb roots, e.g. the comitative *cə-* in Abaza.

Productive use of valency-increasing derivation is restricted only by the considerations of parsing and semantics. Both the causative and applicatives apply to intransitive and transitive verbs, and there is virtually no grammatically determined upper bound on the number of

arguments NWC verbal forms may take. Four-argument verbs are well attested in texts (5.13) and (5.14), and five-argument verbs are adduced in grammars as possible, even if only rarely used.

Besleney Kabardian

- (5.13) *mež'γatə-r t-x^w-a-r-jə-ke-ŝ-a*
 mosque-ABS (3.ABS)-1PL.IO-BEN-3PL.IO-DAT-3SG.ERG-CAUS-do-PST
 '[the president] had the mosque built for us'

Abaza

- (5.14) *j-ŝə-z-j-a-s-h^w-ṗ*
 3SG.N.ABS-2PL.IO-BEN-3SG.M.IO-DAT-1SG.ERG-say-NPST.DCL
 'I will tell him (this) about you.'

On the typologically non-trivial use of applicatives in subordinate clauses see §7.3.

In contrast to the rich and productive system of valency increase, valency decrease is rather marginal and restricted in NWC. It has already been noted that reflexivization and reciprocalization do not in fact involve valency decrease in NWC since they are expressed largely on a par with regular argument marking, see §6.6. This is particularly obvious in Abkhaz-Abaza, which have a dedicated reflexive only for Abs of transitive verbs and reflexivize IO by simple repetition of the appropriate personal prefix, cf. (5.15). In Circassian this is not possible, cf. (5.16) with a dedicated reflexive prefix.

Abaza (elicited)

- (5.15) *j-h-hə-r-dər-d*
 3SG.N.ABS-1PL.IO-1PL.ERG-CAUS-know-DCL
 'we learned' (lit. we caused ourselves to know)

Temirgoy West Circassian

- (5.16) *ze-r-a-ka-ŝe*
 RFL.IO-DAT-3PL.ERG-CAUS-know
 'they learn'

Combination of causativization and reflexivization is sometimes used to form imperatives of non-agentive and inverse verbs (see Ershova 2017 on Kabardian), as in (5.17).

Abaza (elicited)

- (5.17) *sə-b-q-bə-m-r-áštalə-n*
 1SG.ABS-2SG.F.IO-LOC-2SG.F.ERG-NEG-CAUS-forget-NEG.IMP
 'Don't forget about me!' (lit. don't let me be forgotten on you)

As to genuine valency-decreasing operations, NWC languages have means to eliminate both the patient and the agent of transitive verbs. The former, i.e. the antipassive, is attested only in Circassian, where it is marked by changing the last vowel of the stem from /ə/ to /e/. The typologically non-trivial characteristic of the Circassian antipassive is its ability to apply not only to transitive, but also to bivalent intransitive verbs eliminating their IO (Arkadiev & Letuchiy to appear), cf. (5.18-5.19); in both cases the process is lexically restricted and applies to several dozens of verbs.

Besleney Kabardian

- (5.18) a. *wə-s-šxə-ne-qəm*
 2SG.ABS-1SG.ERG-eat-FUT-NEG
 'I won't eat you.'

- (5.19) b. *der~der-u dā-pš'erəhe-ž'-t-jə dā-šxe-t*
 we~INTF-ADV 1PL.ABS-cook-RE-IPF-ADD 1PL.ABS-eat.AP-IPF
 'We cooked ourselves and ate.'
- a. *ɸ^weg^wə-m je-pλ-te-qəm*
 road-OBL DAT-look-IPF-NEG
 'He didn't look at the road.'
- b. *məd-č'e pλe-w že-t g^wəš'əʔe-r-u*
 here-INS look.AP-ADV run-IPF talk-CVB-ADV
 'He drove talking and looking here and there.'

The ergative agent is eliminated in the lexically restricted resultative construction, which is based on the preterite form of transitive verbs in Circassian (Arkadiiev 2016) (5.20) and involves static inflection in Abkaz-Abaza (5.21) (on static vs. dynamic verbs see § 5.5). In the latter it is possible to form a passive-like construction by attaching the inchoative suffix to the resultative (5.22), admittedly a syntactic calque from Russian. A passive calqued from Turkish is reported for Ubykh (Fenwick 2011: 142–143).

Bzhedugh West Circassian (elicited)

- (5.20) a. *te psənč'-ew ɬ-er d-ke-žə-ɸ.*
 we quick-ADV meat-ABS 1PL.ERG-CAUS-roast-PST
 'We quickly roasted the meat.'
- b. *ɬ-er ke-žə-ɸe.*
 meat-ABS CAUS-roast-RES
 'The meat is roasted.'

Abaza (elicited)

- (5.21) a. *a-ph^wəspa á-š j-ʕa-l-tə-d.*
 DEF-girl DEF-door 3SG.N.ABS-CISL-3SG.F.ERG-open(AOR)-DCL
 'The girl opened the door.'
- b. *á-š j-tə-b.*
 DEF-door 3SG.N.ABS-open(RES)-NPST.DCL
 'The door is opened.'
- (5.22) *á-mačə-k^wa a-sabəj-k^wa-la j-žžə-xá-d*
 DEF-plate-PL DEF-child-PL-INS 3PL.ABS-wash(RES)-INC(AOR)-DCL
 'The dishes were washed by the children.'

Finally, all NWC languages have both P-labile and A-labile verbs (Hewitt 1981; Smeets 1992b, Letuchiy 2009a specifically on West Circassian), cf. such verbs as Circassian P-labile *q^wəte* 'break' or A-labile *pč'e* 'weed', Ubykh P-labile *šxereb* 'shatter' (Fenwick 2011: 143) or Abaza A-labile *mačaw* 'cook'. Needless to say, the morphological expression of arguments almost always makes clear whether the given verb is used transitively or intransitively, consider (5.23).

Besleney Kabardian

- (5.23) a. *zə-g^were-m jə-ʔe š'ə-q^wəte-č'e*
 one-certain-OBL POSS-arm (3.ABS)TEMP-break-INS
 'when someone's arm broke'
- b. *dəɸ^wəžə-m ... dreva-xe j-e-q^wəte*
 wolf-OBL log-PL 3SG.ERG-DYN-break
 'The wolf is chopping the wood.'

5.3. Expression of spatial meanings

NWC languages are outstanding in the elaboration of the morphological encoding of spatial meanings. In addition to lexical expression by means of positional and motion roots (e.g. on positional verbs in Kabardian see Ryzhova & Kjuseva 2013) as well as postpositions, at least three interacting grammaticalized systems can be singled out: (i) locative preverbs whose choice depends on the spatial configuration of the landmark; (ii) prefixes or suffixes indicating the direction of motion; (iii) deictic preverbs showing the orientation of motion with respect to the speaker or origo. Most of these elements have extended their functions beyond the spatial domain.

Locative preverbs are by far the most numerous ranging from about 30 in Circassian (Kumakhov 1964: 164–182) to several dozen in Ubykh (Dumézil & Esenç 1975b: 103–130; Fenwick 2011: 112–114) to more than a hundred in Abaza and Abkhaz (Spruit 1986: 22–31; Klychev 1994, 1995)⁵. Most of them are synchronically or historically incorporated nouns or postpositions. Their meanings are sometimes very specific, as e.g. Abaza *naḗə*- ‘hand’ in (5.24a) or *čʼwʼa*- ‘fireplace’ in (5.24b), sometimes quite general, as e.g. West Circassian *tje*- ‘on the surface’ (5.25) or *šʼə*- denoting unspecified location. Preverbs are often stacked, as in (5.24a).

Abaza (Klychev 1995: 170, 211)

- (5.24) a. *a-kʷtaḅʼ s-naḗə-ča-pə-l-č-ṭ.*
 DEF-egg 1SG.IO-LOC:hand-LOC:below-LOC:front-3SG.F.ERG-break(AOR)-DCL
 ‘She broke the egg in my hands.’
- b. *a-taba čʼwʼa-gəla-ḗ.*
 DEF-pan LOC:fireplace-stand-NPST.DCL
 ‘The pan is standing in the oven.’

Temirgoy West Circassian

- (5.25) *ḅʷegʷə-m sə-tje-ha-žʼə-ḅ*
 road-OBL 1SG.ABS-LOC:on-enter-RE-PST
 ‘I entered (lit. on the surface of) the road.’

All locative preverbs in Circassian (and probably also in Ubykh, cf. Charachidzé 1989: 384), but only a subset of those in Abkhaz-Abaza (Lomtadze 1983; Avidzba 2017: 109–122) are applicatives introducing indirect objects expressed, where appropriate, by personal prefixes, as in (5.24a) vs. (5.24b). Many locative preverbs (and other applicatives) in Abkhaz-Abaza may function as static verb roots, cf. Abaza *də-la-ḗ* 3SG.H.ABS-be.in-NPST.DCL ‘s/he is there’ (Tabulova 1976: 104) ~ *j-a-la-gəla-n* 3SG.N.ABS-3SG.N.IO-LOC.in-stand-PST.DCL ‘it stood there’ (Klychev 1995: 140).

The choice of the preverb is usually dependent not only on the spatial configuration but primarily on the topological properties of the landmark (see e.g. Kerasheva 1957b/1995, 1992/1995, Paris 1995, Mazurova 2009 on West Circassian), cf. the following set of examples all denoting location inside the landmark:

Standard Kabardian (Kumakhov 1964: 165)

- (5.26) a. *tjepšečʼə-m ja-λə-n*
 plate-OBL LOC:container-lie-MSD
 ‘to be on a plate’

⁵ It has to be kept in mind that these high figures include complex preverbs as well as simplex ones.

- b. *škampə-m de-λə-n*
cupboard-OBL LOC:enclosure-lie-MSD
'to be in a cupboard'
- c. *daxe-m xe-λə-n*
oil-OBL LOC:mass-lie-MSD
'to be in oil'
- d. *šxəʔenə-m kʷeçə-λə-n*
blanket-OBL LOC:through-lie-MSD
'to be in a blanket'

By themselves, locative preverbs do not specify direction of motion with respect to the landmark. Such meanings are indicated by directional markers, which are suffixes or root ablaut in Circassian, prefixes in Ubykh and suffixes or ablaut of locative preverbs in Abkhaz-Abaza. Admittedly the most elaborated system of directional markers is found in Circassian (Urusov 1983; Smeets 1984: 436–451; Arkadiev & Maisak 2018: 125–127), where in addition to the centripetal/centrifugal opposition marked by ablaut (cf. West Circassian *jə-š'e* 'lead into' vs. *jə-š'a* 'lead out of'), there are such suffixes as lative *-he* vs. elative *-č'a*, going back to verbal roots 'enter' resp. 'exit', cf. West Circassian *xe-sə-he* LOC:mass-swim-LAT 'swim into' vs. *xe-sə-č'a* LOC:mass-swim-ELAT 'swim out of', *-hə* 'around', which transitivizes verbs (5.27), as well as suffixes requiring particular preverbs: *de-V-je* 'upwards' (5.28), *je-V-xə* 'downwards' (5.29) and *je-V-λe* 'towards' (5.30).

Besleney Kabardian

- (5.27) *je-ž'a-xe çəxʷ-xe-r q̇-a-kʷə-hə-n-u*
DAT-start-PST-PL man-PL-ABS CISL-3PL.ERG-go.TR-CIRC-MSD-ADV
'They started going around the people.'
- (5.28) *pšexʷə-r d-a-hə-je-ž'a*
chain-ABS LOC:enclosure-3PL.ERG-carry-UP-RE-PST
'They carried the chain up.'
- (5.29) *bγə-m q̇-je-žə-xə-n-u kʷ-a.*
hill-OBL CISL-DAT-run-DOWN-MSD-ADV go-PST
'He went to run (skiing) down from the hill.'
- (5.30) *a-bə s-je-ʔəsə-λe-rjə...*
DEM-OBL 1SG.ABS-DAT-sit.down-ALLAT-ADD
'I sat near him and...'

In Abaza and Abkhaz the system of directional marking comprises the lative vs. elative opposition expressed by means of post-radical suffixes (Spruit 1986: 16–21; Klychev 1972) (5.31), and the change of the final vowel of the locative preverb from *a* to *ə* (Avidzba 2017: 123–131) (5.32).

Abkhaz

- (5.31) a. *jə-ta-j-ga-la-jt*
3SG.N.ABS-LOC:inside-3SG.M.ERG-carry-LAT(AOR)-DCL
'He brought it inside.' (Chirikba 2003: 39)
- b. *a-çla a-χra j-a-č-j-aa-jt*
DEF-tree DEF-rock 3SG.N.ABS-3SG.N.IO-LOC:face-go-ELAT(AOR)-DCL
'The tree grew out of the rock.' (Spruit 1986: 21)

Abaza (Klychev 1995: 197, 205)

- (5.32) a. *a-qanž'a a-ɣʷara j-ta-pssɣa-χ-t.*
 DEF-crow 3SG.N.IO-nest 3SG.N.ABS-LOC:inside.LAT-fly-RE(AOR)-DCL
 'The crow flew back into its nest.'
- b. *a-warba a-ɣʷara j-tə-pssɣa-t.*
 DEF-eagle 3SG.N.IO-nest 3SG.N.ABS-LOC:inside.ELAT-fly(AOR)-DCL
 'The eagle flew out of its nest.'

Finally, in Ubykh the only directional marker is the prefix *-ɬe*, which can occur both on its own in the elative meaning (5.33a) and follow the locative preverb in the translative meaning (5.33b).

Ubykh (Fenwick 2011: 114–115 after Dumézil & Esenç 1975b: 80, 106)

- (5.33) a. *a-w-ɬé-sə-wɬʷə-n*
 3SG.ABS-2SG.IO-ELAT-1SG.ERG-take-PRS
 'I take it away from you.'
- b. *a-qʷé-n šə-bečʷe-ɬe-le-χʷe-qe-n.*
 DEF-cavern-OBL.SG 1PL.ABS-LOC:under-ELAT-pass-PST-PL
 'We passed through (under) the cavern.'

The deictic preverbs, occupying the slots to the left of the locative preverbs, are most numerous in Abkhaz, which has a four-term system including a horizontal ('hither' ~ 'thither') and a vertical ('up' ~ 'down') dimension (Aristava et al. 1968: 151–152), cf. *s-aa-j-t* 'I came' ~ *d-ne-j-t* 's/he went' ~ *d-ɬe-j-t* 's/he went up' ~ *d-le-j-t* 's/he went down'. Other NWC languages have just a binary opposition between cislocative and translocative, with the latter usually being less productive (Ubykh and West Circassian do not have overt translocative markers at all), cf. Abaza *ɣa-j-ra* 'come' ~ *na-j-ra* 'go', Ubykh *a-z-wə-n* 3SG.ABS-1SG.ERG-carry-PRS 'I carry it' ~ *a-j-z-wə-n* 3SG.ABS-CISL-1SG.ERG-carry-PRS 'I bring it' (Fenwick 2011: 111). The cislocative, at least in Circassian and Abaza, is one of the most frequent prefixes and has acquired many non-spatial uses, such as e.g. inchoative, cf. West Circassian *ɬə* 'weep' ~ *qe-ɬə* 'burst weeping', and has undergone considerable lexicalization, cf. Abaza *ɣa-hʷə* 'dance' ~ *hʷə* 'graze'. On the other hand, in Circassian the cislocative has grammaticalized into a redundant inverse-like marker occurring when the indirect object is higher on the person hierarchy than the subject (ergative or absolutive), see Kumakhov (1971: 253–254), Testelet (1989), Arkadijev (2017a) and a detailed study of Besleney Kabardian by Lomize (2013), cf. (5.34a,b). In Standard Kabardian and the eastern dialects, the almost obsolete translocative prefix *ne-* is used in 1>2 combinations (5.35).

