Verbal complex predicates in Circassian languages

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1. Introduction

This chapter surveys the verbal complex predicates (VCPs) in Circassian languages of the Northwest Caucasian family. The presentation is based on the questionnaire on VCPs (Bisang et al. 2023) developed within the ComPLETE project, where VCPs are defined as follows:

> A verbal complex predicate (VCP) is a monoclausal construction with a single set of argument positions, consisting of at least two verbs (or "verb-like" items). These two verb-like items either
>
> (i) both belong synchronically to the class of verbs, or
>
> (ii) combine a lexical verb with a grammatical element which can also be used as a full verb in other contexts.

Circassian languages, which combine complex polysynthetic morphology (Testelets & Lander 2017; Arkadiev & Lander 2020) with a remarkably rich system of constructions involving grammaticalised auxiliaries (Arkadiev & Maisak 2018), present a perfect testing-ground for the multivariate approach to VCPs developed within the ComPLETE project. As will be shown, VCPs in Circassian range from tightly knit verbal compounds whose grammaticalised elements border on derivational affixes to loosely integrated constructions whose status as VCPs as opposed to biclausal structures can be contested.

Several caveats are in order with regard to the application of the above definition to the data of Circassian languages. First, the very notion 'verb' is not unproblematic since Circassian languages show a high degree of word-class flexibility (e.g. Lander & Bagirokova Ms.). Almost any content stem can occur in the predicate position and be furnished with the appropriate predicate morphology and the minor asymmetries in the behaviour of nominals and verbs allow to reliably identify the former rather than the latter. Therefore, some of the constructions discussed below are not restricted as to the lexical input. Second, and probably more importantly, the notion of "monoclausality" is not sufficiently well-defined, either cross-linguistically or for Circassian languages. While Bohnemeyer et al. (2007: 501) and Haspelmath (2016: 299–301) propose the criterion of independent negation as definitional for clausehood, this criterion is treated as a parameter of variation in the ComPLETE questionnaire (parameter G2: "Do the component verbs share polarity?"), which advises the contributors to rely on language-particular diagnostics. As will be shown, the diagnostics of mono- vs. biclausality relevant for Circassian (including independent negation) do not always align with one another and therefore the VCP(-like) constructions in these languages rather form a cline from unambiguously monoclausal to clearly biclausal with many constructions showing hybrid behaviour and variation. This "messiness", which is obviously a consequence of on-going processes of grammaticalisation, should be taken at face value rather than forced into Procrustean bed of aprioristic definitions.

The remainder of the chapter is structured as follows. In section 2 I shall present the necessary information about the Circassian languages and the morphosyntactic diagnostics that will be applied in my analysis, as well as briefly introduce the main types of VCPs in Circassian. Sections 3–5 will discuss the three main types of VCPs in Circassian, namely, root serialisation, auxiliary-verb constructions and constructions with verb reduplication. Section 6 will discuss grammaticalisation paths and instances of lexicalisation as defined by the questionnaire, and section 7 will offer a brief comparative outlook. Section 8 concludes.

2. Information about the language

2.1. Sociolinguistic profile and data sources

Circassian languages, i.e. West Circassian (also known as Adyghe, ISO 639-3 ady) and Kabardian (East Circassian, kbd), belong to the Northwest Caucasian family also comprising Abaza, Abkhaz and the extinct Ubykh (on the family, see Hewitt 2005 and Arkadiev & Lander 2020). Each of the two languages has its own written standard used in media and education and serving as a "roof" over a considerable number of dialects often showing significant divergences. Circassians live in a number of disjoint compact areas in the western part of the Russian North Caucasus covering patches of their original homeland interspersed by settlements of speakers of other languages, mainly Russian, as well as in the diaspora in the Middle East, mostly in Turkey. This situation is a result of the expulsions and resettlements during and after the Caucasian war (1764–1864), which has decimated the indigenous population and disrupted the original dialectal landscape. According to the official census of 2010, there are about 117,500 speakers of West Circassian and about 515,700 speakers of Kabardian in Russia. The standard written West Circassian and Kabardian, which were developed during the Soviet period, enjoy a *de jure* official status in the Russian republics of Adygea, Kabardino-Balkaria and Karachaevo-Cherkessia, *de facto*, however, they experience constant pressure from Russian and are largely limited to colloquial use in rural settings and to events specifically related to traditional culture. All adult speakers of Circassian languages in Russia are bilingual in Russian, which also serves as a lingua franca in multiethnic environments.

The data for this chapter come from a variety of sources, including published descriptions of the languages (most notably those written by native-speaker linguists), the Corpus of Standard West Circassian (WCCorp = Arkhangelskiy et al. 2018–2023), as well as materials collected during the fieldtrips to the Republic of Adygea in 2004–2013, both elicited and textual. The fieldwork materials cover, on the one hand, the Temirgoy dialect of West Circassian, on which the written standard is based, and, on the other hand, the Besleney dialect of Kabardian, which is the westernmost outlier variety of Kabardian in many respects divergent from the standard language (see e.g. Kerasheva 1995[1977]). The multidialectal approach taken in this chapter can be considered somewhat eclectic; it is motivated both by practical considerations (some of the relevant datapoints are available just for one variety) and by the fact that, at least for the dialects spoken in Adygea, the relevant phenomena are largely uniform. Still, some of the phenomena discussed here, especially the constructions with auxiliaries, cannot be *a priori* assumed to be identical across all Circassian idioms, especially the Kabardian ones, and require further study.

2.2. Typological profile

Below, I shall present the most important morphosyntactic characteristics of Circassian languages necessary for the discussion of VCPs, i.e. the structure of the verbal complex, basic syntax of the simple clause and the encoding of finiteness and subordination.

2.2.1. Polysynthesis and the verbal complex

The most important property of the grammar of Circassian and Northwest Caucasian languages in general is polysynthesis, i.e. the tendency to express most syntactic and semantic information by productively formed morphologically complex words, primarily verbs (see Testelets & Lander 2017; Arkadiev & Lander 2020; Arkadiev 2023). Verbal forms in Circassian include the expression of up to five participants, as well as prefixes and suffixes encoding valency-change, spatial configuration, negation, modality, tense-aspect and subordination, see Smeets (1984, 1992), Korotkova & Lander (2010), Arkadiev & Letuchiy (2011), consider examples (1) and (2).

West Circassian

(1) *∅-qə-p-fe-t-ʂə-ŝʷə-š'-ep*
3.ABS-CSL-2SG.IO-BEN-1PL.ERG-do-HBL-FUT-NEG
'We won't be able to do it for you.' (WCCorp)

Besleney Kabardian

(2) *z-a-q̇ə-š'ə-r-a-ʁe-pλə-hə-ne*
RFL.ABS-3PL.IO-CSL-LOC-DAT-3PL.ERG-CAUS-look-carry-FUT
'They will let them look around themselves there.' (kkd130607competition:24[1])

Table 1 presents the schematic template of the Circassian verbal complex, glossing over some minor points of cross-dialectal variation.

Table 1. The Circassian verbal complex

prefixes										root	suffixes			
argument structure zone						pre-stem elements			stem				endings	
–10	–9	–8	–7	–6	–5	–4	–3	–2	–1	0	+1	+2	+3	+4
absolutive	deictic markers	subordinators	applicatives	dative	ergative	jussive	dynamicity	negation	causative	root	directionals, transitivity	event operators	plural	negation, subordinators

As said above, Circassian languages have flexible word classes. Most syntactic positions and the corresponding morphological markers show no restrictions as to the lexical class of stems they admit. In particular, almost any lexical stem can occur in the predicative position and be furnished with appropriate morphology; the following examples show that the personal prefix and the conditional suffix attach to both verbal (3a) and nominal (3b) stems in exactly the same fashion.

Besleney Kabardian

(3) a. *čəgʷə-m* ***wə-de-laž'e-me***
earth-OBL **2SG.ABS**-COM-work-**COND**
'If you work on earth...' (kkd130712ulyap:22)

b. ***wə-bzəλfəʁe-me***
2SG.ABS-woman-**COND**
'If you are a woman...' (skb130716teacher:4)

Predicates in Circassian fall into two subclasses distinguished by their morphology: dynamic and static. To the dynamic class belong all predicates denoting processes and events, as well as certain state-denoting predicates, e.g. 'know'. The static class comprises a closed set of verbs denoting posture, location, possession and certain modal meanings, resultative and some other derived forms of dynamic predicates, as well as all nominal predicates like the one shown in (3b). The two types of predicates are most clearly distinguished in the present tense,

[1] Examples thus attributed come from the small collection of oral texts in Besleney Kabardian recorded and analysed by our fieldwork team.

where static predicates are unmarked while dynamic ones take the so-called dynamic prefix, which looks like *me-*/*ma-* word-initially and *-e-* (West Circassian) or *-ew-* (Kabardian) word-medially; besides that, West Circassian has a dynamic suffix *-r(e)-*, which occurs in negative and dependent present tense forms. Table 2 shows parallel forms of the verbs 'go' and 'stand' in West Circassian and Besleney Kabardian.

Table 2. Static vs. dynamic predicates

	'go'		'stand'	
	West Circassian	Besleney	West Circassian	Besleney
Prs 3Sg	***ma***-*ḳʷe*	***ma***-*ḳʷe*	*šʼə.t*	*šʼə.t*
Prs 1Sg	*s*-***e***-*ḳʷe*	*s*-***ew***-*ḳʷe*	*sə-šʼə.t*	*sə-šʼə.t*
Prs 3Sg Neg	*ḳʷe*-***r***-*ep*	*ḳʷe-q̇əm*	*šʼə.t-ep*	*šʼə.t-q̇əm*
Prs relative	*ḳʷe*-***re***-*r*	*ḳʷe-r*	*šʼə.tə-r*	*šʼə.tə-r*

The distinction between static and dynamic predicates is particularly important for the discussion of auxiliary verb constructions in section 4, since the majority of auxiliaries belong to the static class. As will be shown, in the most tightly integrated VCPs in West Circassian the static auxiliary can take the dynamic suffix *-r(e)-* when the lexical verb is dynamic; this diagnostic is not applicable to Besleney Kabardian.

The system of verbal pronominal marking distinguishes three series of prefixes: the absolutive series (slot –10), cross-referencing the intransitive S (4a) and the transitive P (4b), the ergative series (slot –5) (4b–c), cross-referencing the transitive A, and the indirect object series, which cross-references one or several indirect objects, which can co-occur with verbs of any valency and are always introduced by applicative prefixes appearing in slots –7 and –6 and normally immediately precede the latter (Arkadiev et al. 2024), (4d). Some of the 3rd person prefixes are null; these will not be indicated in the glosses.

Besleney Kabardian

(4) a. ***sə***-*ḳʷe-te-q̇əm*
1SG.ABS-go-RS-NEG
'I did not go.' (bnx120711fish:3)

b. ***s***-*a-ʁe-šx-a*
1SG.ABS-3PL.ERG-CAUS-eat.ANTIP-PST
'They fed me.' (goa1107xxdog:3)

c. *wə-**s**-šxə-ne*
2SG.ABS-**1SG.ERG**-eat-FUT
'I'll eat you.' (rs120730squirrel:3)

d. *q̇ə-**s**-xʷe-f-xə-žʼ*
CSL-**1SG.IO**-BEN-2PL.ERG-bring-RE/IMP
'Bring it to me!' (aam120728gates:5)

Besides the person-number prefixes, there is also an optional plural suffix *-xe*, identical to the nominal plural marker (Bagirokova et al. 2022), indicating the plurality of a 3rd person absolutive[2] argument, cf. (5a) and (5b).

[2] In the Besleney Kabardian texts the suffix sometimes indicates the plurality of other arguments as well, cf. (7).

West Circassian (WCCorp)

(5) a. *t-jə-fʷətbweljəst-**xe**-r* *tje-ḳʷa-ʁe-**x***
1PL.PR-POSS-football_player-**PL**-ABS LOC-go-PST-**PL**
'Our football players have won.'

b. *šapχe-**xe**-r* *ŝʷə-mə-wəqʷe-**x***
norm-**PL**-ABS 2PL.ERG-NEG-violate/IMP-**PL**
'Do not violate the norms.'

The occurrence of both the overt pronominal prefixes and the plural suffix are important diagnostics of the degree of integration of VCPs in Circassian, in that it is expected that the prefixes will only occur on the first member of the VCP and the suffix only on the second member (cf. e.g. Kerasheva 1995[1984a]: 104). The reality, as we shall see, is more complicated, primarily because the (non)occurrence of these markers can be motivated by factors other than integration.

An important morphological distinction in the verbal complex is that between the stem (including suffixes expressing aspectual and modal meanings as well as tense) and the so-called endings, which include the markers of plural, negation, force, converbs and case, and, in Kabardian, the retrospective shift marker *-t(e)*, which forms the imperfective past as well as attaches to past and future tense forms yielding the pluperfect and the subjunctive, respectively. The stem-internal material forms a distinct prosodic and morphophonological domain from which endings are excluded. This domain is singled out by stress, which is usually bound to the last two syllables of the stem (Moroz 2012; Gordon & Applebaum 2023), and by a number of morphophonological alternations, the most notable of which is the dissimilation /CeCe/ → /CaCe/ in stem-final syllables (Smeets 1984: 206–211; Arkadiev & Testelets 2009: 122–131)[3]. Stem-internal suffixes of the shape -Ce become part of the alternation domain (6a–b), suffixes of different shape block the alternation (6c), and endings (underlined) neither trigger the alternation nor block it (6d–e). The underlying forms are shown in curly brackets.

West Circassian (elicited)

(6) a. *me-l**a**ž'**e*** {me-lež'e}
DYN-work
's/he is working'

b. *lež'**a**-ʁ**e*** {lež'e-ʁe}
work-PST
's/he worked'

c. *l**e**ž'**e**-š't*
work-FUT
's/he will work'

d. *me-l**a**ž'**e**-<u>x</u>* {me-lež'e-xe}
DYN-work-PL
'they are working'

e. *lež'**a**-ʁ**e**-<u>r</u>*
work-PST-ABS

[3] C here stands for a single consonant of consonant cluster.

‘the one who worked’

The behaviour of endings and the /e/~/a/ alternation can serve as diagnostics of the degree of integration of VCPs. The relevant parameters include e.g. whether endings attach to the right of the VCP as a whole or to both of its components and whether the two components form a single alternation domain.