Besleney Kabardian

- (5.34) a. *zeč'e-m-jə qə-d-jə-t-a zadanije-zə-rə-z-xe-r*
 all-OBL-ADD CISL-1PL.IO-3SG.ERG-give-PST task-one-DISTR-one-PL-ABS
 'He gave each of us a task.'
- b. *qə-w-e-ž-a*
 (3SG.ABS)CISL-2SG.IO-DAT-wait-PST
 'S/he waited for you.' (elicited)

Standard Kabardian (Bagov et al. 1970: 127)

- (5.35) *sə-n-o-dew-a-ɣ*
 1SG.ABS-TRAL-2SG.IO+DAT-listen-PST-DCL
 'I listened to you.'

Such a use of the deictic preverbs has been copied by Abaza in contact with Kabardian:

Abaza

- (5.36) *kaɸejka-k-g'əj* *j-g'-ʃa-hə-rə-m-t-χ-wa-z-d*
 penny-INDF-ADD 3SG.N.ABS-NEG.EMP-CISL-1PL.IO-3PL.ERG-NEG-give-RE-IPF-PST.NFIN-DCL
 'they wouldn't give us a penny'

5.4. Finiteness and non-finiteness

All NWC languages morphologically distinguish verbal forms heading independent declarative clauses and those (usually) heading only subordinate clauses (see e.g. Chkadua 1970 on Abkhaz-Abaza, Kerasheva 1984 on Circassian and Hewitt 2010 on Abkhaz). In the simplest case there are verbal affixes of relativization, nominalization and various converbs; sometimes, by contrast, certain non-finites lack overt morphology characteristic of declarative verbal forms. An important and typologically non-trivial characteristic of non-finite forms in NWC is the little role of deranking in their formation: with the exception of certain nominalizations, non-finites in NWC retain the indexing of arguments characteristic of finite forms, and at least some non-finite forms do not impose any restrictions on the expression of TAM categories. On the other hand, there are forms which cannot be unequivocally classified as finite or non-finite due to their mixed behaviour, and some verbal forms occurring in independent clauses are formally related or even identical to forms used in subordination.

NWC languages can be classified into those that have overt marking of finite declarative verbal forms (Abkhaz-Abaza and eastern dialects of Kabardian) and those which have extra marking only for non-finites (Ubykh, West Circassian and western dialects of Kabardian). In the former the marking of finiteness (or rather, declarative mood) interacts with the tense system (§ 5.5). Thus, in Standard Kabardian (Bagov et al. 1970: 124–125) there is an optional declarative marker *-r* used in the present tense of dynamic verbs (*ma-k^we-r* DYN-go-DCL.PRS 's/he is going'), and an obligatory declarative marker *-ʃ* used in the present tense of stative verbs (*ʃə-t-ʃ* LOC-stand-DCL 's/he is standing') and in the preterite and future of all verbs (*jə-ʃ-a-ʃ* 3SG.ERG-lead-PST-DCL 's/he led him/her'). Declarative suffixes are absent from forms used in subordinate clauses, as well as from negative, interrogative and imperative clauses; besides that, forms of imperfect and pluperfect lack a declarative suffix and are not excluded from subordinate and other non-declarative clauses, either. The situation in Abkhaz and Abaza is even more complex: in addition to a declarative marker (Abkhaz *-jt*, Abaza *-t~d*) appearing in the affirmative present, aorist and one of the future tenses of dynamic verbs as well as in at least some negative forms, the form of certain tense markers differs between declarative and non-declarative (most negative, interrogative and subordinate) contexts, cf. Abaza *-n* PST.DCL vs. *-z* PST.NFIN (see section § 5.5 for verbal paradigms), cf. Chkadua (1970).

Ubykh, West Circassian and western Kabardian dialects don't have declarative marking, so finite forms can only be characterized by the absence of overt markers of non-finiteness, such as prefixes of relativization or suffixes of nominalization or converbs, as well as by the choice of the so-called dynamic markers in the present tense. However, dedicated markers of non-finiteness can also be lacking, e.g. in the relativization of Abs, so certain forms neutralize the distinction, cf. Besleney Kabardian *qe-k^w-a* CISL-go-PST 's/he came; the one who came'. In Ubykh and West Circassian certain finite and non-finite forms differ only in the absence resp. presence of the final vowel or in stress (Fenwick 2011: 109–110), cf. Ubykh *a-s-qe-ná* 3SG.ABS-1SG.ERG-say-PRS 'what I say' vs. *a-s-qe-n* 'I say it', *a-š'-qé* 'it happened' vs. *á-š'-qe* 'what

happened’. Besides that, in all NWC languages (non-)finiteness interacts with the expression of negation, albeit in a complex way (see §5.7).

NWC languages have large inventories of non-finite forms with specialized functions. The most prominent class of non-finites is relative forms, traditionally called “participles” but quite distinct from participles of Indo-European languages (see Hewitt 1979b, 2010 on Abkhaz, O’Herin 2002: Ch. 8 on Abaza, Lander 2010, 2012 on West Circassian). As has been said above, relativization is marked by prefixes occupying the same slots as the personal markers; in Abkhaz and Abaza this is supplemented by the change in TAM-inflection (5.37). In Circassian and Ubykh relative forms retain the same TAM-markers, but can attach grammatical case endings (5.38).

Abaza (Rossius 2017)

- (5.37) a. *a-ph^wáspa h^wrápšga l-wə-t-ṭ.*
 DEF-girl flower 3SG.F.IO-2SG.M.ERG-give(AOR)-DCL
 ‘You gave flowers to the girl.’
- b. *a-ph^wáspa h^wrápšga z-wə-tá-z*
 DEF-girl flower REL.IO-2SG.M.ERG-give-PST.NFIN
 ‘the girl whom you gave flowers’

Temirgoy West Circassian

- (5.38) *mač’e psaw-ew qe-z-ke-ze-ž’ə-ke-r.*
 few whole-ADV Cisl-REL.ERG-CAUS-turn-RE-PST-ABS
 ‘Just a few returned intact.’

More on relativization see §7.3. Adverbial subordination in NWC is primarily expressed by numerous converbs, on which see § 7.5.

Of nominalizations of different kinds some yield genuine nominals taking possessive and case markers instead of verbal cross-reference indexes and referring to place, time, manner or participants and are often lexicalized, cf. Abaza *apχ’a-* ‘read, learn’ ~ *apχ’a-ga* learn-NOBJ ‘book’, *apχ’a-rta* learn-NLOC ‘school’, Ubykh *č^we* ‘sleep’ ~ *č^wé-xe* ‘time to sleep’ (Fenwick 2011: 73), or West Circassian *de-* ‘sew’ ~ *da-k^we* sew-NAG ‘seamstress’, *da-č’e* sew-NMNR ‘manner of sewing’. However, action nominals (masdars) show mixed behaviour, in some of their uses retaining verbal morphosyntax, see §7.4.

Finally, at least in Circassian there are forms which can function both as non-finite and finite. One of these is the masdar in *-n*, which in both Circassian languages is used as a pragmatically loaded future tense opposed to the neutral future (see § 5.5); in the latter usage this form does not show any signs of non-finiteness. A more intricate case is presented by the Circassian forms with the manner relativization prefix West Circassian *zere-*, Kabardian *zerə-*, which can head independent clauses marking continuative aspect (5.39); as shown in Arkadiev & Gerasimov (2008, 2009, to appear), these forms retain certain non-finite features and must have arisen by insubordination.

Besleney Kabardian

- (5.39) *š’ə-?e-xe, ž’ə-rjə zera-š’ə-?e.*
 LOC-be-PL now-ADD REL.MNR-LOC-be
 ‘They are there, they still are there.’

5.5. Tense and aspect

NWC languages have numerous tense, aspect and modal categories mainly marked by suffixes and often interacting with each other and other domains (see Chkadua 1970 on Abkhaz-Abaza, Dumézil & Esenç 1975b: 145–160 on Ubykh and Kumakhov 1971: 210–241 on Circassian). In order to describe the basics of this system it is necessary first to address the dichotomy between static and dynamic verbs, a common-NWC morphological distinction partly based on actional semantics.

The clearest distinction between static and dynamic verbs is found in Abkhaz-Abaza, where the two verb classes differ in both tense categories available and patterns of their exponence, cf. Tables 5.4 and 5.5.

Table 5.4. *Affirmative tense forms of static verbs in Abkhaz*

	finite	non-finite
Present	-w- <i>p̣</i>	-w
Past	-n	-z

Table 5.5. *Affirmative tense forms of dynamic verbs in Abkhaz*

	finite	non-finite
Present	-wa- <i>j̣t̚</i> > o- <i>j̣t̚</i>	-wa
Aorist	- <i>j̣t̚</i>	∅
Imperfect	-wa-n	-wa-z
Future I	-š- <i>t̚</i>	-ša
Future II	- <i>p̣</i>	-ra/ə

The situation in Ubykh is similar in that static verbs have an impoverished paradigm with just present and past tenses, but the morphology differs only in the present tense, dynamic -n vs. static -∅ (Dumézil & Esenç 1975b: 145–160; Fenwick 2011: 117–124). Finally, in Circassian static and dynamic verbs have identical arrays of tense forms and consistently differ only in the formation of the present tense, which with dynamic verbs features the immediately pre-radical prefix *me-* ~ *-e-* ~ *-o-* (Kabardian), cf. West Circassian dynamic *s-e-q^wate* ‘I break it’ vs. static *s-ʔəʁ* ‘I hold it’. In West Circassian, negative, interrogative and certain non-finite forms of dynamic verbs take the present tense suffix *-re*, cf. West Circassian *s-q^wate-re-r* 1SG.ERG-break-DYN-ABS ‘the one I break’, while in Shapsugh West Circassian dynamic verbs take the prefix *re-* if there are no other prefixes other than negation and typically in non-present tenses (Smeets 1984: 251; Lander 2010: 83). In the dialects of Kabardian with declarative suffixes, dynamic verbs take *-r* in the present declarative as opposed to the default *-š* with static verbs (see above). Besides that, static verbs can be restricted in non-indicative moods, e.g. they usually do not form the imperative; the lacking forms are compensated by dynamic derivatives, cf. Abaza present *d-š^ʔta-p̣* ‘s/he is lying’ ~ future *d-š^ʔta-zl-wə-š^ʔ-t̚* 3SG.H.ABS-lie-DYN-IPF-FUT-DCL ‘s/he will lie’ (Tabulova 1976: 106).

Semantically, static verbs all denote states, but the reverse is not true, with such stative meanings as ‘know’ or ‘see’ being expressed by dynamic verbs in all NWC, cf. Abkhaz *jə-z-dər-wa-n* ‘I knew it’ 3SG.N.ABS-1SG.ERG-know-IPF-PST.DCL or Besleney Kabardian *s-o-λaʁ^w* 1SG.ERG-DYN-see ‘I see it’. To the static class mainly belong positionals such as ‘stand’, ‘sit’ and ‘lie’ as well as the locational/possessive ‘be’ and the verb meaning ‘want/need’; in Circassian into this class also falls the transitive ‘hold’. Nominal predicates also take static morphology, see

(4.35) above. The majority of verbal lexemes, including transitive verbs, are dynamic regardless of semantics. The borderline between the two classes is somewhat fluid; in Circassian it is possible to attach the dynamic prefix to some static verbs, including nominal stems, yielding a contrast between a state and an activity (5.40); similar duality is attested at least for some posture roots in Abkhaz-Abaza, cf. Abkhaz static past *s-gəla-n* ‘I was standing’ vs. dynamic aorist *s-gəla-jt* ‘I stood up’.

Standard West Circassian (Rogava & Kerasheva 1966: 102)

- (5.40) a. *a-r bzaž’e* b. *a-r me-bzaž’e*
 DEM-ABS wicked DEM-ABS DYN-wicked
 ‘S/he is wicked.’ ‘S/he behaves badly.’

Dynamic transitive verbs become static in the resultative, see (5.23) above, and with certain evaluative affixes, see below.

The tense systems of NWC dynamic verbs, despite considerable structural diversity, show important similarities (see Kljagina 2018 for a typologically-oriented overview of Abkhaz-Abaza and Circassian). First, there is an opposition between perfective and imperfective aspect in the past tenses (preterite/aorist vs. imperfect); second, there is a dichotomy of basic and “retrospectivized” tenses (traditional “series I” and “series II”) cross-cutting the three-way distinction between present, past and future; third, there is a distinction between a neutral and a modalized future tenses. The formal ways these oppositions are expressed vary considerably across NWC with the primary division separating Abkhaz-Abaza, where the least marked form is the perfective past (aorist) as opposed to the formally marked present, and the rest where perfective past has a dedicated suffix (Ubykh *-qe*, West Circassian *-be*, Kabardian *-a* ~ *-be*), probably going back to a perfect/resultative. Table 5.6 shows the basic and retrospectivized tense forms in Abaza. Retrospectivization, i.e. shift of temporal reference into the past with respect to the temporal value of the basic form, is achieved in Abkhaz and Abaza by attaching the marker *-n*, non-finite *-z*, serving as the past marker with static verbs, to the non-finite form of the respective basic tense.

Table 5.6. The tense system of Abaza.

	basic			retrospectivized	
	finite	non-finite		finite	non-finite
present	<i>-əj-t</i>	<i>-wa</i>	imperfect	<i>-wa-n</i>	<i>-wa-z</i>
aorist	<i>-t</i>	∅	preterite	<i>-n</i>	<i>-z</i>
perfect	<i>-χ’a-t</i>	<i>-χ’a</i>	pluperfect	<i>-χ’a-n</i>	<i>-χ’a-z</i>
future I	<i>-wa-š-t</i>	<i>-wa-š</i>	subjunctive I	<i>-wa-šə-n</i>	<i>-wa-šə-z</i>
future II	<i>-p</i>	<i>-ra</i>	subjunctive II	<i>-rə-n</i>	<i>-rə-z</i>

The preterite (retrospectivized aorist) in Abkhaz, according to Hewitt (1979a: 174–175), is mainly used as a medial verbal form in chained narrative clauses (5.41). Though for Abaza much the same is reported in the literature (e.g. Chkadua 1970: 137–140), recent fieldwork data (Kljagina 2018) has shown that the preterite also has independent uses, mainly as “antireresultative” (5.42).

Abkhaz (Hewitt 1979a: 175)

- (5.41) *a-qáca a-ph^wás də-j-bá-n də-d^wə-k^w-la-jt.*
 DEF-man DEF-woman 3SG.H.ABS-3SG.M.ERG-see-PST.DCL 3SG.H.ABS-LOC-LOC-go(AOR)-DCL
 ‘The man saw the woman and went out.’