2.2.2. Basic syntax

Circassian languages exhibit ergativity in both head- and dependent marking (Smeets 1992; Kumakhov & Vamling 2009; Letuchiy 2012). In head marking, ergativity manifests itself in the aforementioned distinction between the absolutive and the ergative series of verbal pronominal prefixes. In dependent marking, Circassian languages have just two grammatical cases, i.e. the absolutive (*-r*), marking the intransitive S (5a) and the transitive P (5b), and the oblique (*-m* and some allomorphs), which marks the transitive A, various indirect objects, e.g. the recipient, as well as nominal possessors and certain adjuncts not cross-referenced in the predicate. The absolutive and oblique case markers do not normally occur on 1st and 2nd person pronouns, proper names, singular nouns with possessive prefixes and non-specific common nouns (Arkadiev & Testelets 2019). Example (7) illustrates the agent and the recipient marked by the oblique case with the non-specific P unmarked.

Besleney Kabardian

(7) *kelxoz–themade-**m*** *bəʁʷ* *çəxʷ-xe-**m*** *q̇-a-r-jə-t-xe-t-jə*
kolkhoz–chief-**OBL** bull human-PL-**OBL** CSL-3PL.IO-DAT-3SG.ERG-give-PL-RS-ADD
‘The director would give the people a bull.’ (bnx110713soviet:1)

Further case markers include the instrumental (*-ç̌’e*) and the adverbial (West Circassian *-ew*, Kabardian *-we* ~ *-əw*), which are relevant because they often occur on verbs marking them as dependent (see section 2.2.3).

In terms of word order, Circassian languages are head-final in nominal and adpositional phrases (apart from the fact that adjectives and most numerals follow the noun in the so-called nominal complexes showing properties of compounds, Lander 2017), but exhibit more flexibility at the clausal level. While verb-final structures like in (7) clearly predominate, arguments and adjuncts can occur post-verbally as well (8). Dependent clauses most often precede the matrix predicate (9), although deviations from this are also attested (10).

Besleney Kabardian

(8) *pŝaŝe-m* *q̇-a-xʷ-jə-h-a* *š’ej*
girl-OBL CSL-3PL.IO-BEN-3SG.ERG-bring-PST tea
‘The girl brought them tea.’ (aam120728tea:4)

(9) [*a-r* *çəḳ-xe-m-jə* *ja-çəxʷə-n-əw*] *sə-xʷje*
DEM-ABS little-PL-OBL-ADD 3PL.ERG-know-MOD-ADV 1SG.ABS-want
‘I want the little ones to know this, too.’ (akm110714txt1:3)

(10) *vrač’ə-m* *nahə-ḟ-əw* *j-e-çəxʷ*
doctor-OBL COMP-good-ADV 3SG.ERG-DYN-know
[*wə-ḷ-a~wə-mə-ḷ-a-me*]
2SG.ABS-die-PST~2SG.ABS-NEG-die-PST-COND
‘The doctor knows better whether you are dead or not.’ (tay120722doctor:12)

2.2.3. Subordination and (non-)finiteness

Circassian languages possess a complex system of morphological encoding of inter-clausal relations. Verbal forms heading dependent clauses in most cases keep intact the cross-reference of participants and in many cases the encoding of tense as well, their subordinate status being indicated by additional markers. Those of the latter which are pertinent to the topic of this chapter include the following:

(i) The multifunctional "modal" suffix *-n* with a range of diverse uses, both independent (modal future) and subordinate (marking purpose and complement clauses with different degrees of nominalization, see Serdobolskaya 2009 on West Circassian and Ershova 2012 on Besleney Kabardian); this suffix can occur on its own (11) or be further furnished with case suffixes such as the adverbial (9).

Besleney Kabardian

(11) *pŝaŝe-m š'ej q̇-a-x^{w}-jə-hə-**n**-jə*
girl-OBL tea CSL-3PL.IO-BEN-3SG.ERG-bring-**MOD**-ADD
*jə-ʁe-hač'e-**n** x^{w}.je-w*
3SG.ERG-CAUS-guest-**MOD** need-ADV
'The girl had to bring tea to [the guests] and be hospitable...' (aam120728tea:3)

(ii) Prefixal markers of temporal (12), reason (13) and manner/factive (14) subordination, which are historically as well as synchronically akin to relativisation of applied objects (Caponigro & Polinsky 2011; Lander 2012: 288–320; Arkadiev et al. 2024: 902–904); verbal forms with such prefixes usually take case suffixes.

Besleney Kabardian

(12) [*s-jə-zamjetke-xe-r **š'**-je-z-ʁa-hə-**m***]
1SG.PR-POSS-notes-PL-ABS **TMP**-DAT-1SG.ERG-CAUS-bring-**OBL**
'when I had my notes sent (to the publishers)' (akm110714self:4)

(13) *ǯ'a-ra [sə-**ç̌'e**-dehaš'x-a-**r***]
DEM-PRED 1SG.ABS-**RSN**-laugh-PST-**ABS**
'This is why I laughed.' (lan130709parable:10)

(14) *d-ew-g^{w}ə̇fe [ž'ə̇le-m zə-q̇ə-**zer**-jə-ʔatə-ž'ə-**r***]
1PL.ABS-DYN-rejoice village-OBL RFL.ABS-CSL-**FCT**-3SG.ERG-raise-RE-**ABS**
'We are happy that the village is developing.' (skb130716school:11)

(iii) Numerous converbial markers, one of them being the adverbial suffix, which can attach not only to the modal form (9), but also directly to verbal stems (15).

Besleney Kabardian

(15) *ŝhaje jə-g^{w} r-jə-mə-h-**əw** ne.mə.ç̣'–twəč'an ḳ^{w}-a*
but POSS-heart LOC-3SG.ERG-NEG-bring-**ADV** other–shop go-PST
'But he was not pleased and went to a different shop.' (goa120718present2:2)

In addition to non-finite forms with overt markers of subordination, there exists an unmarked 'bare stem' form lacking any affixes of subordination as well as, at least in principle, of tense or mood (Kerasheva 1995[1979]). With static predicates, the bare stem form is indistinguishable from the present tense, but with most dynamic verbs the two forms are supposed to differ insofar as the present tense requires the dynamic prefix lacking in the bare

stem form, compare (16a) and (16b). In section 4.2 we shall see, however, that in some constructions the bare stem form can in fact host the dynamic prefix and even tense suffixes.

West Circassian (WCCorp)

(16) a. *kfar-kame* ***sə-ḳʷe*** *s-ŝʷe-jəʁʷ*
Kfar-Kama **1SG.ABS-go** 1SG.IO-MAL-wish
'I wish to go to Kfar Kama.'

b. *ǯ'abʁʷə-m-č'e* *s-**e**-ḳʷe*
right-OBL-INS 1SG.ABS-**DYN**-go
'I go rightwards.'

The bare stem form is one of those particularly characteristic of dependent predicates in VCPs, but various forms with overt markers of subordination are also found there. Besides that, the behaviour of overt subordinators with respect to the components of VCPs can be diagnostic of the latter's degree of integration: in particular, when the whole VCP occurs in a subordinate clause, prefixal markers of subordination are expected to occur on the first component of a tightly-integrated construction.

Finally, the expression of negation in Circassian predicates is related to their independent vs. subordinate status. There are two markers of negation (Kerasheva 1995[1984b]; Smeets 1984: 289–378): the common Northwest Caucasian prefixal marker *mə-* occurring immediately before the stem and the innovative suffixes *-ep* (West Circassian) and *-q̇əm* (Kabardian). Somewhat simplifying (for a detailed discussion, see Smeets 1984: 296–332; Sumbatova & Lander 2007), the suffixal markers of negation occur in independent declarative clauses (17), while only prefixal negation is admitted in non-declarative moods such as the imperative (18) and in subordinate clauses (19).

Besleney Kabardian

(17) *a-r* *s-j-ane.ž'* *jə-de-te-**q̇əm***
DEM-ABS 1SG.PR-POSS-grandmother 3SG.ERG-agree-RS-**NEG**
'My grandmother did not allow this.' (aam120728granny:5)

(18) *par-jə* *ž'-we-**mə**-ʔe*
nothing-ADD PVB-2SG.ERG-**NEG**-say/IMP
'Don't say anything!' (lan130709parable:28)

(19) *jə-št-a* [*stakan–pštərə-m* *q̇-je-**mə**-ʔab-əw*]
3SG.ERG-take-PST glass–hot-OBL CSL-DAT-**NEG**-touch-ADV
'He took it (the tea) without touching the hot glass.' (aam120728tea:6)

The distribution of negation markers is an important diagnostic of the degree of integration of VCPs. First, as mentioned in section 1, the very possibility for the components of a construction to be independently negated can point to its biclausal status, although, as we shall see, it is far from straightforward (Kerasheva 1995[1984a]: 107). Second, when the whole negated construction is put into a subordinate clause, the position of the prefix *mə-* is indicative of the degree of integration: for genuine VCPs it is expected that the prefix will occur on the first component of the construction.

2.3. The inventory of VCPs in Circassian

My classification of VCPs in Circassian is based on two independent parameters: (i) symmetry and (ii) morphosyntactic status of the components. The parameter of symmetry is related to whether any one member of the construction can be considered as expressing a semantic operator applying to the other(s). Symmetrical VCPs are those whose components are not "subordinate" to each other in this semantic sense; they are primarily constituted by VCPs involving different types of reduplication. Asymmetrical VCPs, by contrast, involve two verbs, one of which shows clear signs of grammaticalisation. The parameter of morphosyntactic status concerns the division between VCPs formed by compounding of roots/stems and those involving verbal forms furnished with at least some inflectional material. The cross-classification of the VCPs according to these parameters is shown in Table 3, and examples of each type are given in (20a–d).

Table 3. Classification of VCPs in Circassian

	asymmetrical	symmetrical
root/stem-based	directional root-serialisation (20a)	reduplicative root-compounding (20c)
verbform-based	auxiliary-verb constructions (20b)	constructions with full-verb reduplication (20d)

West Circassian

(20) a. *jə-**pλə-ha**-š'ət*
LOC-**look-enter**-FUT
's/he will look inside' (Bersirov 2001: 160)

b. *ja-gəj-ew* *χʷə-ʁe*
3PL.IO+DAT-scold-ADV become-PST
'He sometimes scolded them.' (Rogava & Kerasheva 1966: 361)

c. ***ʔe-we~λe-we**-š'ət*
hand-hit~leg-hit-FUT
's/he will flounder' (Bersirov 2001: 212)

d. *sə-zere-**ç̌'e-qʷəze**-ʁe~**ç̌'e-qʷəza**-ʁ-ew* <...>
1SG.ABS-MNR-**LOC-squeeze**-RES~**LOC-squeeze**-RES-ADV
sə-š'ə-tə-ʁ
1SG.ABS-LOC-stand-PST
'I stood ... thus squeezed tightly (in my clothes)' (WCCorp)

Sections 3 and 4 deal with root-serialisation and auxiliary-verb constructions, respectively. The latter are further subclassified into several types and present considerable challenges for analysis. The two types of symmetrical VCPs, despite all their differences, will be discussed together in section 5; this decision is primarily motivated by the most salient common denominator of these constructions, i.e. their symmetry manifested formally through (broadly understood) reduplication.

3. Root-serialisation

The first type of VCP to be surveyed is represented by verbal compounds consisting of two (rarely three) juxtaposed roots, the first of which (V1) in principle can belong to an open class while the second (V2) comes from a very limited set of grammaticalised verbs of directed

motion. Due to the fact that most V2-s almost obligatorily occur with applicative prefixes (which in some cases are lexicalised and no longer affect valency), the root of V1 is in most cases sandwiched between the two components of V2, hence the term "verbal incorporation" used for these construction in Circassian studies (Kumakhov 1964: 139–146; Rogava & Kerasheva 1966: 285–287; Bersirov 2001: 157–185). Examples in (21) show the directional verb 'depart, start' in its independent use and as a second member of a compound where it serves as a marker of ingressivity.

Besleney Kabardian

(21) a. *zawe-r* *q̇-**je**-mə-ž**'e**-r-u*
war-ABS CSL-**DAT**-NEG-**depart**-CVB-ADV
'before the war started' (xvr120725besleney:11)

b. *s-j-ade* ***je**-s-hə-ž**'**-a-w*
1SG.PR-POSS-father **DAT**-1SG.ERG-carry-**depart**-PST-ADV
'when I started carrying my father' (lan130709parable:7)

The verbal roots able to occur as V2 in this type of VCP are LOC-*he* 'enter', LOC-*ç̌'ə* 'exit', *-he/ə* 'carry (around)', DAT-*xə* 'descend', DAT-*ž'e* 'depart', and LOC-*sə* 'reach'. Besides that, two elements occurring as the second members of such compounds, *de-...-je/ə* 'ascend' and DAT-...-*ɬe* 'approach', do not exist as independent verbs synchronically and can be considered affixes, although they clearly belong to the same morphosemantic paradigm, cf. (22).

Besleney Kabardian

(22) a. *bzəlχʷəʁe-m* *pŝeχʷə-r* ***d**-jə-š'e-**jə**-ž'-rjə*
woman-OBL chain-ABS **LOC**-3SG.ERG-lead-**ascend**-RE-ADD
'The woman pulled the chain up and..' (tay120722misha:8)

b. *a-bə* *s-**je**-ʔəsə-**ɬe**-rjə*
DEM-OBL 1SG.ABS-**DAT**-sit-**approach**-ADD
'I sat close to him and...' (aam120728gates:7)

This, together with the high degree of morphosyntactic integration of the components and considerable semantic generality of the directional roots, suggests that this type of VCP in Circassian is close to affixation (cf. their treatment as suffixes by Urusov 1983, Smeets 1984: 436–451; and Kapitonov 2007). The exposition below is mostly based on Bersirov (2001).

3.1. Semantic relations

The second components of such verbal compounds serve as (semi-)grammaticalised expression of spatial and Aktionsart meanings. The former constitute the core and sometimes the only function of all V2-s, including DAT-*ž'e* 'depart', which expresses ingressivity, as in (21b) above, but combines only with a limited number of verbs denoting (caused) motion (Bersirov 2001: 175–176), thus the ingressive meaning is derived compositionally (e.g. 'depart running' = 'start running'). An even narrower semantic restriction pertains to the rare formations with the V2 LOC-*sə* 'reach', which denote the completion of a caused motion event (Bersirov 2001: 177–178), cf. (23).

West Circassian

(23) *ʔaχʷe-m* *č'em-xe-r* *mezə-m* ***n**-jə-fə-**sə**-ʁe-x*
herdsman-OBL cow-PL-ABS forest-OBL **LOC**-3SG.ERG-drive-**reach**-PST-PL
'The herdsman drove the cows up to the forest.' (Bersirov 2001: 177)

The other verbs in their directional meanings combine both with verbs of motion (24a), and with verbs that can be said to express a kind of 'abstract motion' like 'look' or 'call' (24b).

West Circassian

(24) a. *seldatə-r* *šə-m* *q-**je**-psə-**xə**-ʁ*
soldier-ABS horse-OBL CSL-**DAT**-climb-**descend**-PST
'The soldier dismounted the horse.' (example courtesy of Irina Bagirokova)

b. *ajš'et* *wəne-m* *q-**jə**-ʒ'ə-**ç̌'ə**-ʁ*
Ayshet house-OBL CSL-**LOC**-call-**exit**-PST
'Ayshet called from the house.' (WCCorp)

The two most productive V2-s are LOC-*he* 'enter' and LOC-*ç̌'ə* 'exit', which combine with verbs of different semantic types and show considerable polysemy. Thus, compounds with -*ç̌'ə* 'exit' can denote circular motion when combined with the dative applicative (25a), as well as various more abstract extensions of the directional meaning, such as creation of an object out of some material (25b). In combination with an indirect object reflexive prefix compounds with 'exit' denote motion backwards, as in (26).

Besleney Kabardian

(25) a. *hancə.gʷaš'e* *q̇ə-**r**-a-š'e-**ç̌'**-t*
idol CSL-**DAT**-3PL.ERG-lead-**exit**-RS
'They carried an idol around [for the ritual of evoking rain].' (akm110714rain:3)

b. *ketljet-r-jə* *bẑeẑej-m* ***xe**-ʂ̂ə-**ç̌'**-a*
cutlet-ABS-ADD fish-OBL **LOC**-do-**exit**-RES
'The cutlets are made of fish.' (bnx110712fish:2)

West Circassian

(26) *kʷəkʷe* *qə-**ʐ**-e-pλe-**ç̌'ə**-ʁ*
Kuko CSL-**RFL.IO**-DAT-look-**exit**-PST
'Kuko looked back.' (Bersirov 2001: 165)

Compounds with LOC-*he* 'enter', in addition to the directional meaning (27a), can express that the event occurs inside the object or have attenuative semantics (27c). The meaning of small degree can also be expressed by compounds with LOC-*ç̌'ə* 'exit', cf. ***ʔʷə-š'xəpçə-ç̌'ə*** **LOC**-smile-**exit** 'smile a little' (Bersirov 2001: 165).

West Circassian

(27) a. *šar-xe-r* *weŝʷegʷə-m* ***r**-a-ṭʷəpš'ə-**ha**-ʁe-x*
balloon-PL-ABS sky-OBL **LOC**-3PL.ERG-release-**enter**-PST-PL
'They released the balloons into the sky.' (WCCorp)

c. *qa-s-št-jə* *sə-**xe**-ʒ'ə-**ha**-ʁ*
CSL-1SG.ERG-take-ADD 1SG.ABS-**LOC**-read-**enter**-PST

‘I took [the book] and skimmed through it.’ (Bersirov 2001: 167)

In many cases the meaning of the compound verb is lexicalised and the function of the V2 appears to license the locative preverb introducing the indirect object expressing e.g. stimulus of emotion (28a), (28b).

West Circassian (examples courtesy of Irina Bagirokova)

(28) a. *ç̌’ale-r* *pis’me-m* ***ç̌’e-gʷəŝʷə-ç̌’ə-ʁ***
youth-ABS letter-OBL **LOC**-rejoice-**exit**-PST
‘The youth was happy about the letter he got.’

b. *ŝewezəje-r* *zere-çəkʷə-m* ***tje-wəç̌’ətə-he***
boy-ABS FCT-small-OBL **LOC**-be_timid-**enter**
‘The boy is shy because of his small height.’

A special case is constituted by verbal compounds with the meaning of circular motion formed with the second component *-he/ə*. According to Bersirov (2001: 181), these compounds contain the root which is independently found in the transitive verb *-he/ə*[4] ‘carry’ (29a). In contrast to all other verb-root compounds discussed here, compounds with ‘carry’ do not necessarily combine with locative prefixes, and all of them are transitive in accordance with the valency of the second verb, cf. (29b) with an intransitive V1.

Besleney Kabardian

(29) a. *ṭe* *a.p.š’əʁʷe.me* *se* *wə-s-**hə**-ž’ə-n-jə*
well then 1SG 2SG.ABS-1SG.ERG-**carry**-RE-MOD-ADD
‘Well, then I’ll bring you back and...’ (lan130709parable:11)

b. *q̇-a-kʷə-**h**-rjə* *ǯ’emehat-xe-r*
CSL-3PL.ERG-go-**carry**-ADD neighbourhood-PL-ABS
‘They walk around neighbourhoods...’ (bnx110713hance:2)

There are a few cases of compounds with three roots, where V1 itself is complex, e.g. West Circassian *qə-pə-**ŝə-he-ç̌’ə*** CSL-LOC-**do-carry-exit** ‘fence off’, formed by a combination of *qə-ŝə-he-* ‘surround’ and *pə-ç̌’ə* ‘get detached’ (Bersirov 2001: 159; see also Kapitonov 2007: 279–280).

3.2. Wordhood and monoclausality

VCPs of this type clearly constitute one phonological and morphosyntactic word whose morphological makeup in all respects follows the template shown in Table 1. Phonological wordhood is evidenced e.g. by the /e/~/a/ alternation, which, if applicable, affects the compound as a whole (30).

West Circassian

(30) *z-je-č**a**-ž’**e**-m* *mədre-r-jə* *λ-je-ž’a-ʁ*
TMP-DAT-run-depart-OBL other-ABS-ADD LOC-DAT-depart-PST
‘When he started running, the other one ran after him, too.’ (WCCorp)

Morphologically, the two juxtaposed verbal roots act as one unit for all kinds of prefixal and suffixal markers, as has been shown e.g. for tense suffixes in many of the examples given

[4] The variation of the final vowel in this verb is not very well understood.

above. The same concerns negation, which can only affect the whole compound, see (31) with the suffixal negation and (31b) with the prefixal negation; likewise, the whole compound falls within the scope of the suffixal habilitive ‘be able to’ (31b) and the prefixal causative (32).

West Circassian (WCCorp)

(31) *sə-qə-z-e-pλe-ç’-r-**ep***
1SG.ABS-CSL-RFL.IO-DAT-look-exit-DYN-**NEG**
‘I do not look back.’

b. *q-ja-**mə**-če-xə-**ŝʷə**-xe-re-r*
CSL-3PL.IO+DAT-**NEG**-run-descend-**HBL**-PL-DYN-ABS
‘those who could not run down’

Besleney Kabardian

(32) *jalah weš’x q-je-**ʁe**-žebze-x*
ITRJ rain CSL-DAT-**CAUS**-precipitate-descend
‘Oh God, cause the rain to fall down!’ (akm110714rain:5)

All these facts unequivocally point to the monoclausality of VCPs with root serialisation.

3.3. Argument sharing

In terms of argument sharing root compounds fall into two subtypes. Compounds formed by the intransitive V2-s, i.e. LOC-*he* ‘enter’, LOC-*ç’ə* ‘exit’, DAT-*xə* ‘descend’, DAT-*ž’e* ‘depart’, and LOC-*sə* ‘reach’, by default retain the transitivity value of V1 and often have an extra indirect object introduced by the applicative component of V2. For transitive V1-s it can be argued that it is the absolutive arguments of the two verb roots that are shared, i.e. P of V1 = S of V2. Consider the transitive V1 *ʒə* ‘A throw P’, which in combination with V2 DAT-*xə* ‘S descend (from IO)’ yields trivalent transitive *je-ʒə-xə* ‘A throw P from IO’ (33).

Besleney Kabardian

(33) *çəxʷə-r ẑə š’ə-χʷ-ç’e-re*
human-ABS old TMP-become-INS-CVB
*bγə-m **r**-a-ʒə-**xə**-ž’-t*
mountain-OBL **DAT**-3PL.ERG-throw-**descend**-RE-RS
‘When the person grew old, they would throw him down from a mountain’. (lan130709parable:2)

The indirect objects of bivalent intransitive V1-s are normally suppressed and replaced by the indirect objects introduced by the applicative component of V2-s; thus, *je-pλə* ‘S look at IO’ in combination with V2 *jə-he* ‘S enter into IO’ yields bivalent intransitive *jə-pλə-he* ‘S look into IO’, where the dative preverb introducing the stimulus argument of V1 is replaced by the locative preverb introducing the landmark of V2. Still, in some lexicalised cases the applicative preverbs do not introduce any argument (Bersirov 2001: 161–162), hence the compounds simply retain the argument structure of V1, as e.g. West Circassian *xe-š’etə-ç’ə* LOC-sigh-exit ‘sigh’.

In a few cases compounds with transitive V1-s become bivalent intransitive; consider the compound *pə-šxə-he* ‘S gnaw (around) IO’ (34) based on the transitive *šxə* ‘A eat P’; given that the V2 in the independent use has a different meaning (‘start, set about’), it is unclear how exactly the argument structures of the two components are unified; anyway, the ergative A of

V1 corresponds to the absolutive S of the compound, while the P of V1 is probably replaced by the locative indirect object.

West Circassian

(34) *he-r* *qʷəpŝhe-m* ***pə-šxə-ha-ʁ***
dog-ABS bone-OBL **LOC**-eat-**enter**-PST
'The dog gnawed (around) the bone.' (Bersirov 2001: 167)

The second subtype of argument sharing is found in the compounds with the transitive V2 *-he/ə* 'carry (around)'. As said above, such compounds are always transitive, with intransitive and transitive V1-s alike. Here the S or A argument of V1 is shared with the A argument of V2; as to the P argument of the compound, it can either correspond to the second argument of a bivalent V1, or be introduced by V2, e.g. if V1 is monovalent. Example (35) shows this for the transitive V1 *jə* 'A clay P', and example (36) for the bivalent intransitive *je-pλə* 'S look at IO', with the dative preverb of the latter being suppressed in the compound in favour of the absolutive P. An example with a monovalent V1 was given in (29b) above.

Besleney Kabardian

(35) *jə-wəne–č'əb* *jaṭa–ʁʷe-č'e* *q̇-a-jə-**he**-t*
POSS-house–back loam–red-INS CSL-3PL.ERG-clay-**carry**-RS
'They used to clay (lit. clay around) the back of the house with red loam.' (akm110714txt10:13)

West Circassian

(36) *š'agʷə-r* *ə-pλə-**h**-ew* *ə-wəbla-ʁ*
courtyard-ABS 3SG.ERG-look-**carry**-ADV 3SG.ERG-start-PST
'He started looking around the courtyard.' (Bersirov 2001: 183)

To summarise, VCPs involving root serialisation in Circassian are tightly integrated, both semantically and morphosyntactically. On the semantic side, we observe, first, a high degree of selectivity of V2-s with respect to the V1-s they are able to combine with: some V2-s co-occur with just a handful of V1-s, and even those that are not so restricted can hardly be considered fully productive. Second, the semantic contribution of V2-s is rather abstract and transcends the boundaries of directed motion extending into Aktionsart; many compounds have idiomatic and lexicalised meanings. On the morphosyntactic side, root compounds show complete integration on all levels, from argument structure, where we observe both sharing of arguments and their suppression or introduction, to morphology, whereby the compounds do not show any differences from simplex verbs.

4. Constructions with auxiliaries

4.1. Overview of the system

Circassian languages possess a rich and variegated system of constructions with auxiliaries, all the more striking given their overall polysynthetic morphosyntax (notably, the Abkhaz-Abaza branch of the family features only a handful of such constructions, see section 7), see Kerasheva (1995[1984a]: 110–148) for a pioneering survey and Arkadiev & Maisak (2018: 127–132) for a brief overview in English. The most remarkable property of this system is polygrammaticalisation (Craig 1991, Robert 2004), whereby one and the same lexical verb gives rise to several distinct constructions differing in semantics and morphosyntax. As an illustration of this, consider examples in (37) showing the West Circassian verb *χʷə* 'become, happen' in multiple grammaticalised uses.

West Circassian (Kimmelman 2010: 13)

(37) a. *se* *školə-m* ***sə-ḳʷe*** ***χʷə-ʁe***
1SG school-OBL **1SG.ABS-go** **become-PST**
'I began to go to school.' (aspect: inchoative)

b. *se* *školə-m* ***sə-ḳʷe*** ***χʷə-š't***
1SG school-OBL **1SG.ABS-go** **become-FUT**
'I am allowed to go to school.' (modality: deontic possibility)

c. *se* *školə-m* ***sə-ḳʷ-ew*** ***me-χʷə***
1SG school-OBL **1SG.ABS-go-ADV** **DYN-become**
'Sometimes I go to school (but not all the time).' (aspect: raritive or habitual)

d. *se* *školə-m* ***sə-ḳʷe-n-ew*** ***me-χʷə***
1SG school-OBL **1SG.ABS-go-MOD-ADV** **DYN-become**
'I have to go to school.' (modality: external necessity)

e. *se* *školə-m* ***sə-ḳʷe-n-ç'-jə*** ***me-χʷə***
1SG school-OBL **1SG.ABS-go-MOD-INS-ADD** **DYN-become**
'Maybe I will go to school.' (modality: epistemic)

f. *se* *školə-m* ***sə-ḳʷe-m-jə*** ***me-χʷə***
1SG school-OBL **1SG.ABS-go-COND-ADD** **DYN-become**
'I can go to school (but it doesn't matter if I don't).' (modality: external possibility)

As can be seen in (37), the individual constructions differ in the forms of both lexical (V1) and grammatical (V2) verbs. A similar situation obtains with other Circassian auxiliaries, the most widely attested of which, besides the dynamic verb *χʷə* 'become, happen', are based on the static verbs West Circassian *fa.je* / Kabardian *xʷ.je* 'want, need' and the combinations of the bound root *-t-* 'stand' with various locative preverbs. In some cases auxiliaries can stack, their order reflecting their semantic scope (38), see Kerasheva (1995[1984a]: 141–146).