Abaza (elicited, Kljagina 2018: 46)

- (5.42) *swəltan d-ʕa-j-n*
 Sultan 3SG.H/ABS-CISL-go-PST.DCL
 ‘Sultan came (and then left).’

As to the perfect and pluperfect, at least for Abaza it has been argued (Kljagina 2017, 2018: 40–46) that the suffix *-χ’a* and its negated counterpart *-s* are distinct from the European-style perfect and express a meaning like ‘already’ resp. ‘not yet’ (cf. the term “iamitive”, Dahl & Wälchli 2016):

Abaza (elicited, Kljagina 2018: 43)

- (5.43) a. *sara aráʔa χʷə-skʷša s-bzáza-χ’a-t.*
 1SG here five-year 1SG.ABS-live-IAM-DCL
 ‘I have been living / have lived here for five years.’
 b. *sara warad gʷ-sə-m-hʷa-s-t.*
 1SG song NEG.EMP-1SG.ERG-NEG-say-NONDUM-DCL
 ‘I haven’t yet sung.’

It is not surprising that retrospectivization of the future yields a modal meaning of irrealis, as in (5.44a), though the temporal meaning of past intention is also attested (5.44b).

Abaza

- (5.44) a. *sara ačʷə-ja ja-s-čʰp-wə-šə-z?*
 1SG what-QN REL.ABS-1SG.ERG-do-IPF-FUT-PST.NFIN
 ‘What could I do?’
 b. *wadərʕʷána a-kałχóz-la d-cá-χ-wa-šə-n.*
 \ thereafter DEF-kolkhoz-INS 3SG.H.ABS-pass-RE-IPF-FUT-PST.DCL
 ‘After that she was going to return to the kolxoz field.’

The tense system of Ubykh is similar to that of Abkhaz-Abaza but for the replacement of the old aorist by the perfect with the suffix *-qe* (Fenwick 2011: 118); the former is attested on its own with a “mirative” function (Dumézil & Esenç 1975b: 151–152) and is used as a retrospective shift marker attaching to the other tense suffixes; however, subjunctive II is derived from the future II by the past suffix *-qe*, cf. Table 5.7 (Fenwick 2011: 118, 121).

Table 5.7. Tense system of Ubykh

	basic			retrospectivized	
	Sg	Pl		Sg	Pl
present	<i>-n</i>	<i>-a-n</i>	imperfect	<i>-ne-jt</i>	<i>-a-ne-jλ(e)</i>
preterite	<i>-qe</i>	<i>-qe-n(e)</i>	pluperfect	<i>-qe-jt</i>	<i>-qe-jλ(e)</i>
future I	<i>-ew</i>	<i>-n-ew</i>	subjunctive I	<i>-ewə-jt</i>	<i>-n-ewə-jλ(e)</i>
future II	<i>-ewt</i>	<i>-n-ewt</i>	subjunctive II	<i>-ewtʷ-qe</i>	<i>(-n)-ewtʷ-qe(-n)</i>

Of the Circassian tense systems only the Kabardian one readily lends itself to an analysis in terms of simple vs. retrospectivized forms, with the imperfect suffix *-t(e)* serving as the retrospective marker (cf. Bagov et al. 1970: 131–138; Kljagina 2018: 65–90), cf. table 5.8.

Table 5.8. Tense system of Besleney Kabardian

	simple		retrospectivized
Present	(dynamic prefix)	imperfect	- <i>t</i>
Preterite/Aorist	- <i>a</i> ~ - <i>be</i>	pluperfect	- <i>a-t</i>
Future I	- <i>ne</i>	subjunctive I	- <i>ne-t</i>
Future II	- <i>n</i>	subjunctive II	(- <i>n-t</i>)

The combinatorics of tense suffixes in Circassian is freer than in the other languages of the family. In addition to the forms in Table 5.8, there is a double past -*be-a* used in variation with the pluperfect in -*a-t*, and it is possible to add the future suffixes to the preterite, usually yielding an inferential, cf. West Circassian *qe-p-še-be-š't* CISL-2SG.ERG-know-PST-FUT ‘you must know it’. In West Circassian, it is the marker of the perfective preterite -*be* and not that of the imperfect -(š')*tə-be* (< stand-PST), which is used as a retrospectivizer (see Korotkova 2009); at least in the Shapsugh dialect, both the preterite and the imperfect can be retrospectivized with a predictable semantic difference (Arkadiev 2014b), see (5.45). More on Circassian pluperfects and their uses see Arkadiev (2017b), Kljagina (2018: Ch. 3).

Shapsugh West Circassian (elicited, Arkadiev 2014b)

- (5.45) a. *zarjeme ʔʷəḳ'əbze ja-be-ḳ'edə-ba-b.*
 Zarema key 3SG.ERG-CAUS-vanish-PST-PST
 ‘Zarema lost her keys (but has already found them).’
- b. *wedre wəne-m ja-sə-xe-r re-gʷasaʔe-štə-ba-be-x.*
 other room-OBL LOC-sit-PL-ABS DYN-talk-IPF-PST-PST-PL
 ‘The people sitting in the other room were talking (now they don’t talk).’

Like Abkhaz-Abaza, Circassian languages also have a iamitive -*xe*, largely restricted to the past tense and attaching after the preterite suffix, cf. Besleney Kabardian *ja-qʷəte-ba-xe* ‘s/he has already broken it’.

The two futures in NWC differ in hard to pinpoint modal overtones; generally, the future I expresses neutral prediction or planned action as in (5.46a), while the future II expresses some sort of epistemic or emotional commitment on the part of the speaker (see Serdobolskaya 2009: 456–474 on Temirgoy West Circassian and Kljagina Ms. on Kuban Kabardian), e.g. promise, threat, or doubt, cf. (5.46b). As mentioned above, the Circassian modal future is marked by the same suffix as the masdar, and probably results from insubordination of the latter in modal constructions.

West Circassian (elicited, Serdobolskaya 2009: 467)

- (5.46) a. *njewəš' ž'-ew sə-qe-tež'ə-š't.*
 tomorrow early-ADV 1SG.ABS-CISL-stand.up-FUT
 ‘I shall get up early tomorrow (I have a reason to do it).’
- b. *njewəš' ž'-ew sə-qe-tež'ə-n.*
 tomorrow early-ADV 1SG.ABS-CISL-stand.up-MOD
 ‘I shall get up early tomorrow (I’ve just decided to).’

Of the typologically non-trivial uses of tenses it is worth mentioning the attachment of non-finite tense markers to proper names in non-first mention, reported for Abaza (Tabulova 1976: 45): *awəj Karəjm-xa-wa* PROX Karim-INC-IPF ‘this Karim’.

In addition to the perfective vs. imperfective opposition in the past tenses, NWC languages have a number of optional aspectual categories expressed by dedicated affixes. The

most productive of them is the refractive used to express reverse motion (West Circassian *qe-kʷe-žʹə* Cisl-go-RE ‘return’), responsive action (Abaza *ɿʷə-χ* write-RE ‘write a response’), single repetition (Besleney Kabardian *žejə-žʹ* sleep-RE ‘fall asleep again’) and a number of other functions (see Avidzba 1968 on Abkhaz-Abaza and Arkadiev & Korotkova 2005 on West Circassian). In Abkhaz-Abaza the refractive suffix can be reinforced by the repetitive prefix to yield the meaning of pure repetition (see Panova 2018b on Abaza), see (5.47).

Abaza (elicited, Panova 2018b)

- (5.47) a. *a-hʷrapšza jə-s-t-χ-t.*
 DEF-flower 3SG.M.IO-1SG.ERG-give-RE(AOR)-DCL
 ‘I gave him the flower back.’
- b. *a-hʷrapšza j-ata-jə-s-t-χ-t.*
 DEF-flower 3SG.M.IO-REP-1SG.ERG-give-RE(AOR)-DCL
 ‘I gave him the flower again.’

Other aspectual categories attested in NWC include inchoative (mostly used to derive dynamic verbs from nominals, productive in Abkhaz-Abaza and Ubykh), completive, iterative, frequentative, habitual and continuative. The frequentative suffix *-zepət* in Circassian stems from an auxiliary verb *ze-pə-t* REC.IO-LOC:tip-stand ‘be interconnected’; it has been borrowed into Abaza, where it is used both as a suffix and as an adverb (Tabulova 1976: 207–208); similar origin is evident for the Ubykh continuative *-zelefeɬ* (Fenwick 2011: 127). In Circassian aspectual meanings are primarily expressed by constructions with auxiliaries (Kimmelman 2011, Arkadiev & Maisak 2018: 127–132), e.g. the preterite of *pe-t* LOC:front-stand as the avertive, cf. Kuban Kabardian *tje-xʷe pe.t-a* LOC:top-fall AUX-PST ‘s/he almost fell’.

5.6. Modality and mood

The modal categories in NWC are quite heterogeneous in both functions and expression and are not yet fully and adequately described (see e.g. Kuznetsova 2009 on Temirgoy West Circassian). It has already been shown that the expression of irrealis (subjunctive) is handled by the tense system, while conditional and concessive meanings are integrated into the system of non-finite subordination (see §7.5). Illocutionary moods include imperative, hortative, optative and interrogative. The non-negated imperative is the simplest verbal form often comprising just the bare stem without the 2nd person prefix indexing the actor, cf. West Circassian *šxə* ‘eat it!’; in Abkhaz-Abaza and Ubykh the actor prefix is omitted only with transitive verbs, and in all NWC it is present in negated imperatives as well as in the plural, cf. Abaza *j-š-čʹakʹ* 3SG.N.ABS-2PL.ERG-weigh(IMP) ‘you.PL weigh it!’. Abkhaz-Abaza have a suffix *-n* in the negated imperative in addition to the regular prefixal negation, cf. Abkhaz *wə-m-ca-n* 2SG.ABS-NEG-go-NEG.IMP ‘don’t go!’ (Aristava et al. 1968: 118). Commands and wishes directed at the 3rd person are marked by the hortative suffixes in Abkhaz-Abaza and Ubykh, cf. Ubykh *a-j-mə-kʹe-gʹačʷ* 3SG.ABS-LOC-NEG-come-HORT ‘let him not come’ (Fenwick 2011: 130), and prefixes in Circassian, cf. Temirgoy West Circassian *q-j-ere-ne-žʹ* Cisl-LOC-HORT-remain-RE ‘let him remain there’. The optative can combine with the past tense to express counterfactual wishes, e.g. Abkhaz *j-z-dər-wa-nda-z* 3SG.N.ABS-1SG.ERG-know-IPF-OPT-PST.NFIN ‘if only I knew’ (Aristava et al. 1968: 122).

With respect to interrogative forms NWC languages split into Circassian with one interrogative marker for general and content questions (West Circassian *-a*, Kabardian *-re*, limited to the present tense) and the rest with different markers for general and content questions

(e.g. Ubykh -š vs. -j, Fenwick 2011: 133). Abkhaz and Abaza are typologically unique in being able to form content questions solely by means of verbal morphology, see §6.9.

Other modal meanings expressed in the verbal complex include situational possibility and necessity and epistemic modality. Situational possibility can be expressed by the benefactive applicative or by specialized suffixes like West Circassian -š^wə or Ubykh -fe, cf. Ubykh sə-*g^wəč'áqe-fe-qe-me* 1SG.ABS-speak-HBL-PST-NEG 'I was not able to speak' (Fenwick 2011: 126 after Dumézil 1967: 111). Necessity is expressed mainly by auxiliaries, but West Circassian has a debitive suffix -pχe, cf. *wə-t-λeβ^wə-pχa-β* 2SG.ABS-1PL.ERG-see-DEB-PST 'we had to see you' (Smeets 1984: 279). Epistemic modality, not distinguishing between possibility and necessity, is primarily expressed by constructions with auxiliaries, especially in Circassian (see Aksenova 2015 on Bzhedugh West Circassian); some of them have already become suffixes, like West Circassian -š^wtən < LOC-stand-MSD, cf. (5.48). Of similar origin is the Abkhaz debitive (Hewitt 1979a: 192).

Temirgoy West Circassian

- (5.48) *mə-š' zə-g^were š'ə-χ^wə-βe-š^wtən.*
 this-OBL one-certain LOC-happen-PST-INFER
 'Something must have happened here.'

In Abkhaz-Abaza there is an inferential mood (Hewitt 1979c) with the suffix -za, probably an earlier auxiliary, which itself can take either the non-past suffix -p̄ or the subjunctive marker -rə-n, with a difference in temporal reference of the event, (5.49).

Abaza (Tabulova 1976: 167)

- (5.49) a. *d-š-kət-laɣ^w-za-p̄*
 3SG.H.ABS-2PL.IO-village-mate-INFER-NPST.DCL
 'He must be your fellow villager.'
- b. *a-mš ajšəs-za-rə-n*
 DEF-day short-INFER-FUT.NFIN-PST.DCL
 'The day must have been short.'

There are no unequivocal evidential categories in NWC (not counting the inferential), even though marking of quotation and indirect speech is well-developed, see §7.4.

The NWC verbal complex also encodes various evaluative meanings, such as 'easy' vs. 'hard', excessive or intensive action and others, cf. the West Circassian simulative suffix -š^we 'pretend' in (5.5) above or the Abaza suffix -g^wəš'a- expressing the speaker's pity, (5.50).

Abaza (Tabulova 1976: 212)

- (5.50) *marajdat wə-l-ba-rək^wən, d-g^wərk'a-g^wš'a-p̄.*
 Maridat 2SG.M.ABS-3SG.F.ERG-see-COND 3SG.H.ABS-happy-pity-NPST.DCL
 'If Maridat sees you, she will be happy, the poor one.'

Facilitative and difficilitative suffixes turn dynamic verbs into static and suppress the agent of transitive verbs, cf. Abaza *j-s-fa-t* 3SG.N.ABS-1SG.ERG-eat(AOR)-DCL 'I ate it' vs. *j-fa-χ^wə-p̄* 3SG.N.ABS-eat-FCL-NPST.DCL 'it is easy to eat' (Tabulova 1976: 107).

Suffixes expressing aspectual, evaluative and modal meanings can combine with each other, their order generally reflecting their semantic scope (see Korotkova & Lander 2010 on West Circassian), cf. (5.3) and (5.5) above. Many of the suffixes described in grammars, however, appear to have limited productivity, and speakers are reluctant to combine them in elicitation.

5.7. Negation

The expression of negation is one of the most intricate phenomena in NWC verbal morphology (see Chkadua 1970 on Abkhaz-Abaza, Dumézil & Esenç 1975b: 163–170, Fenwick 2011: 136–138 on Ubykh, Kumakhov 1971: 245–247 and Smeets 1984: 289–378 on Circassian in general, Sumbatova & Lander 2007 on West Circassian). All NWC languages have both prefixal and suffixal negative morphemes. The prefixal negation *-m-*, occurring immediately before the stem, clearly belongs to the common layer of NWC affixes, while negative suffixes in Circassian (West Circassian *-ep*, Kabardian *-qəm*) are clearly innovative (see Kumakhov 1971: 246–247, Smeets 1984: 344–378), as well as the Abaza/Sadz emphatic negative prefix *g'*-. In Abkhaz-Abaza and Ubykh the negative suffix is also *-m*. With regard to the distribution of the prefixal and suffixal negative markers Abkhaz-Abaza and Ubykh differ considerably from Circassian.

The most complex system of negation is found in Abaza and in the Sadz dialect of Abkhaz, where declarative verbal forms mark it twice: first in the beginning of the word by the emphatic prefix *g'*- in the post-absolutive slot and then by the regular prefixal or suffixal *-m-*, see Table 5.9 (Lomtadidze et al. 1989: 111–112). The emphatic negative prefix is absent from non-declarative and non-finite forms.

Table 5.9. Negative verbal forms in Abaza.

	finite	non-finite
static present	<i>-g'-...-Σ-m</i>	<i>-Σ-m</i>
static past	<i>-g'-...-Σ-mə-z-ṭ</i>	<i>-Σ-mə-z</i>
dynamic present	<i>-g'-...-Σ-wa-m</i>	<i>-m-Σ-wa</i>
imperfect	<i>-g'-...-Σ-wa-mə-z-ṭ ~ -g'-...-m-Σ-wa-z-ṭ</i>	<i>-m-Σ-wa-z</i>
aorist	<i>-g'-...-m-Σ-ṭ</i>	<i>-m-Σ</i>
future I	<i>-g'-...-Σ-wa-šə-m</i>	<i>-m-Σ-wa-š</i>
subjunctive I	<i>-g'-...-m-Σ-wa-šə-z-ṭ</i>	<i>-m-Σ-wa-šə-z</i>
imperative	<i>-m-Σ-n</i>	—
realis conditional	—	<i>-m-Σ-ztən</i>

In both Abkhaz-Abaza and Ubykh the choice of prefixal vs. suffixal position of the negative *-m-* depends on whether the verb is static or dynamic, declarative or non-declarative (all non-declarative and most non-finite forms have prefixal negation), and with declarative forms on particular tense (e.g. in Abkhaz-Abaza aorist is negated prefixally, in contrast to most other tenses; in Ubykh, by contrast, the dynamic present is negated prefixally as opposed to most other tenses, Fenwick 2011: 136–137; both options are attested for the imperfect in Ubykh and Abaza).

In Circassian, in most non-declarative and non-finite verbal forms only prefixal negation is possible, cf. West Circassian imperative *wə-mə-β* 2SG.ABS-NEG-cry(IMP) ‘don’t cry!’ or conditional *mə-k^we-me* NEG-go-COND ‘if s/he doesn’t go’. On the other hand, the normal position of negation for all declarative forms is suffixal, but the prefix is also possible with a difference in meaning, cf. a minimal pair from the Nart sagas in (5.51):

Bzhedugh West Circassian (Smeets 1984: 328–329)

- (5.55) a. *sə-qə-b-de-k^we-n-ep!*
 1SG.ABS-CISL-2SG.IO-COM-go-MSD-NEG
 ‘I won’t marry you!’ (it is not the case that [I will marry you])

b. *sə-qə-b-de-mə-kʷe-n!*

1SG.ABS-CISL-2SG.IO-COM-NEG-go-MSD

‘I still won’t marry you!’ (it will be the case that [I don’t marry you])

Forms with two non-redundant negative markers are also possible, cf. West Circassian *sə-mə-dax-ep səd-ep!* 1SG.ABS-NEG-beautiful-NEG what-NEG ‘No, it’s not the case that I’m not pretty!’ (Sumbatova & Lander 2007: 81). Smeets (1984: 327–332) describes the suffixal vs. prefixal negations as the difference between predicative and attributive negation; Sumbatova & Lander (2007) rather argue that the negative suffix encodes standard negation in terms of Miestamo (2005), i.e. the negative truth value of the proposition, while the negative prefix is reserved for all other types of negation. In most cases this is equivalent to the narrow scope of prefixal negation vis-à-vis some other operator (modal or subordinating), but suffixal negation can also be embedded, cf. West Circassian *š’ə-sə-ɛ-ep-š’tən* LOC-sit-PST-NEG-INFER ‘he must have sat here’ (Kumakhov 1971: 245), and can have narrow scope with respect to some operators it follows in the suffixal chain, most notably, irrealis, cf. Besleney Kabardian subjunctive *kʷe-ne-xe-te-qəm* go-FUT-PL-IPF-NEG ‘they would not have gone there’.

6. Simple clause

6.1. Structure of noun phrases

The core of the noun phrase in all NWC languages is constituted by the so-called *nominal complex*, a specific formation comprising a noun and some of its modifiers. Typically, a nominal complex includes a noun, which can be followed by an adjective or an adjective-like modifier (e.g., a resultative verb) and preceded by a non-referential nominal modifier or a borrowed relational adjective (6.1), although some varieties allow different orders; in (6.1) the brackets indicate the boundaries of the nominal complex.

West Circassian

- (6.1) *qatə-m jə-[tarjəχ qebar Ɂe.ʃeɁʷen]-xe-r*
 town-OBL POSS-history tale wonderful-PL-ABS
 ‘the wonderful historical tales of the town’

NWC languages differ in the position of simple numerals within the nominal complex: in Circassian they are accompanied by a “linker” morpheme and typically occur at the end of the complex (6.2), although they can split it in Kabardian (6.3). In Ubykh and Abkhaz-Abaza, numerals normally occur to the left of other lexical elements of the complex (6.4) (but in Abkhaz they may also occur outside of the nominal complex, see below).

West Circassian

- (6.2) *šə-çəkʷ-jə-š’ə-r*
 horse-small-LNK-three-ABS
 ‘three small horses’

Besleney Kabardian

- (6.3) *abaz-jə-ɬ qʷaž’-jə*
 Abaza-LNK-two village-ADD
 ‘and two Abaza villages’

Ubykh (Fenwick 2011: 91, after Dumézil 1960: 435)

- (6.4) *ʁe-tqʷe-qap[e]-ewn*
 3SG.PR-two-hand[.OBL]-INSTR
 ‘with his two hands’

A combination of the lexical parts of a nominal complex may have properties of a single stem surrounded by prefixes and suffixes (see Lander 2017 on West Circassian). Despite this, orthographic conventions often require that it be written as a sequence of separate words. This may be motivated by the fact that the lexical parts of a nominal complex can have a complex morphological structure themselves. Moreover, in some varieties, especially in Kabardian, the elements of the nominal complex undergo demorphologization accompanied by liberalization of word order, acquisition of prosodic independence by the lexical parts of the complex and the rise of complex syntactic structures within the complex.

A noun or a nominal complex can be preceded by various modifiers such as demonstratives (6.5), referential possessors (cf. (4.19e) above), relative clauses, and some closed class elements whose inventory differs between languages. Possessors clearly constitute an autonomous NP and must be cross-referenced on the nominal complex (see §4.1). For demonstratives see §4.2 and for relative clause constructions, see §7.3.

Abkhaz (Chirikba 2003: 57)

- (6.5) *ant a-tápha-čʷa*
 MED.PL ART-girl-PLH
 ‘those girls’

It is not always clear whether a modifier preceding a noun is included into the nominal complex or not. For example, in West Circassian, the predicate of a relative clause sometimes lacks the properties of an independent prosodic word when it immediately precedes the head noun (cf. Lander 2010, 2012, 2017). Demonstratives are usually described as autonomous words or as proclitics, but for Ubykh, Fenwick (2011: 79–81) treats demonstratives as prefixes. At the same time, some modifiers typically entering a nominal complex occasionally are found outside of it. For example, Abkhaz shows a specific construction where a numeral accompanies the noun but takes its own article (6.6). It is not clear whether this should be described as a single NP.

Abkhaz (Chirikba 2003: 57)

- (6.6) *r-áhʷsʷ-čʷa á-χ-ɣə-k*
 3PL.IO-sister-PL ART-three-H-INDF
 ‘all three of their sisters’

In Circassian and Abkhaz-Abaza complex numerals simply follow the nominals they modify, cf. West Circassian *jəʎes tʷe-čʷ-jə-pʎ* ‘eighty years’, while in Ubykh they precede the nominal, and the final component of the numeral forms a compound with the noun (6.7).

Ubykh (Fenwick 2011: 90 after Dumézil & Esenç 1977b: 14)

- (6.7) *tqʷétʷ-ale šə-šʷ-ále-n*
 twenty-COORD three-year-COORD-OBL
 ‘twenty-three years’

A combination of two nominals describing the same individual may form a complex phrase either by simple apposition (presumably within a single nominal complex) or, at least in Circassian, by a typologically interesting structure with one of the nominals being marked by the

adverbial case (6.8). In Ubykh, according to Fenwick (2011: 43), a noun may be accompanied by other modifier-like elements marked with an adverbial case as well (6.9), but at least for Circassian, similar structures are likely to be treated as sequences of an adverbial clause and a nominal.

West Circassian

- (6.8) *tark^waje-m ja-qat-ew samswən sə-q-jə-čʻə-Ɂ*
 Turkey-OBL POSS-town-ADV Samsun 1SG.ABS-CISL-LOC-go.out-PST
 ‘I went out of the Turkish town of Samsun.’

Ubykh (Fenwick 2011: 43, after Vogt 1963: 85)

- (6.9) *ašʻe-cə-nə tət*
 shirt-PRIV-ADV man
 ‘a man without a shirt’

While definiteness/specificity is marked by morphological means, there is some evidence that nominals with and without morphological determiners have distinct properties akin to the NP/DP distinction. The most revealing context in this respect is the predicate position. Only nominals that have their own reference – either due to their inherent properties (proper names and pronouns) or due to some sort of specificity marking – must and can take a copula, as shown in (6.10) from Abaza:

Abaza (elicited)

- (6.10) *arəj a-daska waχʻə ckʻa-*(k) ak^w-b*
 PROX DEF-blackboard today clean-INDF 3SG.IO+COP-DCL
 ‘This blackboard is clean today.’

6.2. Predicate structure

In all NWC languages, we can distinguish between two classes of predicates: predicative proper and copular. The predicate position need not be fulfilled by a verb describing a situation. Rather there is a strong, yet violatable bias in NWC languages to encode the focus as the predicate; cf. (6.11a) and (6.11b). This goes hand in hand with the fact that predicates are formed on the basis of words of all major parts-of-speech as well as some postpositions, which acquire the relevant predicate morphology (6.11c).

West Circassian (elicited)

- (6.11) a. *səhata-r šʻə-m dežʻ bzəwə-xe-r k^wec-hase-m tje-bəb-a-ke-x*
 hour-ABS three-OBL at bird-PL-ABS wheat-field-OBL LOC-fly-LAT-PST-PL
 ‘Around three o’clock the birds flew to the wheat field.’
 b. *səhata-r šʻə-m dežʻ bzəwə-xe-r zə-tje-bəb-a-ke-xe-r*
 hour-ABS three-OBL at bird-PL-ABS REL.IO-LOC-fly-LAT-PST-PL-ABS
k^wec-hesa-Ɂ
 wheat-field-PST
 ‘Around three o’clock the birds flew TO THE WHEAT FIELD.’
 c. *bzəwə-xe-r k^wec-hase-m zə-šʻə-tje-bəb-a-ke-xe-r*
 bird-PL-ABS wheat-field-OBL REL.IO-TEMP-LOC-fly-LAT-PST-PL-ABS
səhata-r šʻə-m dežʻə-Ɂ
 hour-ABS three-OBL at-PST
 ‘The birds flew to the wheat field AROUND THREE O’CLOCK’

Copular predicates consist of two parts: a copula and its complement which immediately precedes it. The complement of a copula may be a referential NP, as in (6.12), but in clefts, it may be manifested by other kinds of constituent. In (6.13), we find a focused adverbial clause appearing as a complement of the copula:

- Abaza (elicited)
- (6.12) *sara arəj z-ɣʷə-z sakʷ-p̌*
 I PROX REL.ERG-write-PST.NFIN 1SG.COP-NPST.DCL
 ‘I am the one who wrote this.’
- (6.13) *sup vilka-la j-z-s-fa-wa*
 soup fork-INS 3SG.N.ABS-REL.RSN-1SG.ERG-eat-IPF
 [loška gʷ-a-ʔa-m-ta] akʷ-b
 spoon NEG.EMP-3SG.N.IO-be-NEG-ADV 3SG.IO+COP-DCL
 ‘I am eating the soup with a fork because there is no spoon.’ (Lit. ‘Why I am eating the soup with a fork is the non-existing of a spoon.’)

For some constituents, NWC languages and speakers vary as to whether they can function as predicates proper or require a copula. For example, proper names tend to appear with the copula but they may also form a predicate proper. Full-fledged NPs consisting of a noun and a relative clause can constitute predicates in some NWC varieties (6.14) but are much more heavily accepted in others, where a kind of a light verb is required (6.15): probably this depends on whether a speaker interprets a combination of a relative clause with a noun as referential by default.

- Abaza (elicited)
- (6.14) *murat j-argʷan-əw a-wəram j-bzaz-wa d-čʳəqʷ.čʳpaɣʷ-b.*
 Murat REL.ABS-close-NPST.NFIN DEF-street REL.ABS-live-IPF 3H.ABS-shoe-maker-
 NPST.DCL
 ‘Murat is a shoe-maker who lives at the neighboring street.’

- West Circassian (elicited)
- (6.15) a. *ʔmurat šhačʰafe t-jə-ježʰape šʰə-zə-f-a-šə-re*
 Murat respect 1PL.IO-POSS-school LOC-REL.IO-BEN-3PL.ERG-make-DYN
 čʰetɛjeɣažʰ
 teacher
 ‘Murat is a teacher who is held in high respect at our school.’
- b. *murat šhačʰafe zə-f-a-šə-re čʰetɛjeɣažʰ-ew*
 Murat respect REL.IO-BEN-3PL.ERG-make-DYN teacher-ADV
t-jə-ježʰape ʔʷə-t
 1PL.IO-POSS-school LOC-stand
 Lit. ‘Murat stands at our school as a teacher who is held in a high respect.’

While copulas form a well-established syntactic constituent with their complements, in simple predicate constructions there is no good evidence for a verb phrase. However, regardless of its transitivity, the predicate may form a tighter unit with the absolutive argument. For instance, in Circassian a sequence of an absolutive argument and a predicate of the relative clause cannot be separated by an internal head, see Lander (2010). In Abkhaz-Abaza if a non-human or plural absolutive argument immediately precedes its predicate, the latter normally

lacks the absolutive cross-reference index which otherwise occurs on its left periphery, see ex. (5.7) above.

6.3. Valency classes

Major valency classes in NWC are defined by the patterns of verbal cross-reference (see e.g. Paris 1969, Bossong 1982, Smeets 1992b, Hewitt 2008). All verbs have an absolutive cross-reference marker (though with some verbs it seems to be dummy), and transitive verbs (or rather verb stems) are those which can have ergative cross-reference markers. In languages with overt case marking common NP arguments receive absolutive and oblique cases, respectively, see examples (4.17) and (4.18) above and (6.16) below.

Temirgoy West Circassian (elicited)

- (6.16) a. *č'atē-r me-žaje*
 boy-ABS [3.ABS]DYN-sleep
 'The boy is sleeping.'
- b. *pšaše-m č'atē-r j-e-λeβ^{wə}*
 girl-OBL boy-ABS [3.ABS]3SG.ERG-DYN-see
 'The girl sees the boy.'