Besleney Kabardian

(38) *jə-pŝ-ha-n* ***xʷ.je*** ***χʷ-a***
LOC-crawl-enter-MOD **need** **become-PST**
'It became necessary for him to crawl into [the pit]' (sr120724fear:26)

In the following, I shall describe auxiliary verb constructions classifying them on the basis of the form of the lexical verb, which has the following possibilities most of them shown in (37):

(i) the bare stem (37a,b), subsection 4.2;

(ii) the modal form in *-n* (38), subsection 4.3;

(iii) the adverbial form West Circassian *-ew* / Kabardian *-we*/*-əw* (37c), subsection 4.4;

(iv) the combination of the modal suffix *-n* with the adverbial suffix, further called modal adverbial form, West Circassian *-n-ew* / Kabardian *-n-əw* (37d), subsection 4.5;

(v) the concessive forms in *-n-ç'-jə* and *-m-jə* (37e,f), subsection 4.6.

The material will mainly come from my own fieldwork on Besleney Kabardian, complemented where necessary with the data and analysis of West Circassian presented in the

very detailed and insightful unpublished working paper Kimmelman (2010), as well as some other publications and corpus data.

As a baseline for an objective evaluation of the degree of morphosyntactic integration of constructions with auxiliaries let's consider the construction with the lexical verb West Circassian *fa.je* / Kabardian *xʷ.je* 'want' with a sentential complement headed by the modal adverbial form (39a). This combination of two predicates is biclausal by all relevant diagnostics, i.e. possibility for the two verbs to have different subjects (39b) and be independently modified by adverbials (39c) as well as negated (39d,e).

Besleney Kabardian

(39) a. [*a.p.xʷed-əw* *sə-χʷə-n-əw*] *sə-xʷe.j-a-t*
1SG.ABS-become-MOD-ADV 1SG.ABS-want-PST-RS
'I wanted to become like her.' (yzn130712biography:65)

b. ***s-j-ade*** [*daḳʷe* ***sə***-*χʷə-n-əw*] *xʷ.je-t*
1SG.PR-POSS-father seamstress **1SG.ABS**-become-MOD-ADV want-RS
'My father wanted me to become a seamstress.' (tlr120722history:16)

c. ***dəʁʷase*** *sə-xʷe.j-a* [***newbe*** *mejqʷape* *sə-ḳʷe-n-əw*]
yesterday 1SG.ABS-want-PST **today** Maykop 1SG.ABS-go-MOD-ADV
'Yesterday I wanted to go to Maykop today' (elicited)

d. *žejə-ž'ə-n-əw* *xʷ.je-xe-**qəm***
sleep-RE-MOD-ADV want-PL-**NEG**
'They don't want to sleep.' (sr120724fear:17)

e. *ǯ'eš'ə-m* *səhatə-r* *ṭʷə* *neʁʷəne* *sə-**mə**-žejə-n-əw*
night-OBL hour-ABS two until 1SG.ABS-**NEG**-sleep-MOD-ADV
sə-xʷ.je
1SG.ABS-want
'I want to be awake [lit. not to sleep] till 2 o'clock tonight.' (elicited)

By their morphological properties, the two verbs are also clearly independent: they need not be adjacent and the complement can follow the matrix (39c), personal prefixes cannot be omitted on either of the verbs (40a,b), and subordinating prefixes are allowed only on V2, just as the wide scope prefixal negation (40c).

Besleney Kabardian (elicited)

(40) a. **se* *_žejə-n-əw* *sə-xʷ.je*
1SG _sleep-MOD-ADV 1SG.ABS-want
intended: 'I want to sleep.' (possible only in the meaning 'I want him/her to sleep.')

b. **se* *sə-žejə-n-əw* *_xʷ.je*
1SG 1SG.ABS-sleep-MOD-ADV _want
intended: 'I want to sleep.' (possible only in the meaning 'S/he wants me to sleep', cf. (39b))

c. *s-ew-ŝe* [*we* *wə-žejə-n-əw*
1SG.ERG-DYN-know 2SG 2SG.ABS-sleep-MOD-ADV

*wə-**zerə**-x^{w}e<**m**>je-r*]
2SG.ABS-**FCT**-<**NEG**>want-ABS
'I know that you don't want to sleep.'

Against this background, I shall examine the morphosyntactic integration of the VCPs to be discussed in the next subsections.

4.2. V1 = bare stem

The richest subsystem of auxiliary verb constructions in Circassian is the one where V1 occurs in the bare stem form without any overt markers of non-finiteness or TAM. These constructions were studied by Kerasheva (1995[1979], 1995[1984a]: 110–121) focusing on their morphosyntactic properties. For West Circassian, such constructions were more recently analysed by Kushnir (2011) from the point of view of degree of grammaticalisation and morphosyntactic integration; Kushnir shows that constructions with different auxiliaries form a cline from tightly integrated suffix-like formations to looser combinations of two semi-independent verbs. Kimmelman (2007, 2010) also discusses the semantics of these and other auxiliary-verb constructions in greater detail.

4.2.1. Semantic relations

The meanings expressed by constructions with the V1 in the bare stem form belong to the domains of aspect and modality.

The auxiliary *ze-pə-t* REC.IO-LOC-stand 'be joined', lit. 'stand close to each other' expresses the frequentative meaning ('V regularly', 'V all the time') (41).

Besleney Kabardian

(41) *a-bə-m q̇ə-x^{w}-a-h* ***ze-pə-t***
DEM-OBL-OBL CSL-BEN-3PL.ERG-carry **REC.IO-LOC-stand**
'They regularly bring [money] for her.' (xvr120725healer:3)

The auxiliaries *pe-t* 'stand before' and *tje-t* 'stand on' appear to be synonymous and express the progressive meaning with durative predicates (42a) and the proximative meaning ('be about to V') with telic and punctual predicates (42b) (Kimmelman 2007: 300–306; 2010: 17–18); when the auxiliary is in the past tense, the construction expresses the avertive meaning ('the event was about to occur but did not', Kuteva 1998, Kuteva et al. 2019) (42c). However, in my small Besleney Kabardian corpus the auxiliary *tje.t* does not occur at all, and of the three occurrences of the auxiliary *pe.t* (none of them in the past tense) two are found in subordinate clauses denoting progressive situations simultaneous to a foregrounded event (42d).

Besleney Kabardian

(42) a. *a-r* *ma-ḳ^{w}e* ***pe-t***
DEM-ABS DYN-go **LOC-stand**
'S/he is going.' (elicited)

b. *ǯ'edəw-m* *ʒaʁ^{w}e-r* *q-j-e-wəbəd* ***pe-t***
cat-OBL mouse-ABS CSL-3SG.ERG-DYN-catch **LOC-stand**
'The cat is about to catch the mouse.' (elicited)

c. *sə-tje-x^{w}e* ***pe-t-a***
1SG.ABS-LOC-fall **LOC-stand-PST**
'I almost fell.' (elicited)

d. *q̇e-kʲʷe-ž'* ***pe-t-re*** *a–ŝəpq̇ə-m* *q̇ə-pe-ç̌'e-xʷe-ž'-a*
CSL-go-RE **LOC-stand-CVB** DEM–true-OBL CSL-LOC-LOC-fall-RE-PST
'On his way back he met the same [person] again.' (hjk120727hoja:9)

The interpretation of the combination of the bare stem of V1 with the auxiliary *χʷə-* 'become, happen' depends on the form of the latter. When the auxiliary is in the past tense, the construction expresses inception of a habitual situation ('started to V regularly') (43a); in fact, the inceptive meaning is probably an implicature of the past tense, since the most frequent use of the auxiliary in the corpus involves a temporal subordinate form expressing habituality pure and simple ('when it V-s regularly') (43b), which can probably be considered a *sui generis* subordinate conjunction. By contrast, when the auxiliary occurs in the future tense, the construction expresses deontic possibility ('be allowed to V') (44), usually under negation.

Besleney Kabardian
(43) a. *jəλes-jə-blə-m* *školə-m* *sə-kʲʷe* ***χʷ-a***
year-LNK-seven-OBL school-OBL 1SG.ABS-go **become-PST**
'I started attending school at the age of seven.' (elicited)

b. *weš'x* *š'ə-mə-ʔe* ***š'ə-χʷ-ç̌'e***
rain LOC-NEG-be **TMP-become-INS**
kukle-r *ja-xʷ-a-pe-t-jə*
doll-ABS 3PL.IO-BEN-3PL.ERG-dress-RS-ADD
'When there was no rain, they would dress up a doll and [carry it around]' (akm110714rain:2)

(44) *ž'-a-ʔe maxʷekʷ-ç̌'e* *wə-γəç̌'e* ***mə-χʷə-n-əw***
PVB-3PL.ERG-say Thursday-INS 2SG.ABS-wash.ANTIP **NEG-become-FUT-ADV**
'It is said that one is not allowed to do washing on Thursdays.' (bnx110712week:1)

Several constructions encode similative meaning ('it appears/seems that V'). The one employs the static predicate West Circassian *fe.de* / Kabardian *xʷe.de* 'be like' and is mostly used in subordinate clauses as a kind of similative conjunction 'as if' (45).

Besleney Kabardian
(45) *ṭekʲʷ-əw* *q̇ə-ç̌'a-š'te* ***xʷe.d-əw*** *z-jə-ŝ-a*
little-ADV CSL-LOC-fear **be_like-ADV** RFL.ABS-3SG.ERG-do-PST
'He pretended as though he was a little afraid.' (sr120724fear:18)

The other similative constructions are based on the special form of V1 with the similative suffix West Circassian *-ŝʷe* / Kabardian *-fe*, which belongs to the stem (as evidenced by its falling within the domain of /e/~/a/ alternation) and therefore cannot be considered a converb marker. This form combines with the auxiliary *tje-t* 'stand on' in Besleney Kabardian (46) and *tje-we* 'hit on' in West Circassian (47); these constructions stand out in that the shared argument appears as the indirect object of V2 (see the next section).

Besleney Kabardian
(46) *a-bə* *səmež'a-**fe** **tje-t***
DEM-OBL be_ill-**SML** **LOC-stand**
'S/he appears to be ill.' (elicited)

West Circassian

(47) *a-š'* *səmeǯa-ŝʷe* ***tj-e-we***
DEM-OBL be_ill-**SML** **LOC-DYN-hit**
'S/he seems ill.' (Kimmelman 2010: 37)

4.2.2. Morphosyntactic integration

In terms of wordhood the VCPs with aspectual auxiliaries *ze.pə.t* (frequentative) and *pe.t* / *tje.t* (progressive-proximative) show the greatest degree of morphological integration, allowing neither permutation nor interruption and displaying most properties of a single grammatical word (Kushnir 2011: 225; cf. also Kerasheva 1995[1984a]: 117–118). In particular, all prefixal morphology occurs on V1 only, notably including the dynamic prefix in the present tense (42a,b) and the negative prefix *mə-* with scope over the whole construction in subordinate clauses (48a); by contrast, all endings, including the plural *-xe*, are only allowed on V2, at least for the frequentative auxiliary (48b). Moreover, in West Circassian the dynamic suffix *-re* is also allowed on V2 in negated and non-finite present tense forms (49), which is remarkable given that the auxiliaries themselves are static predicates; this diagnostic is unavailable in Besleney Kabardian. The constructions also behave as a single unit with respect to operators and modifiers.

Besleney Kabardian

(48) a. *a-bə* *j-e-ṣe*
DEM-OBL 3SG.ERG-DYN-know
[*se* *sə-**zərə-mə**-žej* *ze-pə-tə-r*]
1SG 1SG.ABS-**FCT-NEG**-sleep REC.IO-LOC-stand-ABS
'S/he knows that it is not the case that I sleep all the time.' (elicited)

b. *pŝaŝe-m* *maxʷe–q̇es* *pismo-xe-r*
girl-OBL day-every letter-PL-ABS
*jə-tx(**-**xe)* *ze-pə-t-a-**xe***
3SG.ERG-write(*-**PL**) REC.IO-LOC-stand-PST-**PL**
'The girl wrote letters every day.' (elicited)

West Circassian

(49) *je-ŝʷe* *ze-pə-t-**re**-r* *me-wətaŝʷe*
DAT-drink REC.IO-LOC-stand-**DYN**-ABS DYN-become_drunk
'Who drinks all the time becomes drunk.' (WCCorp)

The other VCPs with the bare form of V1 show less integration. Some of them, like the deontic possibility construction with 'become' (50a) and the similative construction with 'hit' in West Circassian (51a), allow permutation and interruption. The similative constructions allow V1 to inflect for tense (51b). Besides that, both constructions with 'become' and all similative constructions allow V1 to be independently negated (50b), (51c) (cf. Kerasheva 1995[1984a]: 120–121) as well as V2 to take subordinating prefixes (50c), (51d). Note also that the wide-scope negation in subordinate clauses also occurs on V2, cf. (44) above. All this suggests if not biclausality but at least a considerable degree of independence, especially for those constructions that allow their components to be independently modified by operators such as tense and negation.

Besleney Kabardian

(50) a. ***χʷə-ne*** *sə-ḳʷe* *školə-m*
become-FUT 1SG.ABS-go school-OBL
'I may go to school.' (elicited)

b. *fə-dəde* *wə-**mə**-λaʁʷ* *χʷə-ne-**q̇əm**-jə*
good-very 2SG.ERG-**NEG**-see become-FUT-**NEG**-ADD
'one must love (the children) very much (lit. one may not not love).' (tlr120722history:45)

c. *s-ew-ṣe* *školə-m* *sə-ḳʷe* ***zerə**-χʷə-ne-r* /
1SG.ERG-DYN-know school-OBL 1SG.ABS-go **FCT**-become-FUT-ABS/
*sə-**zerə**-ḳʷe* *χʷə-ne-r*
1SG.ABS-**FCT**-go become-FUT-ABS
'I know that I may go to school.' (elicited)

West Circassian (Kimmelman 2010: 38)

(51) a. *a-š'* ***tj-e-we*** *səmeǯa-ŝʷe*
DEM-OBL **LOC-DYN-hit** be_ill-SML
'S/he seems ill.'

b. *a-š'* *səmeǯe-**ʁa**-ŝʷe* *tj-e-we*
DEM-OBL be_ill-**PST**-SML LOC-DYN-hit
'S/he looks like s/he was ill.'

c. *a-š'* ***mə**-səmeǯa-ŝʷe* *tj-e-we*
DEM-OBL **NEG**-be_ill-SML LOC-DYN-hit
'S/he looks like s/he is not ill.'

d. *s-e-ṣe* [*a-š'* *pis'me-xe-r* *ə-txə-ŝʷe*
1SG.ERG-DYN-know DEM-OBL letter-PL-ABS 3SG.ERG-write-SML
***zere**-tje-we-re-r* / ***zer**-jə-txə-ŝʷe* *tje-we-re-r*]
FCT-LOC-hit-DYN-ABS / **FCT**-3SG.ERG-write-SML LOC-hit-DYN-ABS
'I know that s/he looks like a person writing letters.'

4.2.3. Argument sharing

In terms of argument structure, all constructions but those involving the similative suffix on V1, consistently lack personal prefixes on V2. This can be argued to be indicative of the auxiliaries' complete lack of argument structure, or probably of their taking V1 as their absolutive argument (cf. the insightful observations in Kerasheva 1995[1984a]: 115). The latter interpretation is particularly attractive for the constructions with *χʷə-* 'become, happen', which consistently does not take personal prefixes also in other types of VCPs. The question of argument sharing becomes more interesting in the constructions with the similative suffix on V1, where, by contrast, it is V2 that determines the argument structure of the construction and indexes the subject (= S/A of V1) as its indirect object, the absolutive of V2 being apparently "dummy" (thus the pattern of sharing is S/A = IO). The West Circassian construction with 'hit' and the Besleney Kabardian construction with 'stand on' differ in that the former, but not the latter, allows V1 to index the subject as well, compare (53) and (54), as well as (51d) with the indexation of the ergative agent on V1.

West Circassian

(53) ***w*-*e*-*səmeǯa*-*ŝʷe*** ***qə*-*p*-*tj*-*e*-*we***
2SG.ABS-DYN-be_ill-SML CSL-**2SG.IO**-LOC-DYN-hit
'You appear to be ill.' (Kimmelman 2010: 38)

Besleney Kabardian

(54) ***(*wə*-)*səmeǯ'a*-*fe*** ***p*-*tje*-*t***
(***2SG.ABS**-)be_ill-SML **2SG.IO**-LOC-stand
'You appear to be ill.'

There is some evidence that it is not necessarily the subject (S/A) of V1 that gets co-indexed on V2 in the similative construction in West Circassian. Thus, in (55a) the index on V2 corresponds to the indirect object introduced by the locative applicative on V1, and in (55b) the cross-referenced participant is not an argument of V1 at all, but the possessor of its subject. Evidently, what is relevant here is semantic/pragmatic salience rather than argument structure.

West Circassian

(55) a. *wəzə*-*r* ***p*-*ç̌'e*-*ç̌'ə*-*ʁa*-*ŝʷe*** ***qə*-*p*-*tj*-*e*-*we***
pain-ABS **2SG.IO**-LOC-exit-PST-SML CSL-**2SG.IO**-LOC-DYN-hit
'You appear to be no longer ill (lit. you appear as if pain left you).' (WCCorp)

b. ***p*-*ŝhe*** *wəzə*-*ŝʷe* ***qə*-*p*-*tj*-*e*-*we***
2SG.PR-head ache-SML CSL-**2SG.IO**-LOC-DYN-hit
'You appear to have a headache.' (example courtesy of Irina Bagirokova)

4.3. V1 = modal *-n*

There are two related VCPs with the main verb appearing as a bare modal form in *-n*, which involve the same auxiliary West Circassian *fa.je* / Kabardian *xʷ.je* 'want, need'. Despite surface similarity, the two constructions differ in their meanings (deontic vs. epistemic) and morphosyntactic properties, sometimes quite non-trivial. On this bifurcation in West Circassian, see Kerasheva (1995[1984a]: 131–132), Kimmelman (2010: 29–32) and especially Lander & Bagirokova (2015). Given the close intertwining between semantics and morphosyntax of these two constructions, I shall discuss them together.

The properties that both constructions have in common are related to their morphosyntactic integration, i. e. rigid order and strict contiguity of the two predicates (56a), (57b) as well as the ban on the occurrence of personal prefixes on V2 (56b), (58).

Besleney Kabardian (elicited)

(56) a. *pš'edej* *ʔʷexʷ* *s*-*ṣe*-***n*** *(*pš'edej)* ***xʷ.je***
tomorrow work 1SG.ERG-do-**MOD** tomorrow **must**
'I must work tomorrow.'

b. *mejqʷape* ***sə*-*ḳʷe*-*n*** ***(*sə*-)*xʷ.je***
Maykop **1SG.ABS**-go-MOD (***1SG.ABS**-)must
'I must go to Maykop.'

West Circassian (examples courtesy of Irina Bagirokova)

(57) a. *asλen* *me*-*čəje*-*n* *fa.je*
Aslan DYN-sleep-MOD must

‘Aslan must be sleeping.’

b. **asλen fa.je me-čəje-n*
Aslan must DYN-sleep-MOD

(58) ***tə**-q-e-g^{w}əź^{w}e-n* *(***tə**-)fa.je*
1PL.ABS-CSL-DYN-be_late-MOD (***1PL.ABS**-)must
‘We must be late.’

The morphosyntactic differences between the two constructions can be regarded as directly reflecting the different scopes of the modal operator, situational (predicate-level) in the case of deontic modality vs. propositional (sentence-level) in the case of epistemic modality. The properties of constructions are summarised in Table 4 and further illustrated in examples (59)–(61).

Table 4. Morphosyntactic properties of the deontic and epistemic necessity VCPs with *fa.je* / *x^{w}.je* ‘want, need’

	deontic	**epistemic**
dynamic prefix on V1	no (56)	yes (57a), (58)
tense on V1	no (59a)	yes (59b)
tense on V2	yes (59a)	no
negation on V2	yes (60a)	no
negation on V1	yes (60b)	yes (60c)
subordinators on V1	yes (61a)	no
subordinators on V2	yes (61b)	no
/e/~/a/ alternation in V1	no (62a)	yes (62b)

Besleney Kabardian (Somin & Kushnir 2012)

(59) a. *rəwstam təwč’anə-m ḳ^{w}e(*-**ʁe**)-n x^{w}e.j-**a***
Rustam shop-OBL go(*-**PST**)-MOD must-**PST**
‘Rustam had to go shopping.’

b. *weš’x q-je-š’xə-**ʁe**-n x^{w}.je*
rain CSL-DAT-rain-**PST**-MOD must
‘It must have rained.’

Besleney Kabardian (elicited)

(60) a. *mejq^{w}ape sə-ḳ^{w}e-n x^{w}.je-**q̇əm***
Maykop 1SG.ABS-go-MOD must-**NEG**
‘I need not go to Maykop.’

b. *ǯ’eš’ə-m səhatə-r ṭ^{w}ə neʁ^{w}ane sə-**mə**-žejə-n x^{w}.je*
night-OBL hour-ABS two until 1SG.ABS-**NEG**-sleep-MOD must
‘I must stay awake (lit. not sleep) until 2 o’clock at night.’

c. *č̣’ale-r **mə**-žejə-n x^{w}.je*
boy-ABS **NEG**-sleep-MOD must
‘The boy must not be sleeping.’

West Circassian (WCCorp)

(61) a. *ja-t-e-ʔʷe <...>*
3PL.IO+DAT-1PL.ERG-DYN-say
adəga–bze-r ***zer-a-ŝe-n*** ***fa.je-r***.
Circassian–language-ABS **FCT**-3PL.ERG-know-**MOD** **need-ABS**
'we tell them <...> that they should know the Circassian language'

b. *te kjərjəlljəce-r je.ǯ'a.ṗe-xe-m a-ç̌e-λ.he-ʁe-**n***
1PL Cyrillic-ABS school-PL-OBL 3PL.IO-LOC-put-RES-**MOD**
zere-fa.je-r *qə-d-gʷə.r<e>ʔʷe*
FCT-need-ABS CSL-1PL.IO-<DYN>understand
'We understand that Cyrillic script should be introduced in schools.'

West Circassian (Lander & Bagirokova 2015: 7, 9)

(62) a. *psə-he mašəne-r z-ʁ**e**-č**e**-n / *z-ʁ**a**-č**e**-n fa.j*
water-carry car-ABS 1SG.ERG-CAUS-run-MOD must
'I must send the car for water.'

b. *psə-he mašəne-r j-e-ʁ**a**-č**e**-n / *j-e-ʁ**e**-č**e**-n fa.j*
water-carry car-ABS 3SG.ERG-DYN-CAUS-run-MOD must
'It is likely that he is sending the car for water.'

Given that in the epistemic construction the *-n* suffix does not block the /e/~/a/ alternation (62b) (it has to be noted that this has been robustly observed only for West Circassian; the Besleney Kabardian data is inconclusive, but examples without the alternation have also been elicited), it must have been reanalysed as an ending, probably forming a single morpheme with *faj*. Further evidence for this in West Circassian is provided by the quite exceptional possibility for the epistemic construction to co-occur with forms containing the negative suffix *-ep*, which otherwise occurs only in independent clauses (Kimmelman 2010: 32; Lander & Bagirokova 2015: 12) (63).

West Circassian

(63) *ǯ'ər-jə waχte-r qe-sə-ʁ-**epə-n*** ***fa.je***
now-ADD time-ABS CSL-reach-PST-**NEG-MOD** **must**
'Probably time has not come yet.' (WCCorp)

In terms of argument sharing, the epistemic auxiliary clearly takes the whole proposition as its only argument thus not sharing any arguments with V1; for the deontic construction, it could be probably argued that the auxiliary shares the subject (S/A) participant with V1, but unequivocal evidence for this is lacking given the ban on argument indexing on V2.

4.4. V1 = adverbial *-əw* / *-ew*

VCPs with V1 appearing in the adverbial form involve two auxiliaries: *š'ə-t* LOC-stand 'stand' (frequently reduced to *š't-* and apparently encliticised) and *χʷə-* 'become, happen'. Their interpretation and morphosyntactic properties partly depend on the tense form of the auxiliary and show some interdialectal differences.

4.4.1. Semantic relations

The construction with the auxiliary ‘stand’ in Besleney Kabardian is mostly used in past tenses and expresses past habitual (64). Its counterpart in West Circassian, according to Kimmelman (2010: 24–26), does not show tense restrictions and also expresses a habitual meaning (65).

Besleney Kabardian

(64) *ç’ale–çəḳ-xe-r de-rjə d-a-d-je-ṣ-**əw=š’.tə-ʁ-a***
boy–little-PL-ABS 1PL-ADD 2PL.ABS-3PL.IO-COM-DAT-do-**ADV=stand-PST-PST**
‘We used to play with the boys.’ (akm110714txt10:14)

West Circassian (Kimmelman 2010: 24)

(65) *bzəwə-r bəb-**ew** **š’ə.t***
bird-ABS fly-ADV stand
‘Birds fly.’

Besides that, a construction involving the same auxiliary with the modal suffix *-n* expresses epistemic modality in Besleney Kabardian (66); its counterpart in West Circassian has become a suffix attaching to the stem without any markers of subordination (67) (Rogava & Kerasheva 1966: 181, 185–186).

Besleney Kabardian (Somin & Kushnir 2012)

(66) *a-r žej-a-**w** **š’tə-n***
DEM-ABS sleep-PST-**ADV** **stand-MOD**
‘S/he must have slept.’

West Circassian (WCCorp)

(67) *mə λenəq^{w}e-m q-jə-ç’ə-ʁe-**š’tə-n***
this side-OBL CSL-LOC-exit-PST-**AUX-MOD**
‘He must have arrived from this side.’

The semantics of the construction with the auxiliary *χ^{w}ə-* is somewhat difficult to define. According to Kimmelman (2010: 16–17), it can be interpreted compositionally as ‘it so happens that V1’. When the auxiliary is in the present tense the construction often assumes a “raritive” meaning ‘sometimes V1’ (Kerasheva (1991[1984a]: 123) , but when the auxiliary is in the past tense the construction can have an inceptive meaning (68).

West Circassian (WCCorp)

(68) *jeṭane pjəs’me-xe-r ze-f-a-txə-x-**ew*** ***χ^{w}ə-ʁe***
later letter-PL-ABS REC.IO-BEN-3PL.ERG-write-PL-**ADV** **become-PST**
‘Later they started to write each other letters.’

4.4.2. Morphosyntactic integration

The habitual construction with the auxiliary ‘stand’ shows a considerably high degree of phonological and morphosyntactic integration. Its components occur in a fixed order, only V1 attaches personal prefixes and only V2 takes tense suffixes (64). Negation normally also occurs on V2 (69), but examples with negation on V1 are also attested (70).

Besleney Kabardian

(69) *nenajə-r* *jə-redjətjelə-m* *jə-ʔəʁ-əw*
baby-ABS POSS-parent-OBL 3SG.ERG-hold-ADV
starše-xe-m *ja-djež'* *ʔʷə-h-**əw*** ***š'tə-ʁ-a-te-q̇əm***
elder-PL-OBL 3PL.IO-to LOC-enter-**ADV** **stand-PST-PST-RS-NEG**
'The parent would not go to the elder members of the family holding a baby.' (akm110714txt5:1)

West Circassian

(70) *č̣'ale-xe-r* *pč'əhe.re* *qə-λə-r-a-**mə**-ʁa-he-x-**ew*** ***š'ə.tə-ʁ***
boy-PL-ABS at.evening CSL-LOC-LOC-3PL.ERG-NEG-CAUS-enter-PL-ADV stand-PST
'[The parents observed the girl closely,] they would not let boys visit her in the evenings.' (WCCorp)

The epistemic construction with *š'tə-n* stand-MOD predictably allows V1 to take tense suffixes (66) and negation (71), but this by itself does not signal a low degree of integration, since these features are driven by semantic scope and the auxiliary remains uninflected and tends to be reduced.

Besleney Kabardian (Somin & Kushnir 2012)

(71) *sə-**mə**-ḳʷe-ž'ə-**n-əw*** ***š'tə-n***
1SG.ABS-**NEG**-go-RE-**FUT-ADV** **stand-MOD**
'I will probably not go home.'

By contrast, the construction with *χʷə-* 'become, happen' shows little integration, allowing e.g. independent expression of tense (72) and negation (73).

West Circassian (WCCorp)

(72) a. *s-jə-mə-ŝefeʁʷ* *dež'* *č̣'e-wəpč̣a-ḳʷe*
1SG.PR-POSS-NEG-ally to LOC-ask-NML
*sə-qe-ḳʷa-**ʁ-ew*** ***me-χʷə***
1SG.ABS-CSL-go-**PST-ADV** **DYN-become**
'It turns out that I've come to ask a person who is not my ally.'

b. *fjestjəval-ew* *məjeqʷape* *š'ə-r-je-ḳʷe-č̣'ə-re-me*
festival-ADV Maykop LOC-TRANS-DAT-go-exit-DYN-OBL.PL
bere *a-xe-laž'-**ew*** ***χʷə-ʁe***
often 3PL.IO-LOC-work-**ADV** **become-PST**
'It so happened that s/he often took part in festivals organised in Maykop.'