Importantly, transitivity and numerical valency are independent of each other (see e.g. Lander & Letuchiy 2017), and all NWC languages have large classes of bivalent intransitive verbs with the absolutive agentive argument and the patientive argument encoded as the indirect object (see e.g. Letuchiy 2013 on Circassian). To this class belong many verbs denoting activities not affecting the whole object, such as 'hit', 'touch' or 'kiss', speech-act verbs such as 'ask' or 'scold', as well as 'look' as opposed to 'see'. The IO prefix is introduced either by the general "dative" applicative preverb (6.17) or by one of the specialized applicatives; in Abkhaz, Abaza and Ubykh the IO of such verbs can be expressed just by the personal prefix (6.18b), which is not possible in Circassian. Note that in Circassian and Ubykh the IO of such verbs is case-marked by the same oblique case as the ergative agent of transitive verbs (6.17b).

Temirgoy West Circassian (elicited)

- (6.17) a. *š^{wə}-qə-t-e-wəpč*
 2PL.ABS-CISL-1PL.IO-DAT-ask(IMP)
 'You (pl.) ask us!'
- b. *pšaše-r č'atē-m Ø-je-pλə*
 girl-ABS boy-OBL 3SG.IO-DAT+DYN-look.at
 'The girl is looking at the boy.'

Abaza (elicited)

- | | | | |
|--------|---|----|---|
| | (transitive) | | (intransitive) |
| (6.18) | a. <i>ša-ɣ-b-əj-t</i>
2PL.ABS-1PL.ERG-see-PRS-DCL
'We see you.' | b. | <i>w-ɣa-sə-m-pšə-n</i>
2SG.M.ABS-CISL-1SG.IO-NEG-look-NEG.IMP
'Don't look at me!' |

Ditransitive verbs like 'give', 'say' or 'sell' encode the theme as Abs and the recipient as IO (6.19); in Circassian and Ubykh this results in a typologically rare structure with identical case marking of the agent and the recipient (6.20).

Abaza

- (6.19) *awáj garód-ṭakʷ ʕa-lá-r-tə-n*
 DIST orchard-little (3SG.N.ABS)CISL-3SG.F.IO-3PL.ERG-give-PST.DCL
 ‘They gave her a small orchard.’

Temirgoy West Circassian (elicited)

- (6.20) *čʼaṭe-m pšaše-m txəla-r Ø-Ø-r-j-e-tə.*
 boy-OBL girl-OBL book-ABS 3SG.ABS-3SG.IO-DAT-3SG.ERG-DYN-give
 ‘The boy is giving the book to the girl.’

Transitive and intransitive verbs also differ in the formation of reciprocals (see Letuchiy 2007 for more details on West Circassian), cf. Abaza *j-aba-dər-əj-ṭ* 3PL.ABS-REC.ERG-know-PRS-DCL ‘they know each other’ (transitive) vs. *h-aj-čaža-ṭ* 1PL.ABS-REC.IO-talk(AOR)-DCL ‘we talked to each other’ (intransitive) (Tabulova 1976: 192–193), and, in Abkhaz-Abaza and Ubykh, of imperatives, where the 2SG ergative marker is deleted with transitive verbs while the 2sg absolutive marker of intransitive verbs is retained, cf. Ubykh transitive *a-bjé* 3.ABS-see(IMP) ‘see it’ vs. intransitive *wə-sá-je* 2SG.ABS-1SG.IO-hit(IMP) ‘hit me’ (Fenwick 2011: 128–129). On further criteria of determining verb classes by means of the combinatorics of verbs with various valency-changing operations see Letuchiy (2013) about West Circassian.

Besides the major classes of transitive and intransitive verbs, all NWC languages possess the class of so-called “inverse” intransitive verbs, whose more agentive argument is expressed as an indirect object (usually introduced by an applicative), while the absolutive corresponds to the less prominent argument. There are both restricted sets of lexical inverse verbs mainly comprising meanings related to cognition, emotions and wishes, e.g. Kabardian *qə-p-f-o-ṣ* (3.ABS)CISL-2SG.IO-MAL-DYN-do ‘it seems to you’ (Bagov et al. 1970: 118) or Abaza *jə-l-taqə-ṭ* 3SG.N.ABS-3SG.F.IO-want-NPST.DCL ‘she wants it’, as well as productive derivation of inverse forms by means of involuntative or benefactive applicatives, the latter denoting possibility (Hewitt 2008: 80–82; Lander & Vydrin 2009); with transitive verbs Erg changes to IO (6.21). On inverse verbs in Abaza see O’Herin (2002: 167–212).

Besleney Kabardian

- (6.21) *s-xʷe-ṣe-ne-r s-ṣ-a*
 1SG.IO-BEN-do-FUT-ABS 1SG.ERG-do-PST
 ‘I did what I could do.’

6.4. Word order

NWC languages are generally left-branching. The predicate by default occupies the final position, adnominal possessors precede their heads (§6.1), and postpositions rather than prepositions are used. It is commonly accepted that the basic word order in NWC is SOV, i.e. in transitive clauses A precedes P (6.22).

Abaza

- (6.22) *j-ašʼá-hba phʷás d-ʕá-j-gə-n*
 3SG.M.IO-brother-elder woman 3SG.H.ABS-CISL-3SG.M.ERG-lead-PST.DCL
 ‘His elder brother married (lit. led a woman).’

However, it is also a common wisdom that in reality, word order at the clause level is much freer (see Kumakhov & Vamling 2009: Ch. 5; Khutezhev 1999 for Kabardian, Tsikolia 1973 for Abkhaz). The predicate need not occupy the clause-final position (although in

subordinate clauses this rule is relatively strict), and likewise arguments may be scrambled especially where case marking and/or the context provide hints to their grammatical relations. Notably, the absence of core case-marking in Abkhaz-Abaza also does not preclude a degree of variation in word order. Other factors such as animacy of the nominal may play a role as well. E.g., Polinskaja (1989) and Kumakhov & Vamling (2009: 126) argued that in Kabardian, an inanimate ergative argument neutrally follows the absolutive argument (6.23) (in fact, the former paper even claimed that the SVO and OSV orders are equally possible in many other contexts as well).

Kabardian (Polinskaja 1989: 282)

- (6.23) a. *ʃaɫe-r psə-m ja-thet-a-ʃ*
 boy-ABS water-OBL 3SG.ERG-stifle-PST-DCL
 b. *?/*psə-m ʃaɫe-r ja-thet-a-ʃ*
 water-OBL boy-ABS 3SG.ERG-stifle-PST-DCL
 ‘The/a lad got drowned (lit., the water drowned the/a lad).’

Information structure can affect word order as well. For example, focused elements sometimes occur sentence-initially, as in (6.24). At the same time, NWC varieties also may use the preverbal position for focused elements, as in (6.25) and in (6.26), where the focused question word occurs immediately to the left of the verb:

Kabardian (Colarusso 1992: 76)

- (6.24) *pʃaʃe-xe-r se qe-s-λaʁ^w-a-xe-ʃ*
 girl-PL-ABS I CISL-1SG.ERG-see-PST-PL-DCL
 ‘I saw THE GIRLS.’ / ‘The girls I saw (not the boys).’

Abaza (O’Herin 2002: 30)

- (6.25) *s-k’tab də.z.da j-na-z-aχ^w?*
 1SG.IO-book who 3SG.N.ABS-TRAL-REL.ERG-take
 ‘Who took my book?’

West Circassian

- (6.26) *č’aɫe-xe-r xet ə-p^wə-nə-x?*
 boy-PL-ABS who 3SG.ERG-bring.up-MOD-PL
 ‘Who will bring up the boys?’

Kumakhov & Vamling (2009: 122–125) state for Circassian that wherever several proper names (which normally lack overt case marking) function as core arguments, word order appears to be strict SOV. However, this conclusion has been made mainly on the basis of sentences elicited out of context, and in fact the proper context and the appropriate intonation may improve different orders, see e.g. (6.27).

Kuban Kabardian

- (6.27) *nwəɾjet zarjeme ja-be-ʃxe-ne, sare ja-be-g^we.λə-ž’ə-ne*
 Nuriet Zarema 3SG.ERG-CAUS-eat-FUT Sara 3SG.ERG-CAUS-lie-RE-FUT
 ‘Zarema will feed Nuriet, Sara will care for her sleeping.’

6.5. Agreement

Agreement — in a rather liberal sense of this term — is manifested in NWC languages by means of the pervasive patterns of cross-reference of dependents on their heads, i.e. absolutive,

ergative, indirect and oblique objects on verbs and other predicates, possessors on their head nouns and complements on postpositions, already described in §§4.1 and 5.2 (the only other type of agreement attested in NWC is the one in number between nouns and determiners in Abkhaz-Abaza and Ubykh, §4.2). The features participating in cross-reference are person and number (in all languages) and gender (in Abkhaz-Abaza). This cross-reference is determined by semantics and pragmatics rather than by syntax, as evidenced by the not infrequent instances of mismatch between the features encoded in the personal prefixes and those of the cross-referenced nominals, as e.g. in (6.28), where a non-pronominal phrase is cross-referenced by a 1PL prefix.

Temirgoy West Circassian (textual example, Lander 2012: 150)

- (6.28) *haɬəʒʷe-r nebyər-jə-šʷə-m-jə ze-fe.d-ew t-šxə-be-š...*
 pancake-ABS person-LNK-three-OBL-ADD REC.IO-similar-ADV 1PL.ERG-eat-PST-CS
 ‘As to pancakes, we, the three men, ate them as equals, so...’

Interestingly, in Circassian, non-pronominal phrases cross-referenced by a 1st or 2nd person index must appear in the oblique case, even if the index is absolutive (Beljaeva 2006, Arkadiev et al. 2009: 80–83) (6.29); given that 1st and 2nd person pronouns do not have overt case markers in argument positions while 3rd person absolutive prefixes are null, it is tempting to assume that all nominals overtly indexed in the verb on fact bear oblique case in Circassian (Lander 2012: 151).

Standard West Circassian (Beljaeva 2006)

- (6.29) *zečʷe-m-jə tə-ze-fe-šhaf, zečʷe-m-jə tə-ze-fe-d*
 all-OBL-ADD 1PL.ABS-REC.IO-BEN-differ all-OBL-ADD 1PL.ABS-REC.IO-BEN-similar
 ‘We are all different, we are all similar.’

In addition to personal prefixes indexing all syntactic arguments, NWC languages, as already mentioned in §5.2, have morphological means to index the plurality of the absolutive argument. In Ubykh, this plural marking is extremely complex and admittedly obligatory, while in Circassian and Abkhaz the use of plural endings is optional. Besides that, agreement in number may be obligatory for animate arguments and optional for inanimate, see (6.30a,b).

Abaza (elicited)

- (6.30) a. *a-wasa-kʷá r-pnə/*a-pnə h-ca-p*
 DEF-sheep-PL 3PL.IO-at/3SG.N.IO-at 1PL.ABS-go-NPST.DCL
 ‘We will go to the sheep.’
 b. *a-háqʷ-kʷa r-pnə/a-pnə ʒʷəmp ʃa-j-áj-t*
 DEF-stone-PL 3PL.IO-at/3SG.N.IO-at strawberry CISL-go-PRS-DCL
 ‘Near the stones, strawberries grow.’

6.6. Anaphora

In general, NWC languages employ two types of anaphoric devices: morphological, represented by prefixes (§5.2), and syntactic, represented by autonomous words. Both may be found in one and the same language and sometimes even in one and the same clause. For example, in (6.31) a syntactic reciprocal marker (a complex expression *z-alé z-alé* ‘each other’) co-occurs with a reciprocal prefix:

Ubykh (Fenwick 2011: 83 based on Hewitt's unpublished field-notes)

- (6.31) **z-alé z-alé** **çe-n** **fə-ze-bj-á-n**
 one-COM one-COM good-ADV 1PL.ABS-REC.ERG-see-PL-PRS
 'we love one another'

Morphological and syntactic pronominal devices are not always easily distinguished. The Abkhaz absolutive reflexive pronoun *čə-* takes its own possessive prefixes and probably could be also described as a word-like element (either a clitic or an incorporated stem) (6.32). Interestingly, in Abaza, the same reflexive marker entirely lost its autonomous properties and does not take its own morphology anymore (see example (6.38) below).

Abkhaz (Hewitt 1979a: 77)

- (6.32) **lara l-čə-l-š-we-jt**
 she 3F.SG.IO-RFL.ABS-3F.SG.ERG-kill-IPF-DCL
 'She kills herself.'

Morphological and syntactic anaphors in NWC languages differ in their uses. In Circassian, all kinds of coreference between the arguments of the predicate are normally expressed by morphological devices (6.33), while syntactic anaphors are peripheral.

West Circassian

- (6.33) **nebgər-jə-tʷə-m-jə** **a-ne.ʔʷə-č'e** **zə-ze-f-a-beza-ʁ**
 person-LNK-two-OBL-ADD 3PL.PR-face-INS RFL.ABS-REC.IO-BEN-3PL.ERG-turn-PST
 'The two persons turned their faces to each other (lit., turned themselves to each other with their faces).'

For other languages, the picture depends on whether reflexivity or reciprocity is concerned. Abkhaz-Abaza lack morphological reflexives with the exception of the absolutive reflexive *čə-*, and hence have to rely on syntactic means (6.34) unless the coreference is implied by simple doubling of a person-number feature (6.35). In Ubykh, the reflexives bound by the ergative argument are syntactic, while other reflexives are morphological.

Abaza (elicited)

- (6.34) **awəj a-xağát l-qa j-a-z-lə-rʔʷa-x-t**
 DIST.SG DEF-mistake 3F.IO-RFL 3N.ABS-3N.IO-BEN-3F.ERG-forgive-RE-DYN
 'S/he forgave herself for the mistake (lit., forgave the mistake to herself).'

- (6.35) **j-ʕa-h-hə-r-dər-d**
 3SG.N.ABS-CISL-1PL.IO-1PL.ERG-CAUS-know(AOR)-DCL
 'we learned this' (lit., 'we made ourselves know this')

Ubykh

- (6.36) a. **sə-g'é pšə-sə-š'-ew**
 1SG.PR-self warm-3SG.ERG-make-FUT
 'I will warm myself' (Fenwick 2011: 82, after Dumézil 1967: 68)
 b. **še-ná a-ze-fé-s-ḡ-ew-t**
 three-ADV 3.ABS-RFL.IO-LOC-1SG.ERG-cut-FUT-FUT
 'I will cut it (lit., apart from itself) into three' (Fenwick 2011: 107, after Dumézil & Esenç 1977b: 12)

Reciprocal relations are typically expressed morphologically in all NWC languages. Interestingly, in Circassian reciprocal prefixes almost coincide with the reflexive, cf. (6.33) above, and in Ubykh the same prefix is used for reflexivity and reciprocity, cf. (6.31) and (6.36). In Abkhaz-Abaza, however, reciprocal constructions employ dedicated prefixes (6.37).

Abkhaz (Hewitt 1979a: 87)

- (6.37) *j-**ej**-zə-x^wmar-we-jt*
 3PL.ABS-REC.IO-BEN-play-IPF-DCL
 ‘they are playing for each other’

Morphological reflexives and reciprocals are strictly local: they must have an antecedent among the arguments of the same word. This rules out, e.g., morphological possessive reflexives occurring on a nominal but bound by an argument of the verb. The choice of an antecedent in reflexives usually follows an accusative scheme: the morphological reflexive is bound by the ergative in transitive predicates and by the absolutive in intransitive predicates. However, it is more likely that it is driven by agentivity: indeed, indirect objects can appear as antecedents of reflexives, e.g., in potential constructions (6.38)–(6.39). Further, in Circassian, there is at least one low-agentive verb which allows binding in both directions (6.40).

Abaza (O’Herin 2002: 185)

- (6.38) *č-g’ə-j-zə-k-wa-m*
 RFL.ABS-NEG.EMP-3SG.M.IO-POT-restrain-IPF-NEG
 ‘He cannot restrain himself.’

West Circassian

- (6.39) *zə-s-fe-ʔažə-r-ep*
 RFL.ABS-1SG.IO-BEN-restrain-DYN-NEG
 ‘I cannot restrain myself.’

Kuban Kabardian (elicited)

- (6.40) *sə-z-šə-B^wəpše-ž’-a* / *zə-s-šə-B^wəpše-ž’-a*
 1SG.ABS-RFL.IO-LOC-be.forgotten-RE-PST RFL.ABS-1SG.IO-LOC-be.forgotten-RE-PST
 ‘I forgot myself.’

Morphological reciprocals differ from reflexives in that with transitive stems they seemingly replace the ergative prefix with a specific ergative reciprocal marker (distinct from that used in most other slots with the exception of some indirect objects and bound by the absolutive), hence creating an impression of binding the ergative by the absolutive; cf. Colarusso 2004, Letuchiy 2007, Kazenin 2007. In all languages possessing dedicated reciprocal prefixes, however, it seems that this marker includes a simple reciprocal prefix and some other morpheme (cp. (6.41) with (6.37) and (6.42a) with (6.42b)). Based on this it is more likely that at least diachronically this construction originated from the demotion of the agent to an indirect object and its consequent binding (cf. Lander & Letuchiy 2010: 270 for other arguments for this analysis).

Abkhaz (Chirikba 2003: 38)

- (6.41) *xʔ-**aj**.ba-ba-jt*
 1PL.ABS-REC.ERG-see(AOR)-DCL
 ‘we saw each other’

Kabardian (Kumakhov et al. 2006: 250, 252)

- (6.42) a. *mežjəd-re de-re də-ze-de-łež-a-š*
 Mazhid-COORD we-COORD 1PL.ABS-REC.IO-COM-work-PST-DCL
 ‘Mazhid and we worked together with each other.’
- b. *λə-ž-xe-m-re fe-re max^we-qes*
 man-old-PL-OBL-COORD you.PL-ADD day-every
fə-ze.rə-λag^wə-nu-š
 2PL.ABS-REC.ERG-see-FUT-DCL
 ‘The old men and you will see each other every day.’

Syntactic reflexives and reciprocals have been studied in much less detail, but as it seems they are local as well, i.e. no long-distance reflexives/reciprocals are reported. Syntactic reflexives proper are usually based on the noun ‘head’ (6.34), although Ubykh also has a dedicated reflexive (6.36). Syntactic reciprocals employ the numeral ‘one’ as in (6.31), and more rarely the pronoun ‘other’ (6.43)

West Circassian

- (6.43) *zə-m a-dre-r j-e-ke-mase*
 one-OBL that-other-ABS 3SG.ERG-DYN-CAUS-guilty
 ‘One blames the other.’

Besides dedicated means, the coindexing relations may be supported by intensifiers. In such cases, there seem to be no clausal barriers for coindexing, neither any strict rules are found. cf. (6.44):

Standard Kabardian

- (6.44) *jə-wəž-č’e jezə-m jə-š-u š-jə-ž-a-š*
 POSS-after-INS INTF-OBL 3SG.ERG-know-ADV LOC-3SG.ERG-throw-PST-DCL
 ‘After that, he threw it consciously (lit., himself knowing this)’

6.7. Grammatical relations: subjecthood

As shown above, morphologically NWC languages consistently distinguish between absolutes and non-absolutes. The latter include, first of all, ergatives (whose cross-reference is not introduced by any applicative) and indirect objects. The question is, then, whether these morphological contrasts reflect deeper grammatical relations which can also be distinguished on non-morphological grounds.

The idea that absolutive arguments (S and P) should be described as a separate and the most prominent grammatical relation finds support in several facts. First, unlike other arguments, absolutive arguments are obligatory. This requirement is especially obvious in Abkhaz-Abaza where the predicate must contain an overt absolutive cross-reference prefix unless there is an immediately preceding absolutive nominal. With verbs that for some reason lack an absolutive argument, at least Abkhaz requires dummy indexing (6.45), although it is certainly also possible for other positions as well (Kathman 1993).

Abkhaz (Kathman 1993: 195)

- (6.44) *sarə j-sə-z-ha-wé-jt*
 I 3N.ABS-1SG.IO-BEN-grow-IPF-DCL
 ‘I grow.’ (Lit., ‘It grows for me.’)

The presence of ergative cross-reference is usually semantically motivated. Transitive stems may well go without ergative indexes, e.g., in forms with the demoted agent or in resultative forms (§5.2). Indirect objects are normally optional (although some roots cannot be used without applicatives).

Second, the absolutive is the only argument that cannot be affected by valency changes (cf. Letuchiy 2012 for West Circassian), i.e. there is no valency changing derivation that eliminates the absolutive or causes the original absolutive to be expressed in some other way. This does not hold for other arguments. E.g., the ergative can be demoted to the indirect object (see §6.3). Notably, one of the demoting constructions, which introduces the potential agent by means of the benefactive applicative, has extended to intransitive verbs in Abkhaz-Abaza, but here the benefactive prefix in the potential function does not introduce any indirect object and the absolutive remains intact (see Hewitt 2008: 80):

Abkhaz (Hewitt 2008: 81)

- (6.46) *də-z-s-mə-sə-jt*
 3SG.H.ABS-POT-1SG.IO-NEG-hit(AOR)-DCL
 ‘S/he couldn’t hit me.’

Third, the absolutive and not other arguments may form a tighter unit with the predicate which remains inaccessible to elements external to the clause in relative clause constructions (see §7.3), cf. Lander 2010.

Fourth, at least in some dialects of West Circassian, there is a raising-like construction, where the matrix verb takes the plural suffix corresponding to the plural S/P of the embedded clause but not to the plural ergative (Testeleets 2009: 682, 688), as in (6.47).

West Circassian (partly based on Testeleets 2009: 688)

- (6.47) a. *a-xe-r* *qe-š^we-n-x-ew* *š’a.tə-x*
 DIST-PL-ABS CISL-dance-MOD-PL-ADV must-PL
 ‘They should dance.’
- b. *a-š’* *pjasme-xe-r* *ə-txə-n-x-ew* *š’a.tə-x*.
 DIST-OBL letter-PL-ABS 3SG.ERG-write-MOD-PL-ADV must-PL
 ‘S/he should write letters.’
- c. **a-xe-me* *ʔ^wef* *a-šə-n-ew* *š’a.tə-x*
 DIST-PL-OBL.PL work 3PL.ERG-do-MOD-ADV must-PL
 intended: ‘They should work.’

Yet with other coreference constraints, it is S and A that seemingly go together. As shown in §6.6, local anaphora clearly singles out the S/A as a controller (although reciprocal constructions constitute a possible exception). Further, NWC languages show the “subject control” (both simple and backward) requiring the S/A argument of the embedded verb to be coindexed with the subject of the matrix verb (6.48).

Abaza (elicited)

- (6.48) *h-warad-k^wa* *ʃalaj* *j-h^wa-wa* *d-a-la-ga-ʔ*
 1PL.IO-song-PL Ali 3PL.ABS+3M.ERG-say-IPF 3SG.H.ABS-3SG.N.IO-LOC-begin-DCL
 ‘Ali started singing our songs.’

Colarusso (1992: 181–182) argued that in Kabardian it is S/A that is deleted in coordinating construction and similar structures but this seem to be rather a tendency than a strict

rule, as shown by (6.49), where the plural marking in the second clause implies the coreference of its S to the P of the first clause.

Kabardian (elicited)

- (6.49) *a fəz-xe-r λə-g^were-m jə-λaB^w-a-xe-ŝ,*
 DIST woman-PL-ABS man-some-OBL 3SG.ERG-see-PST-PL-DCL
jəčʼjə qə-če-p-x^we-ž-a-xe-ŝ
 and C1SL-LOC-2SG.IO-BEN-run-PST-PL-DCL
 ‘Some man saw those women and (they) ran to you.’

In general, the tests distinguishing the absolutive do not seem to have any semantic explanation and suggest that it indeed has special syntactic status. On the other hand, the tests distinguishing S/A may rather be based on its agentivity or some kind of discourse prominence making it a default topic. This issue, however, requires further research.

6.8. Negation

As stated in §5.7, negation in NWC languages is expressed by prefixes and suffixes, whose distribution interacts with (non-)finiteness, albeit in a complex way. Because of the strict tendency to express focus as the predicate (§6.2), negation, when having focus in its scope, normally occurs on the main predicate. Though such structures may be translated via constituent negation into English, it should be remembered that in NWC languages they structurally represent nothing more than the negation of the main predicate (6.50), (6.51).

Standard Kabardian

- (6.50) *a-bə papʃe neχə-b.r-əw wə-zə-x^w-jej-r aχʃe-qəm...*
 DIST-OBL for more-often-ADV 2SG.ABS-REL.IO-BEN-want-ABS money-NEG
 ‘That’s why you need not MONEY most of all...’

Abaza (elicited)

- (6.51) *sara j-a-ta-s-k-wa j-g^ʼ-ažanaqa-m,*
 I REL.ABS-3SG.N.IO-LOC-1SG.ERG-translate-IPF 3SG.N.ABS-NEG.EMP-sentence-NEG
ažə-b
 word-NPST.DCL
 ‘I translate not sentences but words.’ (Lit., ‘What I translate is not a sentence, (it) is a word.’)

Notably, however, the focus-associated negation occasionally occurs on the predicate even when the focused quantified parts of the sentence remain embedded (although a wide-scope reading of negation still remains possible):

West Circassian (Testelefs 2009: 684)

- (6.52) *zeč^ʼe-m-jə a ʔ^wefə-r a-ŝə-r-ep*
 all-OBL-ADD that work-ABS 3PL.ERG-do-DYN-NEG
 ‘Not all (persons) did this work.’ / ‘Nobody did this work (lit., all did not did this work).’

Whenever the scope of negation is not constituted by focus, it occurs on the negated element. Normally, it is a predicate of an embedded clause (6.53), but its apparent occurrence on the NP is also observed (6.54).

Abaza

- (6.53) *j-qara-m-k^wa* *a-ž'awra* *də-ça-ça-ta*
 3SG.N.ABS-distant-NEG-CVB.NEG DEF-shadow 3SG.H.ABS-LOC-sit-ADV
awat *j-χč'-wə-n*
 DIST.PL 3SG.ERG-guard-IPF-PST.DCL
 'He sat not far away in the shadow and guarded (sheep).'

West Circassian

- (6.54) *w-jə-mə-g^wape-r* *çəfə-m* *je-mə-š*
 2SG.IO-POSS-NEG-pleasure-ABS person-OBL DAT-NEG-do
 'Do not do to other people what is not pleasant to yourself (lit., your not-pleasure).'

6.9. Question formation

In general, questions in NWC languages typically require specific marking on the predicate. Yes-no questions usually employ specific affixes in the rightmost slot of the verbal complex, as in (6.55), though Kabardian has such a marker for the present tense only relying on falling intonation elsewhere (Applebaum 2010).

Abaza

- (6.55) *wə-g'ə-m-pχaš'-wə-ma?*
 2SG.M.ABS-NEG.EMP-NEG-be.ashamed-IPF-Q
 'Aren't you ashamed?'

In content questions, whenever a question word is used, it is more typical to make it a predicate of a pseudocleft construction (6.56), although it may also remain in-situ (6.57):

Ubykh (Fenwick 2011: 196 after Dumézil 1960: 35)

- (6.56) *sak'e-j* *š-aj-χ'e-ç-a-n-jəj*
 what-Q 2PL.ABS-REL-BEN-cry-PL-PRS-NFIN
 'What is it that you're crying about?'

West Circassian

- (6.57) *t-jə-B^wəneb^w-bžəlfəke-me* *səd* *r-a-ʔ^wa-B?*
 1PL.IO-POSS-neighbor-woman-OBL.PL what DAT-3PL.ERG-say-PST
 'What did our neighbor woman tell him?'

Abkhaz and Abaza show a typologically unique strategy of forming content questions without question words based on relativization of the questioned argument and adding to the predicate one of the three specialized markers: suffixes *-da* for human referents (6.58a), Abkhaz *-j*, Abaza *-ja* for non-human referents (6.58b), and the prefix *-ba-* ~ *-pa-* for adverbial questions, inserted after the adverbial subordination prefixes (6.58c) (see Hewitt 1979a: 10–23 on Abkhaz, Idiatov 2007: 271–278, Pazov 2016 and Arkadiev 2018 on Abaza).

Abaza

- (6.58) a. *j-wə-c-k^wa-z-da?*
 REL.ABS-2SG.IO-be.with-PL-PST-QH
 'Who were with you?'
 b. *z-šá-wə-m-d-ja?*
 REL.IO+BEN-CISL-2SG.M.ERG-NEG-lead-QN
 'Why (lit. what for) didn't you bring them here?'

- c. *j-š-pa-h-č'p-wə-š?*
 3SG.N.ABS-REL.MNR-QADV-1PL.ERG-do-IPF-FUT
 'How will we do it?'

As said in §4.2, Abkhaz has an interrogative root *-arban* used as a predicate an taking absolutive prefixes; likewise, Abaza has a number of dedicated interrogative forms, all of which, however, are more or less transparently interrogative verbal forms optionally used in clefted structures (6.59).

- Abaza (elicited)
- (6.59) a. *j-a-čá-ja* *s-aš'á* *j-š-a-bá-j-tə-z?*
 REL.ABS-3SG.N.IO-belong-QN 1SG.IO-brother REL.ABS-CISL-3SG.F.IO-3SG.M.ERG-give-
 PST.NFIN
 'What did my brother give to you?'
- b. *j-an-bá-k'-əw* *w-an-šá-j-wa-š*
 3SG.N.ABS-REL.TEMP-QADV-COP-NPST.NFIN 2SG.M.ABS-REL.TEMP-CISL-go-IPF-FUT
 'When will you come?' (example courtesy of Anastasia Panova)

7. Complex sentence

7.1. General profile of complex sentence formation

In constructing complex sentences, NWC languages usually do not deviate from their polysynthetic nature and express interclausal relations by morphological means. Conjunctions are rare, but include, for example the coordination marker (see §7.2) and probably also the Abkhaz-Abaza citation particle *h^wa* originating from the verb 'say', which gradually develops into a complementizer (see §7.4).