Besleney Kabardian (elicited)

(73) a. *školə-m* *sə-ḳʷ-əw* *χʷə-**q̇əm***
school-OBL 1SG.ABS-go-ADV become-**NEG**
'I never go to school.'

b. *školə-m* *sə-**mə**-ḳʷ-əw* *me-χʷ*
school-OBL 1SG.ABS-**NEG**-go-ADV DYN-become
'Sometimes I skip (lit. don't go to) school.'

4.4.3. Argument sharing

The construction with the auxiliary *χʷə-* 'become, happen' should clearly be analysed as involving no argument sharing but rather V1 serving as the predicate argument of V2. The same is true of the epistemic construction with *š'tə-n* stand-MOD. Whether the habitual construction with 'stand' should also be analysed in this way, or rather as involving the sharing of the S/A argument of V1 with the unexpressed S argument of the auxiliary, can hardly be determined.

4.5. V1 = modal adverbial West Circassian *-n-ew* / Kabardian *-n-əw*

4.5.1. Semantic relations

This subtype of VCPs comprises at least three constructions, two of which involve the already familiar auxiliaries *š'ə.t* 'stand' and *χʷə-* 'become, happen'. The construction with 'stand' expresses non-epistemic necessity (74).

Besleney Kabardian

(74) *ċəgʷə-m* *wə-de-laž'e-me*
earth-OBL 2SG.ABS-LOC-work-COND
jə-ffede *q̇-w-jə-tə-**n-əw*** ***š'ə.t***
POSS-profit CSL-2SG.IO-3SG.ERG-give-**MOD-ADV** **stand**
'If you cultivate land, it must give you profit.' (kkd130712ulyap:22)

The construction with *χʷə-* 'become, happen' as attested in the Besleney texts expresses real situations that are construed as being beyond full control of the actor (75), somewhat similarly to the so-called acquisitive modals (van der Auwera et al. 2009), cf. their characterisation in Kerasheva (1995[1984a): 138] as 'it so happened the X had to V1'.

Besleney Kabardian

(75) a. *səj* *a-r* *zə-tər-a-ʔʷe-ž'ə-**n-wə*** ***ċ'e-χʷ-te-r***
what DEM-ABS RFL.IO-LOC-3PL.ERG-say-RE-**MOD-ADV** **RSN-become-RS-ABS**
'Why did it happen so that they made a vow?' (akm110714taboo:4)

Another construction within this class of VCPs is documented only for West Circassian by Phelan (2022) and involves the verb *ṩə* 'do' as a causative auxiliary (76). This construction is infrequent as opposed to the highly productive morphological causative with the prefix *ʁe-*.[5]

West Circassian (WCCorp)

(76) *nah-terez-ew* *qə-ŝʷ-λə-pλe-**n-x-ew*** ***qe-t-ṩə-š't***
COMP-correct-ADV CSL-2PL.IO-LOC-look-**MOD-PL-ADV** **CSL-1PL.ERG-do-FUT**
'We'll make them better look after you.'

4.5.2. Morphosyntactic integration

The construction with the verb *š'ə.t* 'stand' shows a certain degree of integration in not allowing interruption or permutation of its components (77a), nor person marking on V2 (77b).

Besleney Kabardian (elicited)

(77) a. ***š'ə.t** se* *q̇ale-m* *sə-ḳʷe-**n-əw***
stand 1SG town-OBL 1SG.ABS-go-**MOD-ADV**
intended: 'I must go to the town.'

[5] Interestingly, this construction is not mentioned in Kerasheva (1995[1984a]: 139–140), who otherwise gives quite generous lists of V2-s occurring in her "complex predicate constructions", some of which can rather be analysed as involving clausal complementation and hence not discussed here.

b. *hantχʷəps* ***z-ʁe-ve-n-əw*** ***(*sə-)š'ə.t***
soup **1SG.ERG**-CAUS-boil-MOD-ADV (***1SG.ABS**-)stand
'I must cook soup.'

At the same time, both components of the construction can be independently negated (78)–(79) and attach prefixal subordinators.

Besleney Kabardian
(78) *sabəj-m* *gʷə-xʷebe-nəʁ-əw* *ja-xʷ-w-jə-ʔe-ne-r*
child-OBL heart-warm-NML-ADV 3PL.IO-BEN-2SG.IO-POSS-be-FUT-ABS
a-r *b-wəxə-**n-əw*** ***š'ə.t-q̇əm***
DEM-ABS 2SG.ERG-finish-**MOD-ADV** **stand-NEG**
'The warmheartedness that you have for children should not come to an end.' (tlr120722history:45)

West Circassian (WCCorp)
(79) *w-je-pλə* *ze-pə-tə-ʁe-č'-jə*
2SG.ABS-DAT-look REC.IO-LOC-stand-PST-INS-ADD
*w-je-**mə-zeš'ə-n-ew*** ***š'ə.t***
2SG.ABS-DAT-**NEG**-get_tired-**MOD-ADV** **stand**
'One should not get tired even if one watched her all the time.'

The construction with *χʷə-* 'become, happen' shows much more freedom, allowing not only independent negation of the components (80) but their free ordering as well (81).

West Circassian
(80) *səd–fe.d.jə.z* *jə-deʁʷə-ʁ-ew* *zə-b-ʁe-hazərə-ʁe-m-jə,*
what–similar POSS-good-NML-ADV RFL.ABS-2SG.ERG-CAUS-ready-PST-COND-ADD
*wə-**mə**-gʷəmeč'ə-n-ew* *χʷə-r-**ep***
2SG.ABS-**NEG**-worry-MOD-ADV become-DYN-**NEG**
'However well prepared, you cannot avoid worrying.' (WCCorp)

(81) ***me-χʷə*** *školə-m* *sə-ḳʷe-**n-ew***
DYN-become school-OBL 1SG.ABS-go-**MOD-ADV**
'I should go to school.' (Kimmelman 2010: 18)

As to the periphrastic causative construction with the verb 'do', Phelan (2022) does not discuss the diagnostics of integration, only noting that the plural suffix referring to the absolutive argument of V1 can occur on V2 (82). The results of my own elicitation do not show any other signs of the construction's integration: the two verbs can change order (83a) and be non-contiguous (83b), and the subordinating prefixes attach only to the auxiliary (83c). Besides that, the components of the construction can be negated independently of each other (84a)–(84b) and even separately modified by adverbials (92).

West Circassian
(82) *laʁe-**xe**-r* *ŝʷ-thač'ə-n-ew* *s-ŝə-š'tə-**x***
dish-**PL**-ABS 2PL.ERG-wash-MOD-ADV 1SG.ERG-do-FUT-**PL**
'I will make you wash the dishes.' (Phelan 2020: 855)

West Circassian (examples courtesy of Irina Bagirokova)

(83) a. ***ŝʷə-s-ʂə-š'tə-x*** *laʁe-xe-r* *ŝʷ-thaǯ'ə-**n-ew***
2PL.ABS-1SG.ERG-do-FUT-PL dish-PL-ABS 2PL.ERG-wash-**MOD-ADV**
'I will make you wash the dishes.'

b. *laʁe-xe-r* *ŝʷ-thaǯ'ə-**n-ew*** *ze.gʷere-m*
dish-PL-ABS 2PL.ERG-wash-**MOD-ADV** sometime-OBL
ŝʷə-s-ʂə-š'tə-x
2PL.ABS-1SG.ERG-do-FUT-PL
'Sometime I'll make you wash the dishes.'

c. *laʁe-xe-r* *t-thaǯ'ə-n-ew* ***zerə**-p-ʂə-re /*
dish-PL-ABS 1PL.ERG-wash-MOD-ADV **FCT**-2SG.ERG-do-DYN
*(*zerə-t-thaǯ'ə-n-ew* *p-ʂə-re)*
(***FCT**-1PL.ERG-wash-MOD-ADV 2SG.ERG-do-DYN)
sə-gʷ *r-jə-hə-r-ep*
1SG.PR-heart LOC-3SG.ERG-carry-DYN-NEG
'I don't like that you make it so that we have to wash the dishes.'

(84) a. *sə-qə-p-tje-kʷəwe-**n-ew*** *sə-**mə**-ʂ*
1SG.ABS-CSL-2SG.IO-LOC-shout-**MOD-ADV** 1SG.ABS-**NEG**-do/IMP
'Don't make me shout at you.' (elicited)

b. *wə-**mə**-λeč'ə-**n-ew*** ***w-j-e-ʂə***
2SG.ABS-**NEG**-be_able-**MOD-ADV** **2SG.ABS-3SG.ERG-DYN-do**
'[As soon as you open the book,] it makes you unable not to read it.' (WCCorp)

(85) ***njewəš'*** *ŝʷə-ḳʷe-ž'ə-n-ew* ***nepe*** *ŝʷə-s-ʂə-š't*
tomorrow 2PL.ABS-go-RE-MOD-ADV **today** 2PL.ABS-1SG.ERG-do-FUT
'I'll arrange it so today that you will depart tomorrow.' (elicited)

4.5.3. Argument sharing

As with many of the constructions already discussed, the simplest way to treat the auxiliaries 'stand' and 'become' is to assume that their absolutive argument is the lexical predicate itself. The situation with the causative auxiliary 'do' is, by contrast, much more complex. The discussion below follows Phelan (2022).

When used as a lexical verb, *ʂə* 'do, make' behaves as an ordinary transitive verb taking an ergative agent and an absolutive patient.When it is employed as a causative auxiliary, 'do' can index the plurality of the absolutive participant of V1 by the suffix *-xe* (82), which suggests that in this case the absolutive arguments of the two verbs are shared (S/P = P). However, and more interestingly, the causative auxiliary can also take absolutive prefixes indexing the participant affected by causation. In the usual case, this participant is the causee, i.e. the only or the most agentive argument of V1, which can be the ergative agent (86a), the absolutive S (86b) or the indirect object with so-called "inversive" predicates denoting emotions and cognition (86c). Such cases can be analysed as sharing of the "subject" with the P of V2.

West Circassian

(86) a. *səd-ew* *be* ***s**-λeʁʷə-n-ew* ***sə**-p-ʂə-ʁ…*
what-ADV much **1SG.ERG**-see-MOD-ADV **1SG.ABS**-2SG.ERG-do-PST
'How much have you made me see.' (WCCorp)

b. *səd paje <…>* ***sə-gʷəʁe-n-ew*** ***sə-p-ʂə-ʁ?***
what for **1SG.ABS**-hope-MOD-ADV **1SG.ABS**-2SG.ERG-do-PST
'Why did you <…> make me hope?' (WCCorp)

c. *we a-xe-r* ***s-šʼə-ʁʷəpše-n-ew*** ***sə-p-ʂə-ʁ***
2SG DEM-PL-ABS **1SG.IO**-LOC-forget-MOD-ADV **1SG.ABS**-2SG.ERG-do-PST
'You made me forget them.' (Phelan 2022: 860)

However, there are cases which hardly lend themselves to an analysis in terms of argument sharing; for instance, the absolutive prefix on the causative auxiliary can correspond to the possessor of the embedded verb's subject (87), provided that it is this possessor which is affected by causation. Even despite this apparent freedom in the choice of participant to be indexed on the auxiliary, as Phelan (2022: 861) argues, such indexing is only possible if the participant in question is also referred to in the lexical predication, consider the ungrammatical example (88).

West Circassian (Phelan 2022: 860–861)

(87) ***p-ce-xe-r*** *wəzə-n-ew* ***wə-s-ʂə-šʼt***
2SG.PR-tooth-PL-ABS hurt-MOD-ADV **2SG.ABS**-1SG.ERG-do-FUT
'I'll make your teeth hurt.'

(88) **mezə-m* *məŝe-xe-r* *xe-mə-sə-n-ew* *wə-s-ʂə-šʼt*
forest-OBL bear-PL-ABS LOC-NEG-sit-MOD-ADV 2SG.ABS-1SG.ERG-do-FUT
intended: 'I will make it so that there are no bears for you in the forest.'

Given the data discussed here and in the preceding subsection, the West Circassian causative construction should be considered biclausal.

4.6. V1 = concessive *-m-jə* / *-n-ç'-jə*

4.6.1. Semantic relations

All constructions from this group involve the auxiliary *χʷə-* 'become, happen' and one of the two concessive forms of V1 with a complex marker formed by attaching the scalar additive ending *-jə* either to the conditional converb in *-me* or to the modal form in *-n* with the instrumental case marker *-ç'e*. Both forms occur on their own in concessive clauses, the difference in meaning between them being hard to define (Klimenchenko 2014: 97–98).

In the construction with the auxiliary the form in *-n-ç'-jə* expresses epistemic modality (Kerasheva 1995[1984a]: 136) ; the auxiliary can be either in the present tense (89a) or in the (modal) future (89b).

Besleney Kabardian

(89) a. *ja-bze-ç'e* *gʷəšʼəʔe-**n-ç'-jə*** ***me-χʷ***
3PL.PR+POSS-language-INS speak-**MOD-INS-ADD** **DYN-become**
'Maybe they spoke their language.' (xvr120725besleney:10)

b. *ḳʷe a-r ǯʼə mə-psewə-žʼə-**n-ç'-jə*** ***χʷə-n***
PTCL DEM-ABS now NEG-live-RE-**MOD-INS-ADD** **become-MOD**
'Maybe she no longer lives now.' (tlr120722history:29)

The semantics of the construction with *-m-jə* is less clear. The examples in (90) are taken from an instruction about preparation of traditional food; the most natural interpretation of (90a) seems to be that of necessity, however, in (90b) the speaker discusses two alternative ways of cooking, which is rather compatible with a possibility meaning. Note that the auxiliary is in the future tense.

Besleney Kabardian

(90) a. *kjefir* *š'e-ç'e* *p-šte-**m-jə*** ***χʷə-ne***
kefir milk-INS 2SG.ERG-take-**COND-ADD** **become-FUT**
'You should take kefir and milk.' (yzn130712recipes:8)

b. *možna* *lə-r-jə* *xe-p-λ.ha-ž'-əw*
possible meat-ABS-ADD LOC-2SG.ERG-put-RE-ADV
*q̇ə-de-b-ʁa-ve-ž'-**m-jə*** ***χʷə-ne***
CSL-COM-2SG.ERG-CAUS-boil-RE-**COND-ADD** **become-FUT**
adjel'n-əw *b-ʁe-ve-ž'-əw*
separate-ADV 2SG.ERG-CAUS-boil-RE-ADV
stolə-m *tje-b-ʁe-wəve-**m-jə*** ***χʷə-ne***
table-OBL LOC-2SG.ERG-CAUS-stand.up-**COND-ADD** **become-FUT**
'As for the meat, you can either put it (in the sauce) and cook together (with it) or cook it separately and put it on the table.' (yzn130712recipes:6)

A rare variant of the construction apparently only found with the negated auxiliary has the conditional, rather than the concessive, form of V1, the meaning being that of prohibition (91).

Besleney Kabardian

(91) *welaha* *mə-r* *s-ṣe-**me*** ***mə-χʷə-n***
ITRJ DEM-ABS 1SG.ERG-do-**COND** **NEG-become-MOD**
'By God, I should not do this!' (xvr120725funeral:6)

4.6.2. Morphosyntactic integration

According to the elicited data, the constructions allow permutation and separation of the components (92)–(93); Kimmelman (2010: 21) reports (and this is supported by corpus data) that the West Circassian constructions do not admit the absolutive plural suffix on the auxiliary (94), which is also a sign of lower integration.

Besleney Kabardian (elicited)

(92) a. *ç'ale-m* *pis'mo* *jə-txə-**n-ç'-jə*** *pš'edej* ***me-χʷ***
boy-OBL letter 3SG.ERG-write-**MOD-INS-ADD** tomorrow **DYN-become**

b. ***me-χʷ*** *ç'ale-m* *pis'mo* *pš'edej* *jə-txə-**n-ç'-jə***
DYN-become boy-OBL letter tomorrow 3SG.ERG-write-**MOD-INS-ADD**
a=b 'The boy will probably write the letter tomorrow.'

West Circassian

(93) ***me-χʷə*** *mašjəne* *s-fə-**m-jə***
DYN-become car 1SG.ERG-drive-**COND-ADD**
'I might drive a car.' (Kimmelman 2010: 22)

(94) *a-xe-r kʷenjak* *je-ŝʷe-n-**xe**-ç'-jə* *me-χʷə(*-**x**)*
DEM-PL-ABS brandy DAT-drink-MOD-**PL**-INS-ADD DYN-become(*-**PL**)
'They are probably drinking brandy.' (Kimmelman 2010: 20)

It is not surprising that in the construction expressing epistemic modality it is the lexical verb that attaches the markers of tense (95) and negation (96), cf. Kerasheva (1995[1984a]: 136–137).

West Circassian (WCCorp)
(95) *sə-z-e-ḳʷe-ç'ə-**ʁe**-n-ç'-jə* *me-χʷə*
1SG.ABS-RFL.IO-DAT-go-exit-**PST**-MOD-INS-ADD DYN-become
'Probably I have gone mad.'

(96) *tə-zere-**mə**-λeʁʷə-ž'ə-n-ç'-jə* *me-χʷə*
1PL.ABS-REC.ERG-**NEG**-see-RE-MOD-INS-ADD DYN-become
'We might not see each other anymore.'

As for the non-epistemic construction, its components can inflect for tense and negation independently,consider examples with lower (97a) and double (97b) negation.

West Circassian (WCCorp)
(97) a. *aw.š'ṭ-ew* ***mə**-wəpçe-m-jə* *χʷə-š'tə-ʁe*
such-ADV NEG-inquire-COND-ADD become-IPF-PST
'He needn't have inquired in this way [nobody expected his question].'

b. *a-š'* *wə-ṭje-**mə**-gʷəš'əʔe-ž'ə-m-jə* *χʷə-š'ṭ-**ep**.*
DEM-OBL 2SG.ABS-LOC-**NEG**-speak-RE-COND-ADD become-FUT-**NEG**
'One cannot avoid discussing it.'

4.6.3. Argument sharing

Like the constructions with the auxiliary *χʷə-* 'become, happen' previously discussed, the modal constructions described in this section should be analysed as involving no argument sharing between the components of the VCPs but rather V2 serving as the (absolutive) argument of V1.

4.7. Summary

Table 5 presents a general overview of the morphosyntactic properties of the Circassian auxiliary verb constructions, attempting to range them by decreasing degree of integration, with the baseline biclausal construction with the verb 'want' (see section 4.1) at the very bottom (cf. Kimmelman 2010: 47). By default, the constructions are given in their Besleney Kabardian form; the constructions attested only in West Circassian are italicised. The table does not include all relevant diagnostics, but only the most robust ones. The label "whole" in the columns on tense, negation and subordinators means that the markers in question apply to the construction as if it were a simplex predicate, i.e. when appropriate suffixal markers attach to V2 and prefixal (in case of tense, the dynamic prefix) to V1.

Table 5. Morphosyntactic properties of auxiliary-verb constructions

construction	meaning	gloss of V2	form of V1	contiguity	person	tense	negation	subordina-tors
V ze.pə.t	frequentative	be joined	bare	yes	V1	whole	whole	whole
V pet/tjet	progressive/ proximative	stand before/on	bare	yes	V1	whole	n/a	whole
V χʷə	inceptive/ habitual	become/ happen	bare	yes	V1	V2	V1, V2	V1, V2
V-n xʷ.je	deontic necessity	want/ need	modal	yes	V1	V2	V1, V2	V1,V2
V-əw š'ə.t	(past) habitual	stand	adverbial	yes	V1	V2	V1, V2	V1, V2
V-n-əw š'ə.t	necessity	stand	modal+adv	yes	V1	V2	V1, V2	V1, V2
V-n xʷ.je	epistemic	want/ need	modal	yes	V1	V1	V1	n/a
V-əw š'tə-n	epistemic	stand-MOD	adverbial	yes	V1	V1	V1	n/a
V xʷe.de	similative	be like	bare	yes	V1	V1, V2	V1, V2	V1, V2
V-n-č'-jə χʷə	epistemic	become	concessive	no	V1	V1	V1	n/a
V χʷə-ne	deontic possibility	become-FUT	bare	no	V1	(V2)	V1, V2	V1, V2
V-n-ew χʷə	'happen'	become/ happen	modal+adv	no	V1	V2	V1, V2	V1, V2
V-əw χʷə	raritive/ inceptive	become	adverbial	no	V1	V1, V2	V1, V2	V1, V2
V-m-jə χʷə	necessity/ possibility	become	concessive	no	V1	V1,V2	V1,V2	V1,V2
V-ŝʷe tje.we	similative	hit	similative	no	V1, V2	V1, V2	V1, V2	V1, V2
V-n-ew ŝə	causative	do	modal+adv	no	V1, V2	V2	V1, V2	V2
V-n-əw xʷ.je	desiderative	want/ need	modal+adv	no	V1, V2	V2	V1, V2	V2

Table 5 enables us to make several observations. First, there is a obvious cline from constructions with the aspectual auxiliaries *ze.pə.t* and *pet* attaching to the bare stem of V1 and behaving almost like suffixes to clearly biclausal constructions such as the analytic causative with 'do'; the majority of the constructions, however, occupy different points between these two poles. Second, we see that there is no perfect correlation between different parameters of morphosyntactic integration. For instance, many constructions showing linear contiguity of components at the same time allow either of them to be independently negated; the ban on person prefixes on the auxiliary is almost universal and does not correlate with any of the other diagnostics.

Third, and even more importantly, some of the properties of constructions more or less naturally follow from their semantics and scope and are probably orthogonal to their degree of grammaticalisation or integration. Thus, the constructions expressing non-epistemic modality take into their scope an irrealis predication referring to an event (Palmer 2001: 8; Boye 2012: Ch. 4), while the modal operator itself can be located in time or negated, and this explains why in these constructions only V2 inflects for tense and both V2 and V1 (the latter sometimes less naturally) co-occur with negation. By contrast, the auxiliaries with an epistemic meaning are wide-scope propositional operators anchored to the here and now of the speaker (Palmer 2001: 7), hence both tense and negation only occur on V1 (see also Narrog 2020 and references therein on the scope of various modal categories). This is most clearly seen in the Janus-like behaviour of the V-*n xʷ.je* construction (see section 4.3).

Another issue to be discussed concerns the semantic (non)compositionality of certain constructions, in particular those with the auxiliary *χʷə-* 'become, happen'. As has been argued

by Kimmelman (2010: 23–24), some of the aspectual and modal interpretations of different constructions with this auxiliary actually arise compositionally, given that the independent uses of this verb may have an additional meaning of positive evaluation. This semantic predictability can be most clearly demonstrated for the combinations of the auxiliary with the concessive and conditional forms of V1, with a predictable meaning shift '(even) if V1, it will become (good)' > 'it is allowed to V1'. Kimmelman also argues that the meaning of necessity or obligation found in the combination of the auxiliary with the modal adverbial form *-n-ew* /*-n-əw* is also derived compositionally from the purposive meaning of the subordinator: 'it becomes (good) in order to V1' > 'it is necessary to V1'. These considerations notwithstanding, most of the constructions discussed in this section have clearly non-compositional semantics, which can be related to the literal meanings of the components only diachronically and through cross-linguistic comparison.

Finally, as I have observed several times above, the question of argument sharing is problematic if at all meaningful for the majority of the constructions with auxiliaries for the simple reason that there is no empirical evidence that the auxiliaries have any arguments in the first place. Because of this, I prefer an analysis whereby the sole argument of the auxiliary is the lexical predicate itself. Exceptions to this are constituted by the similative constructions with 'stand on' (Besleney Kabardian) and 'hit' (West Circassian) and the causative construction with 'do' in West Circassian, whose non-trivial patterns of argument sharing can be directly observed through the indexing and case-marking of participants.

5. VCPs involving constructions with reduplication

The third and probably most non-trivial type of VCP in Circassian languages is constituted by a number of constructions involving verb reduplication, which is here understood broadly as conventionalised repetition of a (potentially complex) element, crucially not limited to single-word environments. Such constructions can be considered VCPs for the following reasons. First, they consist of two (de)verbal elements, either stems or fully inflected forms. Second, each of these constructions forms a monoclausal unit with at least partial sharing of arguments and operators. Third, these instances of verb reduplication are indeed constructions in the terminological sense of Construction Grammar (Hoffmann & Trousdale 2013), in that some aspects of their form, their semantics, or both are conventionalised and unpredictable.

Constructions with verbal reduplication have not received much attention in the literature on Circassian, although they are mentioned in grammars, see e.g. Rogava & Kerasheva (1966: 292–296) on West Circassian. The most comprehensive classification and description belongs again to Bersirov (1969; 2001: Ch. 3), who singles out two main subtypes of verbal reduplication, the one involving verbal roots or stems and yielding a complex stem (akin to the root-serialisation VCPs discussed in section 3), and the other involving full-fledged verbal forms (in some ways similar to the constructions with auxiliaries discussed in section 4). Each of these broader types can be further subclassified according to a number of formal parameters.[6] Below I shall follow Bersirov's classification. The main sources of information for this section, besides Bersirov (2001), are contributions by the participants of the Circassian fieldwork project, most importantly Loseva (2013a,b) and Somin (2012, 2016) on Besleney Kabardian.

5.1. Reduplicative compounds

Reduplicated VCPs of this type follow one of the following structural patterns. The first one is trisyllabic V-X-V, where V is the verbal root and X is an interfix-like element without a clear

[6] Note that Bersirov (2001: 201–207) discusses further instances of reduplicated verbs which I am reluctant to consider VCPs, e.g. synchronically unmotivated fully reduplicated verbal stems and instances of partial reduplication.

meaning (Bersirov 2001: 207–208), e.g. Kabardian ***ḳʷe-re-ḳʷe*** ‘mince’ < *ḳʷe* ‘go’; if the vowel of the root is /ə/, it can change to /e/ in the copy, e.g. West Circassian ***ʁə-ne-ʁe*** ‘whimper’ < *ʁə* ‘cry’. According to Bersirov, this type is better attested in Kabardian than in West Circassian, but still the number of such formations is limited and many of them do not have a clear relation to any synchronically existing verb. The second pattern is quadrisyllabic XV-YV, where X and Y are either existing morphemes, such as incorporated body-part roots (e.g. West Circassian *ʔe-**be**~λe-**be*** hand-**touch**~foot-**touch** ‘rummage about’, Bersirov 2001: 209), numerals (*š’e-**we**~pλa-**we*** three_times-**hit**~four_times-**hit** ‘stagger, sway’, interpretation proposed by Irina Bagirokova, p.c.), or may be partly or wholly opaque (e.g. West Circassian *ha-**pλe**~qʷe-**pλe*** ?-**look**~LOC-**look** ‘look around’, Bersirov 2001: 210[7]). Some of the reduplicated compounds should rather be treated as involving disyllabic bases with modification (e.g. West Circassian *haqʷə~ẑʷeqʷə* ‘chatter’ < *haqʷə* ‘bark’, Bersirov 2001: 209). Interestingly, this type has also assimilated a few compounds that do not involve reduplication in the strict sense of the word, cf. West Circassian *pčʼe.te~λe.te* ‘jump repeatedly’(Bersirov 2001: 211), where the element *-te* is a semi-productive pluractional suffix and *pčʼe-* and *λe-* are roots meaning ‘jump, spring’.

5.1.1. Semantic relations

Reduplicative compounds of the V-X-V type express events consisting of numerous similar subevents, i.e. belong to the multiplicative Aktionsart (Xrakovskij 1997: 27–37), usually with an additional component of lower (98a) or higher (98b) intensity.

West Circassian (Bersirov 2001: 207)

(98) a. *sabəjə-r* *me-**ʁə**-na-**ʁe***
child-ABS DYN-**cry**-INTFX-**cry**
‘The child is whimpering.’

b. *qambweljet* *ə-gʷ* *q-j-e-**ẑe**-re-**ẑə**-čʼə*
Qambolet 3SG.PR-heart CSL-LOC-DYN-**fry**-INTFX-**fry**-exit
‘Qambolet is angry (lit. his heart is burning out’).’

Reduplicative compounds of the XV-YV type can also express multiplicative events (99a), but more often denote events involving motion in opposite or diverse directions (99b). Compounds with a distributive meaning are also attested , cf. Besleney Kabardian *me-ʔe-**ǯʼe**~λa-**ǯʼe*** DYN-hand-**call**~foot-**call** ‘s/he is calling everybody’ (Loseva 2013b: 235).