When expressed morphologically, subordination and coordination are not always easily set apart, since verbal forms marked for interclausal relations may show mixed behavior. Besides that, within the domain of subordination proper, relative clauses, complement clauses, and adverbial clauses are not always clearly distinguished, either. For example, the mechanisms of relativization are regularly used for forming both complement and adverbial clauses (see §7.3). Further, some converbs (whose basic use is associated with adverbial clauses) may be also used in complementation or complementation-like contexts, see §7.4.

7.2. Clause chaining and coordination

Clause chaining in Circassian texts normally operates with general converbs, hence patterning together with other languages of the area like East Caucasian and Turkic (but not South Caucasian), see (7.1) and (7.2). Such general converbs may be marked with a neutral adverbial suffix, as in (7.1). Besides that, in coordinating-like constructions for non-final conjuncts we also find the use of verbal forms unmarked for tense but hosting the additive suffix, as in (7.2).

- Ubykh (Fenwick 2011: 187, after Dumézil 1965: 154)
- (7.1) *a-məš^we-n* *jə-q^we-n* *jə-də-dwe-qə*
 DEF-bear-OBL.SG 3SG.ABS+3SG.ERG-seize-ADV 3SG.ABS+3SG.ERG-CAUS-die-PST
 'the bear caught him and killed him'

- Kuban Kabardian
- (7.2) *...?ene-daxe* *ja-x^we-d-ke-hazər-jə* *hašə-xe-r* *ja-ke-heš-a*
 table-beautiful 3PL.IO-BEN-1PL.ERG-CAUS-ready-ADD guest-PL-ABS 3PL.ERG-CAUS-guest-PST
 '...we set a nice table and entertained the guests (lit., caused the guests be guests).'

In Abkhaz-Abaza, on the other hand, there are dedicated forms which are normally used as non-final predicates in describing a sequence of events:

Abkhaz (Chirikba 2003: 49)

- (7.3) *á-mat a-lá j-á-cha-n jə-psə-jt*
 ART-snake ART-dog 3SG.N.ABS-3SG.N.IO-bite-PST 3SG.N.ABS-die-DCL
 ‘The snake_i bit the dog_j and it_{i/j} died.’

In all NWC languages, we also observe the use of coordinating conjunctions (primarily yet not exclusively in adversative contexts):

Abaza (Tabulova 1976: 284)

- (7.4) *a-la zak-g'jaj g'-a-m-f-t awasa a-pək^w š'a-ŋ^waca-ḡ*
 DEF-dog one+CL.N-ADD NEG.EMP-3SG.N.ERG-NEG-eat-DCL but 3SG.N.IO-nose blood-only-NPST.DCL
 ‘The dog has not eaten anything, yet its nose is (covered with) blood.’

Standard Kabardian (Kumakhov et al. 2006: 504)

- (7.5) *weczž'ane-r q-je-w-a-š jač'jə ja-pe-dəde-w ɬare*
 bell-ABS CISL-DAT-beat-PST-DCL and 3PL.IO+POSS-front-very-ADV Lara
klassə-m šə-h-a-š
 classroom-OBL LOC-go.in-PST-DCL
 ‘A bell rang and Lara entered the classroom for the first time.’

7.3. Relative clauses

NWC languages have large inventories of non-finite forms with specialized functions. The most prominent class of non-finites is relative forms, traditionally called “participles” but quite distinct from participles of Indo-European languages (see Hewitt 1979b, 2010 on Abkhaz, O’Herin 2002: Ch. 8 on Abaza, Lander 2010, 2012 on West Circassian). As has been said above, relativization is marked by prefixes occupying the same slots as the personal markers; in Abkhaz and Abaza this is supplemented by the change in TAM-inflection (7.6). In Circassian and Ubykh relative forms retain the same TAM-markers but can attach grammatical case endings (7.7).

Abaza (Rossius 2017)

- (7.6) a. *a-ph^wəspa h^wrápšza l-wə-t-t.*
 DEF-girl flower 3SG.F.IO-2SG.M.ERG-give(AOR)-DCL
 ‘You gave flowers to the girl.’
 b. *a-ph^wəspa h^wrápšza z-wə-tə-z*
 DEF-girl flower REL.IO-2SG.M.ERG-give-PST.NFIN
 ‘the girl whom you gave flowers’

Temirgoy West Circassian

- (7.7) *mač'e psaw-ew qe-z-be-ze-ž'ə-be-r.*
 few whole-ADV CISL-REL.ERG-CAUS-turn-RE-PST-ABS
 ‘Just a few returned intact (lit. few are those who returned intact).’

Relativization in NWC languages is expressed by morphological devices formally belonging to cross-reference series and typically contrasting the absolutive argument with other arguments (see Shagirov 1965, Hewitt 1979d and Lander 2010, 2012 for Circassian, Özsoy 1992 for Ubykh, Hewitt 1979b, 1985 for Abkhaz, O’Herin 2002 for Abaza and Nichols 2017 for a general survey). Relativization of the absolutive argument in Circassian and Ubykh retains the

argument structure zone of the predicate intact (the absolutive argument is unmarked in Circassian but is overtly cross-referenced in Ubykh), while in Abkhaz-Abaza the absolutive cross-reference is replaced with a relative prefix *jə-*, formally identical to the cross-reference of 3 person non-human/3 person plural argument. Relativization of other arguments, including possessors and postpositional objects is fulfilled by replacing the corresponding cross-reference with a relative prefix (*də-* in Ubykh, *zə-* elsewhere). In (7.8) from West Circassian, we find both relativization of the absolutive (with the verb ‘live in’, lit., ‘sit in’) and relativization of the possessor of the absolutive of the headless clause ‘whose fingers are long’, the relative clauses being bracketed. Note that Ubykh relative marker may display idiosyncratic behavior, as it can be combined with the 3rd person singular possessive prefix when it is expected to replace it (7.9) and it can be prefixed to adverbially marked internal heads (see below) such as ‘day’ – probably because the role of the relativized element in such patterns is determined by the lexical semantics of such heads (7.10).

West Circassian

- (7.8) [*q^waž'e-m* *de-s*] *nahə-ž-xe-m* [*zə-ʔape-xe-r* *č'əhe-xe-r*]
 village-OBL LOC-sit COMP-old-PL-OBL REL.PR-finger-PL-ABS long-PL-ABS
č'etɛjɛkəž'e *χ^wə-n-ew* *a-λate-š'tə-ɸ*
 teacher happen-MOD-ADV 3PL.ERG-consider-AUX-PST
 ‘The old generation living in the village thought that those whose fingers are long would become teachers.’

Ubykh (Fenwick 2011: 178–179)

- (7.9) *d-ke-t^w* *dwe-qé* *məzə*
 REL-3SG.PR-father die-PST(NFIN) child
 ‘the child whose father has died’ (based on Hewitt’s unpublished field-notes)
- (7.10) *də-š^we* *χ'ə-n* *š'-qe*
 REL-year prince-ADV become-PST(NFIN)
 ‘(in) the year he became sultan’ (after Dumézil 1959b: 23)

NWC languages may relativize almost any argument that can be cross-referenced, although in some varieties relativization of possessors of non-absolutive arguments seems to be prohibited (cf. Lander 2010 for Shapsugh West Circassian). More surprisingly, sometimes NWC languages may even relativize the roles that cannot be cross-referenced in independent clauses. In addition to relativization proper, relative forms are used to form locative (7.11), temporal (7.12), (7.13), manner (7.14) and reason (7.15) adjuncts as well as factive complements (7.16). In such cases the relative prefix is introduced by an applicative as a “pseudo-argument”; this relative prefix can or even must be omitted, which is especially characteristic of Kabardian (7.13). Abkhaz and Abaza have dedicated relative prefixes for adjunct relativization (see Hewitt 2010, Khagba 2015) (7.11), (7.14), while Ubykh uses a different strategy for adverbial subordination, combining the subordinating verb-initial prefix with a suffix or postposition (7.15).

Abaza

- (7.11) *j-š'arda-čə-χa-t* *j-ʔa-ta-z.*
 3PL.ABS-much-EXC-INC(AOR)-DCL 3PL.ABS-REL.LOC-be.at-PST.NFIN
 ‘They became too numerous where they lived.’

Temirgoy West Circassian

- (7.12) *werzemež' wəne-m qə-z-j-e-ha-ž'ə-m,*
 Warzameg house-OBL CISEL-REL.TEMP-LOC-DYN-enter-RE-OBL
setenaje q-je-wəpčə-ɐ.
 Setenaya CISEL-DAT-ask-PST
 'When Warzameg returned home, Setenaya asked him.'

Besleney Kabardian

- (7.13) *qə-š'ə-r-a-š'e-č'ə-xe-č'e ...* *psə-m x-a-ž-e.*
 CISEL-(REL.IO)TEMP-DAT-3PL.ERG-lead-ELAT-PL-INS water-OBL LOC-3PL.ERG-throw-LAT
 'When they have visited everyone ... they throw (the idol) into the river.'

Abaza (textual example, Sorokina 2017)

- (7.14) *šə-mχə j-šə-r-h^wa-z* *j-g'-aʔa-χə-m.*
 2PL.IO-millet 3SG.N.ABS-REL.MNR-3PL.ERG-say-PST.NFIN 3SG.N-NEG.EMP-be-RE-NEG
 'Your millet is no longer such as they told you.'

Ubykh (Fenwick 2011: 173)

- (7.15) *a-zeḵ^wé-n de-s-qe-qé-ɐafe* *a-g'jəbž'-qe.*
 DEF-straight-ADV SBD-1SG.ERG-say-PST-because 3.ABS-get.angry-PST
 'He got angry because I told the truth.'

Temirgoy West Circassian

- (7.16) *r-je-d-ɐe-ʔ^we-š't* *xase-m zer-je-d-ɐe-bʔake-re-r*
 DAT-DAT-1PL.ERG-CAUS-say-FUT council-OBL REL.FCT-DAT-1PL.ERG-CAUS-near-DYN-ABS
 'We will ask him to tell (Warzameg) that we invite him to the council.'

A nominal describing a set of referents which is further restricted by a relative clause or referring to an individual on which the relative clause provides additional information – the semantic head – can appear either externally to the relative clause or internally to it, at least as far as word order is concerned (see Lander 2010, 2012 for some evidence that even such nouns may be grammatically treated as external). The external semantic head normally follows the relative clause. The internal semantic head is often marked with an adverbial marker and tends to appear in the left periphery of the relative clause (7.17), although in Abkhaz-Abaza it can also remain unmarked (7.18) (cf. Kibrik 1992).

Ubykh (Fenwick 2011: 177 after Dumézil & Esenç 1975b: 190)

- (7.17) *á-bəjə-n le-ž^w-qe-jlə* *a-lé-mə-χ-ajə-n*
 DEF-sheep-ADV PVB-be.sitting(PL)-PST-RS.PL 3.ABS-LOC-NEG-be.standing(PL)-ITER-PL
 'The sheep that had been sitting there are not there any more.'

Bzyp Abkhaz (Kibrik 1992: 147)

- (7.18) *a-č'ḵ^wən a-la jə-jə-pqə-z* *jə-ɥ-nə jə-ce-jt*
 ART-boy ART-dog REL.ABS-3SG.M.ERG-beat-PST.NFIN 3SG.N.ABS-run-CVB 3SG.N.ABS-go-DCL
 'The dog that the boy beat ran away.'

There are also some minor patterns of relative clause constructions, where an internal head, for instance, takes an external case (Lander 2010), or the predicate of the relative clause appears within a nominal clause in the adjectival position following a modified noun (Paris 1989: 230, Colarusso 1992: 190-191, Applebaum 2013: 108-118). Finally, in all NWC languages

relative clauses may appear without any semantic head, as the second relative clause in example (7.8) above.

Relative clauses are typically used restrictively, i.e. they serve to restrict possible referents of an NP or to identify such a referent. In Circassian, this results in that they cannot modify pronouns. However, in Abkhaz-Abaza the non-restrictive use of relative clauses is possible, even with pronouns as heads:

- Abaza (Anna Sorokina, field notes)
- (7.19) *nčra-ta j-wə-ma-z zəmfʷa-g'əj*
 live-ADV REL.ABS-2SG.M.IO-be.at-PST all-ADD
jə-z-ž'wə-z wara
 3PL.ABS-REL.ERG-lie-IPF-PST.NFIN you.M
 'you, who lied to me during your whole life'

Relative clause constructions have much greater token frequency in NWC languages than in many other languages. In particular, they are frequently used in pseudocleft structures focusing some parts of a proposition (7.20) (see also §7.2). In addition, relative clauses appear in content indirect question constructions (see §7.4).

- Kabardian
- (7.20) *fe-ra-š sə-zə-š'ə-g'wəzə-r*
 you.PL-PRED-DCL 1SG.ABS-REL.IO-LOC-rely-ABS
 'I rely on YOU.' (Lit., 'The one(s) whom I rely upon are you.')

7.4. Complement clauses

Complementation in NWC is fulfilled by a number of heterogeneous means. All languages of the family employ action nominals (masdars) which, however, can (but need not) retain various nominal properties (cf. Ershova 2012 for Circassian and Kulikov 1999 for Abkhaz). In Circassian, for example, masdars can take case marking (7.21) and possessive prefixes (7.22), yet in some constructions they appear without it (7.23):

- Besleney Kabardian (Ershova 2012: 1)
- (7.21) [*txəl je-ž'e-nə-r*] *s-jə-č'ase-qəm*
 book DAT-read-MSD-ABS 1SG.IO-POSS-love-NEG
 'I am not fond of reading books.'
- (7.22) *w-jə-žejə-nə-r jə-rjəq'w-a?*
 2SG.PR-POSS-sleep-MSD-ABS POSS-enough-PST
 'Your sleeping was enough?'
- (7.23) [*max'w-e-č'e žejə-n*] *s-jə-č'ase-qəm*
 day-INS sleep-MSD 1SG.IO-POSS-love-NEG
 'I don't like sleeping during the day.'

The NWCs masdars display a number of curious properties related to their nominal nature. A noteworthy property of Circassian masdars (and some other nominalizations) is their ability to incorporate nominal participants (Ershova 2012, 2015) (7.24). Here they go hand-by-hand with other nouns which easily incorporate nominal modifiers within the nominal complex.

Temirgoy West Circassian

- (7.24) *nart-me žə-wəčʼə-nə-r x-a-ne-žʼə-κ.*
 nart-OBL.PL old-kill-MSD-ABS LOC-3PL.ERG-leave-RE-PST
 ‘Narts gave up killing their elderly.’

In addition, all NWC languages possess a number of nominalizations referring to the manner, location, time or agents of an event. Such nominalizations naturally appear in some complementation patterns but here they compete with constructions which have some properties of (usually headless) relative clauses, although often have marking which is synchronically specific to complementation (7.25).

West Circassian

- (7.25) *gʷəšʼəʔa-čʼe wə-mə-šə-ze qe-šʷa-čʼe-r /*
 speak-NMZ.MNR 2SG.ABS-NEG-know-CVB CISEL-dance-NMZ.MNR-ABS
qə-zere-šʷe-xe-re-r p-šə-βe
 CISEL-REL.MNR-dance-PL-DYN-ABS 2SG.ERG-know-PST
 ‘You learned to dance (lit., got to know how to dance / how (people) are dancing) already when you did not know how to speak.’

Abkhaz and Abaza have a special nonveridical nominalization referring to imaginary events as complements to verbs of seeming or pretending (Tabulova 1976: 171; Hewitt 2005b: 352–353):

Abaza (Tabulova 1976: 171)

- (7.26) *a-mš a-čla jə-z-qa-mə-l-wa-š-ša j-ba-n*
 DEF-bear DEF-tree 3SG.N.ABS-BEN-LOC-NEG-climb-IPF-FUT-IRR 3SG.M.ERG-see-
 PST.DCL

‘It seemed to him that the bear would not be able to climb the tree.’

Moreover, NWC employ in complementation structures constructions which receive markers typical for adverbial clauses (7.27).

Ubykh (Fenwick 2011: 189)

- (7.27) *je-s-f-éw-nə a-z-we-χʷé-n*
 IPS.ABS-1SG.ERG-eat-FUT-ADV 3.ABS-1SG.IO-LOC-pass-PRS
 ‘I am able to eat (lit. it passes within me to eat).’

Reported speech typically retains most properties of direct quotation (including the use of pronouns) but occasionally shows shift in tense marking (cf. Hewitt 2005b: 338 for Abkhaz). In all NWC languages, reported speech may be followed by a citation marker originating from the root ‘say’ (see, e.g., Ershova 2013 for Besleney Kabardian), see (7.28). Notably, however, in Abkhaz-Abaza this marker extends its use to the contexts which are not obviously related to reported speech. This is indicated, for example, by its use with complements of verbs like ‘know’ (7.29); see Hewitt (2005b: 354–356) for details.

Besleney Kabardian

- (7.28) *wə-s-šxə-ne žʼje-rjə žʼə-r-j-e-ʔe-rjə*
 2SG.ABS-1SG.ERG-eat-FUT QUOT-ADD PREF-DAT-3SG.ERG-DYN-say-ADD
 ‘[The eagle] says “I will eat you”.’

Abkhaz (Hewitt 2005b: 355)

- (7.29) *s-ɣáza d-qaça-bzâja-nə h^wa z-dâr-wa-jt*
 1SG.IO-friend 3SG.H.ABS-man-good-CVB QUOT 1SG.ERG-know-IPF-DCL
 ‘I know that my friend is a good man.’

The distribution of different complementation strategies varies and does not necessary occur in one-to-one correspondence with matrix verbs. For Circassian, Serdobolskaya (2016) argued that it may depend on whether a subordinate clause refers to a fact, an event or a proposition. However, even within the range of Circassian dialects, we find some variation in preferences for one or the other strategy, and neither do we observe any strict uniformity among NWC languages.

As noted in §6.7, some verbs in NWC languages are used in control constructions, and both backward (7.30a) and forward (7.30b) control has been shown to be possible (cf. Testeleets 2009 on West Circassian and Matasović 2007 on Kabardian). Potsdam & Polinsky (2012) argued that West Circassian possesses a typologically rare backward rising construction, yet it is not obvious that what they interpret as raising does not rather manifest a control construction (Testeleets 2009).

West Circassian

- (7.30) a. *a-š' ə-wəž wəne-m ja-šə-n wənaβ^we-r*
 DIST-OBL 3SG.PR-after house-OBL POSS-make-MSD family-ABS
f-je-ž'e-n ə-λeč'ə-š't
 BEN-DAT-begin-MSD 3SG.ERG-can-FUT
 ‘After that, the family can start building of a house.’
- b. *a-xe-me q-a-ʔepə-ʔe-n aʔahə-m ə-λeč'ə-š't*
 DIST-PL-OBL.PL CISL-3PL.PL-LOC-help-MSD Allah 3SG.ERG-can-FUT
 ‘Allah can help them.’

7.5. Adverbial clauses

Adverbial subordination in NWC is commonly expressed by numerous converbs. In all languages, there is a marker which is used both as the adverbial case and a general converb ending, cf. (7.31) and (7.32). There are also converbs of temporal simultaneity like West Circassian *-ze* or Ubykh *-še* and *-mse* (Fenwick 2011: 160–162), ‘while/until’-converbs like West Circassian *-fe*, as well as conditional, causal and purposive converbs; West Circassian employs its instrumental case marker to form frustrative converbs (Kuznetsova 2009: 309–318) (7.33).

Temirgoy West Circassian

- (7.31) *a-pašhe ja-wəc^w-ja, z-ja ə-mə-ʔ^w-ew*
 3PL.PR-before LOC-stand.up-ADD one-ADD 3SG.ERG-NEG-say-ADV
teḵ^wə-re š'ə-tə-β.
 little-DUR LOC-stand-PST
 ‘She stood up before them and stood for a while not saying a word.’

Abaza

- (7.32) *ʔ^w-ba s-titrad' j-a-nə-ta*
 two-CL.N 1SG.IO-notebook 3SG.N.ABS-3SG.N.IO-remain-ADV
h-pnə s-ʔa-j-x-d.
 1PL.IO-at 1SG.ABS-CISL-go-RE(AOR)-DCL
 ‘I went home with a poor mark in my notebook.’

Temirgoy West Circassian (Kuznetsova 2009: 314)

- (7.33) *pχa-ke-č'e* *da* *z-jə* *qe-č'ə-β-ep.*
 plough.AP-PST-INS PTCL one-ADD CISL-exit-PST-NEG
 'What's the matter that he ploughed, nothing grew up.'

Note that while we generally assume that converb marking represents inflection, some of these markers clearly behave as if they were attached to already existing forms or even clauses. For example, the Circassian conditional marker is sometimes added to forms containing dynamic prefix which is otherwise almost never used in non-finite contexts (7.34), and the Abaza adverbial marker can follow the declarative marker which normally ends the form and appears only in finite contexts (7.35).

Standard West Circassian

- (7.34) *bzəwə-r* *me-bəbə-me,* *me-bəbə* *g^wəš'əʔe-r-jə*
 bird-ABS DYN-fly-COND DYN-fly word-ABS-ADD
 'If a bird is flying, the word is flying as well.'

Abaza

- (7.35) *wə-š'tax'ə-la* *jə-w-g-əj-t-ta*
 2SG.M.IO-behind-INS 3PL.ABS-2SG.M.ERG-carry-PRS-DCL-ADV
jə-š-awá-š *á-pš-ta* *w-bzáz-əj-t*
 3SG.N.ABS-REL.MNR-possible+IPF-FUT DAT-similar-ADV 2SG.M.ABS-live-PRS-DCL
 'While leaving (lit., carrying) this behind you, you live as if it is allowed..'

There are also affixless converb-like forms; in Circassian they lack tense suffixes and mainly occur as the lexical part of auxiliary-verb constructions (Kimmelman 2011, Arkadiev & Maisak 2018) (7.36); in Abkhaz-Abaza they contain non-finite tense suffixes and head adverbial clauses (7.37).

Besleney Kabardian

- (7.36) *weš'x* *k^wed-re* *š'ə-mə-ʔe* *š'ə-χ^wə-m*
 rain many-DUR LOC-NEG-be TEMP-AUX-OBL
 'when it doesn't rain for a long time'

Abaza

- (7.37) *s-a-z-q^wəc-wa* *s-žəl-ç-d*
 1SG.ABS-3SG.N.IO-BEN-think-IPF(NFIN) 1SG.ABS-LOC-pass(AOR)-DCL
 'I went away, thinking about it.'

In addition, many clauses which are usually translated as adverbial exploit relativization. For example, Circassian languages regularly refer to temporal location via oblique or instrumental NPs based on temporal relativization, as in (7.38):

West Circassian

- (7.38) *s-j-ate-ž* *qə-zə-wəc^wə-č'e,* *se-rjə* *a-r* *s-e-šə*
 1SG.IO-POSS-father-old CISL-REL.TEMP-be.tired-INS I-ADD DIST-ABS 1SG.ERG-DYN-do
 'Whenever my old father gets tired, I do this as well.'

8. Areal and typological profile

In the domain of phonology, NWC languages share with the other languages of the Caucasus such features as rich consonant inventories comprizing a glottalized series of stops and

affricates as well as complex consonantal clusters. In morphosyntax, the areally common features include morphological ergativity, use of prefixes as markers of agreement / cross-reference as well as for the encoding of spatial relations, predominantly left-branching word order and non-finite subordination. Of importance are also such features as the preponderance for valency increase as compared to valency decrease (cf. Nichols et al. 2004) and the prominence of the grammatical relation “indirect object”, the latter being reflected in bivalent intransitives being a robust and well-populated subset of the verbal lexicon. In the domain of TAM categories, the distinction between a perfective and an imperfective past tenses is fairly trivial, especially in the European context, while the opposition of a neutral and a modalized future tenses can be seen as a North-Caucasian areal phenomenon finding parallels in Turkic. Finally, the typologically quite non-trivial pattern of differential case marking attested in Circassian clearly fits the areally widespread and more trivial phenomenon of differential object marking, even if generalizes it to both grammatical cases and all syntactic positions.

9. Outstanding issues

NWC languages are outstanding in many respects, both against the background of the languages of Western Eurasia and globally, as well as among the other languages of the Caucasus. Among the typological peculiarities of NWC one should mention their exuberant consonantism with a number of rare segments such as the Circassian glottalized affricates or the Abaza palatalized uvulars coupled with a severely impoverished “vertical” vocalism, both of which have posed challenges to phonological theory. In morphosyntax, one should go beyond the rather vague characterization of NWC languages as “polysynthetic” and point out such more concrete feature as the consistent encoding of a virtually unrestricted number of participants in the verbal complex, especially by means of numerous productive applicative prefixes introducing indirect objects corresponding to optional adjuncts of other languages. This property of NWC challenges the theoretical claims limiting the argument structure of a possible verb in human languages to just three participants (cf. Babby 2009 and the discussion in Arkadiev 2014c: 268–270). No less important is the use of relativization encoded morphologically by means of a special series of “operator-bound” personal markers working in some way similar to resumptive pronouns (Lander & Daniel, to appear) as the major morphosyntactic mechanism employed in such syntactic processes as subordination, encoding of information structure and questions. Surely typologically outstanding if not downright unique are the Abkhaz-Abaza purely morphological strategy of content question formation, also transparently based on relativization (§6.9) and the unrestricted differential case marking in Circassian languages.

Last but not least, one should note the peculiar behavior of quantifiers, which have been best described for Circassian languages (see Nikolaeva 2012 on West Circassian). First, although Circassian languages possess genuine distributive quantifiers like ‘each’ (9.1), they seem to contradict the proposed universals on such items by e.g. being able to occur as predicates in pseudocleft focus constructions (9.2); for details see Arkadiev & Lander (2013).

Besleney Kabardian (Arkadiev & Lander 2013: 5)

- (9.1) *č’atē-pebž som-jə-š’e se j-a-s-t-a*
 boy-every rouble-LNK-hundred I DAT-3PL.IO-1SG.ERG-give-PST
 ‘I gave each boy a hundred roubles.’

Temirgoy West Circassian (Arkadiev & Lander 2013: 6)

- (9.2) *xaləʒ^we* *qə-zə-tje-fa-ke-r* *č'ale-pepč*
 pie Cisl-REL.IO-LOC-fall-PST-ABS boy-every
 'EVERY BOY got a pie.' (Lit. On whom a pie fell is every boy)

Second, in complex sentences quantifiers can bind zero pronouns even when the latter belong to the matrix clause, i.e. under backward control (see Testelet 2009 for a comprehensive description of the phenomenon in West Circassian); consider examples (9.3)–(9.4).

Temirgoy West Circassian (Testelet 2009: 696–697)

- (9.3) \emptyset_i *faj-ep* [*zəpar-m-jə_i* *wered* *q-ə-ɽ^we-n-ew*]
 want-NEG nobody-OBL-ADD song Cisl-3SG.ERG-say-MOD-ADV
 'Nobody wants to sing.'

- (9.4) \emptyset_i *me-g^wəʒ^we* [*sabəj-pepč_i* *ʃ^wəhaftən* *qə-r-a-tə-n-ew*]
 DYN-hope child-every present Cisl-DAT-3PL.ERG-give-MOD-ADV
 'Every child hopes to receive a present.'

Both these phenomena seem to form part of more general properties of Circassian morphosyntax, but their rationale and theoretical interpretation still remains unclear.

Abbreviations

1 – 1st person; 2 – 2nd person; 3 – 3rd person; ABS – absolutive; ADD – additive; ADV – adverbial; ALLAT – allative; AOR – aorist; AP – antipassive; ART – article; AUX – auxiliary; BEN – benefactive; CAUS – causative; CIRC – circumferential; Cisl – cislocative; CL – classifier; CMPL – completive; COLL – collective; COM – comitative; COMP – comparative; COND – conditional; COORD – coordination; COP – copula; CS – causal; CVB – converb; DAT – dative; DCL – declarative; DEB – debitive; DEF – definite; DEM – demonstrative; DIST – distal demonstrative; DISTR – distributive; DUR – durative; DYN – dynamic; ELAT – elative; EMP – emphatic; ERG – ergative; EXC – excessive; F – feminine; FCL – facilitive; FCT – factive; FUT – future; H – human; HBL – habilitive; HORT – hortative; IAM – iamitive; IMP – imperative; INC – inceptive; INDEF – indefinite pronoun; INDF – indefiniteness; INFER – inferential; INS – instrumental case; INSTR – instrumental applicative; INTF – intensifier; INTRG – interrogative; INVOL – involuntative; IO – indirect object; IPF – imperfect; IPFV – imperfective; IPS – impersonal; IRR – irrealis; ITER – iterative; JUD – judicantis applicative; LAT – lative; LNK – linking element; LOC – locative applicative; M – masculine; MAL – malefactive; MED – medial demonstrative; MNR – manner; MOD – modal; MSD – masdar; N – non-human; NAG – agent nominal; NEG – negation; NFIN – nonfinite; NLOC – locative nominal; NMNR – manner nominal; NMZ – nominalization; NOBJ – object nominal; NONDUM – 'not yet' marker; NPST – nonpast; OBL – oblique; OPT – optative; PL – plural; POSS – possessive; POT – potential; PP – postpositional series of personal prefixes; PR – possessor series of personal prefixes; PRED – predicative; PREF – prefix; PRIV – privative; PROX – proximal demonstrative; PRS – present; PST – past; PTCL – particle; PVB – preverb; Q – question marker; QADV – adverbial question marker; QUOT – quotative; RE – refactive; REC – reciprocal; REL – relativizer; REP – repetitive; RES – resultative; RFL – reflexive; RS – retrospective shift marker; RSN – reason; SBD – subordinator; SG – singular; SML – similative; ST – stative; TEMP – temporal; TR – transitive; TRAL – translocative.

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Online resources

Abkhaz corpus: <http://baltoslav.eu/apsua/?mova=en>

Adyghe (Abzakh dialect) resources:

http://lacito.vjf.cnrs.fr/ALC/Languages/Abzakh_popup.htm

Adyghe (Bzhedug dialect) resources:

http://lacito.vjf.cnrs.fr/ALC/Languages/Bjedug_popup.htm

Adyghe (Shapsug dialect) resources:

http://lacito.vjf.cnrs.fr/ALC/Languages/Shapsug_popup.htm

Ubykh resources: http://lacito.vjf.cnrs.fr/pangloss/corpus/list_rsc_en.php?lg=Ubykh