West Circassian

(99) a. ***šʼe-we~pλa-we**-xe-ze* *de-čʼə-žʼə-ʁe-x*
three_times-hit~four_times-hit-PL-SIM LOC-exit-RE-PST-PL
‘They left sawying.’ (Bersirov 2001: 212–213)

b. *pezade* *jə-kabjənjet* *jə-t-ew* *me-**ha.če~z-je-če***
Pazad POSS-office LOC-stand-ADV DYN-**run~RFL.IO-DAT-run**
‘Pazad is running to and fro in his office.’ (Bersirov 2001: 210)

If one takes into account the relation of these compounds not just to the verbal roots, but to their disyllabic constituents as well, two general patterns emerge. In the first pattern, either the first or the second component (but never both!) is an independently existing verbal stem,

[7] An alternative interpretation of this verb, probably supported by similar nominal formations with clearly derogatory semantics (cf. ***he**-gʷəṣʷe~**qʷe**-gʷəṣʷe* dog-rejoice~pig-rejoice ‘malicious joy’), is dog-look~pig-look (Irina Bagirokova, p.c.).

e.g. West Circassian ***ḳʷe.ŝe***~*λe.ŝe* ‘walk about slowly’ < *ḳʷe.ŝe* ‘sneak up to’ itself formed from the root *ḳʷe* ‘go’ with an opaque element *-ŝe* (Bersirov 2001: 209) or *ha.če*~***z.je.če*** ‘run to and fro’ < *z-je-če* RFL.IO-DAT-run ‘run around’ (Bersirov 2001: 210). The second pattern involves compounds where only roots exist as independent verbs, but the XV and YV strings do not, e.g. *ʔe-**tχʷe***~*λe-**tχʷe*** hand-**grasp**~leg-**grasp** ‘fuss’ from *tχʷe* ‘grasp’ (Bersirov 2001: 212).

5.1.2. Morphosyntactic integration

Similarly to directional verb-root serialisation discussed in section 3, reduplicative compounds have all phonological and morphosyntactic properties of single words and simple clause predicates. As noted by Rogava & Kerasheva (1966: 293), reduplicative compounds “are united by a single word stress, although … there is a short pause between their components, marked in writing by a hyphen”. Likewise, compounds form a single domain for the /e/~/a/ alternation, cf. (98a) and (99a). Morphologically, they are inflected in the same way as simplex verbs, taking all appropriate prefixal or suffixal markers, including personal (100)–(101), dynamic (98), (99b) and locative (100) prefixes and suffixes of tense (100) or converbs (99a). Likewise, the compounds are negated as a whole by suffixal (101a) and prefixal (101b) markers and can serve as input to causativisation (101b).

West Circassian (WCCorp)

(100) *se-rjə mə xeʁegʷə-m be.re **sə-š’ə-**ʔe-tχʷe~λe-tχʷa-**ʁ***
1SG-ADD DEM land-OBL long_time **1SG.ABS-LOC**-hand-grasp~foot-grasp-**PST**
‘While in this country, I, too, made fuss for a long time.’

(101) a. *hač’e s-jə-ʔe paje sə-ʔe-če~λa-če-r-**ep***
guest 1SG.ABS-POSS-be for 1SG.ABS-hand-run~foot-run-DYN-**NEG**
‘I don’t run to and fro just because I am having a guest.’

b. *çəfə-r tə-**mə-ʁe**-ʔe-če~λe-če-nə-m fe.ŝ*
human-ABS 1PL.ERG-**NEG-CAUS**-hand-run~foot-run-MOD-OBL for
‘in order for us to not make the people run to and fro’

5.1.3. Argument sharing

In terms of argument structure, all reduplicative compounds are monovalent intransitive verbs taking an absolutive subject. Most, if not all, components of such VCPs are likewise monovalent intransitives, hence they share their only argument in a trivial fashion (if it is at all possible to speak about argument sharing in those cases when only one of the components exists as an independent predicate). The only exception to this is the West Circassian verb *je-haʁʷə-ŝʷəʁʷə* ‘envy’, which inherits the indirect object introduced by the dative applicative preverb from its second component, the bivalent intransitive *je-ŝʷəʁʷə* ‘envy’ (Bersirov 2001: 210); in this case the components share both arguments (102).

West Circassian (Bersirov 2001: 210)

(102) *a bžedəʁʷə-pš’-xe-r bweleteqʷe-me ja-neqʷeqʷə-x-ew*
DEM Bzhedugh-prince-PL-ABS Boletoko-OBL.PL 3PL.IO+DAT-compete-PL-ADV
***ja**-haʁʷə~ŝʷəʁʷ-ew š’ə-tə-ʁe-x*
3PL.IO+DAT-envy~envy-ADV LOC-stand-PST-PL
‘Those Bzhedugh princes were rivals of the Boletoko clan and envied them.’

5.2. Full-verb reduplication

Constructions with reduplication discussed in this subsection involve full verbal forms that contain inflectional affixes and can in principle stand alone (Bersirov 2001: 214–218).

Importantly, none of these constructions contain two identical verbal forms; rather, we are dealing with two forms sharing the root, most or all derivational and some inflectional affixes but differing in some inflectional morphology. Hence, as said above, the very term "reduplication" can be applied to these constructions with some caveats (see, however, Mattiola & Masini 2022 for a similar understanding). Another important aspect of these constructions is that many of them are unable to head independent clauses and function as modifiers or complements of other predicates (for an interesting parallel, see Puttaswamy 2018: 95–97 on similar constructions in Malto < Dravidian). In contrast to lexically highly restricted reduplicative compounds described in the preceding section, the lexical slots in most of the constructions with full-verb reduplication are open and can in principle be occupied by any semantically appropriate predicate (Somin 2012).

The subtype closest to full reduplication are constructions of the pattern V-V.NFIN, where the first instance of the verb is a bare-stem form and the second has some non-finite suffix, usually the additive (103). An alternative analysis, postulating that the additive marker is a phrasal clitic attaching to the reduplicated compound as a whole, is also possible.

West Circassian

(103) ***sə-xe-pəǯ'~sə-xe-pəǯ'-jə*** *sə-q-je-xə-ž'ə-ʁ*
1SG.ABS-LOC-poke~1SG.ABS-LOC-poke-ADD 1SG.ABS-CSL-DAT-descend-RE-PST
'I poked it several times and got down.' (WCCorp)

The verbal forms in other subtypes may differ only in the non-finite suffixes occurring on the two components of the construction (104), or additionally in further prefixal and suffixal markers, such as the refactive and cislocative (105) or negation (106).

Besleney Kabardian

(104) *a-r* *q̇a-fe-**me*** *q̇a-f-**əw-re*** *q̇e.fa.ḳʷe* *χʷə-ne*
DEM-ABS CSL-dance-**COND** CSL-dance-**ADV-CVB** dancer become-FUT
'He will dance for some time and will become a dancer.' (Somin 2016: 213)

(105) ***q̇ə**-də.r-je-ḳʷe-ç'-**me*** *də.r-je-ḳʷe-ç'ə-**ž'-əw-re***
CSL-LOC-DAT-go-exit-**COND** LOC-DAT-go-exit-**RE-ADV-CVB**
'when he thus walked to and fro around (the store) for some time' (oag120718presents2:5)

West Circassian

(106) *tə-çe-s~tə-çe-**mə**-sə-m-jə* *qə-t-pə-mə-λ-ew*
1PL.ABS-LOC-sit~1PL.ABS-LOC-**NEG**-sit-COND-ADD CSL-1PL.IO-LOC-NEG-lie-ADV
'paying no attention to whether we are sitting there or not' (WCCorp)

5.2.1. Semantic relations

The Besleney Kabardian construction V-COND V-ADV-CVB illustrated in (104) and described by Somin (2012: 219–225; 2016: 211–217) expresses that the situation lasted for a considerable time (107).

Besleney Kabardian

(107) ***q̇ə-ž'-a-ʔe-me*** ***q̇ə-ž'-a-ʔ-əw-re*** *jə-ç'ewəxə-m*
CSL-PVB-3PL.ERG-say-COND **CSL-PVB-3PL.ERG-say-ADV-CVB** POSS-end-OBL
mašjəne *zeç'e-r-jə* *zerə-xʷ.je-r* *q̇ə-ž'-a-ʔ-a*
car all-ABS-ADD FCT-want-ABS CSL-PVB-3PL.ERG-say-PST

‘they talked for a long time and finally they said that they all wanted a car’ (kbs120721presents:3)

As was seen in (105), basically the same construction can have an additional meaning of motion in different or opposite directions when V1 contains the cislocative prefix *q̇e-* and V2 the refactive suffix *-ž’ə*. The same markers can occur in reduplicative constructions without non-finite suffixes on V1, at least in West Circassian; the cislocative prefix can occur on either of the verbs, but not on both (Bersirov 2001: 215), cf. a minimal pair from the same text in (108). Such constructions express bidirectional or repeated events, not necessarily with long duration.

West Circassian (Bersirov 2001: 216)

(108) a. *z-jə-pλə-h~zə-**q**-jə-pλə-ha-**ž’**-jə*
RFL.ABS-3SG.ERG-look-carry~RFL.ABS-**CSL**-3SG.ERG-look-carry-**RE**-ADD
psərəč’ə-m-č’e *ǯ’a-ʁe*
opposite_bank-OBL-INS call-PST
‘She looked around herself and shouted to the opposite bank of the river.’

b. *zə-**q**-jə-pλə-h~z-jə-pλə-ha-**ž’**-jə*
RFL.ABS-**CSL**-3SG.ERG-look-carry~RFL.ABS-3SG.ERG-look-carry-**RE**-ADD
zere-fe-λeč’-ew *ǯ’a-ʁe*
MNR-BEN-be_able-ADV call-PST
‘She looked around herself and shouted with all her forces.’

Another construction described for Besleney Kabardian by Somin (2012: 225–229; 2016: 217–221) usually involves the bare stem form of V1 and the additive suffix *-rjə* on V2 and expresses a situation of short duration (109), cf. also its West Circassian counterpart in (103).

Besleney Kabardian

(109) ***je-ǯ’e~je-ǯ’e-rjə*** *xe-žej-a*
DAT-read~DAT-read-ADD LOC-sleep-PST
‘He read for a short while and fell asleep.’ (Somin 2012: 226)

The construction where V2 contains the negative prefix *mə-* expresses uncertainty or irrelevance as to the occurrence or non-occurrence of the event (Bersirov 2001: 217–218), (106), (110).

Standard Kabardian (Bersirov 2001: 217)

(110) *ŝeǯ’aʁʷe* ***χʷ-a*** ***mə-χʷ-a*** *ẑə-s-ʔ-ew*
noon **become-PST** **NEG-become-PST** PVB-1SG.ERG-say-ADV
‘While I was thinking (lit. saying) whether it was already noon or not...’

Finally, bordering upon reduplication, there is a biverbal construction whose components are related to each other primarily through their semantics, either as antonyms (111) or as synonyms (112). In both cases it is common for the stems of both verbs, which themselves may be complex, to share some elements (either roots or affixes), although cases with totally unrelated verbs are also attested (113).

West Circassian

(111) *de-**wa**-j~je-**we**-x-ew* *werə-r* *ŝha-rə-s*
LOC-**hit**-ascend~DAT-**hit**-descend-ADV wave-ABS LOC-TRANS-sit
'a wave sits over (the crest of the sea) rising up and going down' (Bersirov 2001: 218)

(112) *ǯ'exaŝʷe-r* *qə-**r**-jə-ḳʷə-**ha-ç̌'**~qə-**r**-jə-čə-**ha-ç̌'**-jə*
floor-ABS CSL-**DAT**-3SG.ERG-go-**carry-exit**~CSL-**DAT**-3SG.ERG-run-**carry-exit**-ADD
'walking nervously (lit. covering the floor by walking and running)' (WCCorp)

(113) *qə-zere-**p-fe-neşʷə**~qə-zere-**p-ç̌'e-χʷepsə**-re-m-jə <...>*
CSL-FCT-**2SG.IO-BEN-like**~CSL-FCT-**2SG.IO-LOC-dream**-DYN-OBL-ADD
we-rjə *w-je-mə-gʷəcefa-ʁ-ew* *š'ə.t-ep-š'tə-n*
2SG-ADD 2SG.ABS-DAT-NEG-suspect-PST-ADV stand-NEG-AUX-MOD
'You must have noticed yourself that he likes you and dreams about you.' (WCCorp)

Bersirov (2001: 218) only very briefly mentions the antonymous biverbal constructions. This type of complex predicate in Circassian deserves a more detailed study.[8]

5.2.2. Morphosyntactic integration

The constructions with full verb reduplication appear to fluctuate between two and one phonological words, which is evidenced by the variation in the application of the /e/~/a/ alternation to V1, cf. (114a) with alternation and (114b) without it in the same type of construction with the V1 in the bare stem form.

West Circassian (WCCorp)

(114) a. *ze-x**a**-s-ŝ**e**~ze-xe-sə-mə-ŝ-ew*
REC.IO-LOC-1SG.ERG-know~REC.IO-LOC-1SG.ERG-NEG-know-ADV
'whether I feel it or not'

b. *wə-q-jə-ʁe-f**e**b**e**~wə-q-jə-mə-ʁe-fab-ew*
2SG.ABS-CSL-3SG.ERG-CAUS-warm~2SG.ABS-CSL-3SG.ERG-NEG-CAUS-warm
'whether it makes you warm or not'

Morphosyntactically, all constructions show a considerable degree of integration, especially those where V1 lacks markers of non-finiteness. For Besleney Kabardian this has been studied by Loseva (2013a; 2013b: 239–243), who reports that in such constructions the absolutive personal prefix can occur once on V1 (115a) if the base is bivalent, but must be repeated on both verbs with monovalent bases (115b); the ergative, applicative and dynamic prefixes must occur on both verbs (115c). In constructions with non-finiteness markers on V1 or with prefixal negation on V2 the absolutive prefix is also mandatory on both components (115d).

Besleney Kabardian

(115) a. ***wə**-q̇ə-z-ew-h~s-ew-hə-ž'*
2SG.ABS-CSL-1SG.ERG-DYN-carry~1SG.ERG-DYN-carry-RE
'I carry you to and fro' (Loseva 2013b: 240)

[8] It is also worth noting that in the West Circassian corpus such biverbal constructions are mostly attested in the literary works by Iskhak Meshbeshe, famous for his archaic ornate style and complex morphosyntax.

b. ***s**-ew-ḳʷe~*(**sə**-)q̇-ew-ḳʷe-ž'*
1SG.ABS-DYN-go~*(**1SG.ABS**-)CSL-DYN-go-RE
'I go and come.' (Loseva 2013a: 3)

c. *wəne-m q̇ə-**š'ə**-fe-me q̇ə-*(**š'ə**-)fe-r-əw*
house-OBL CSL-**LOC**-dance-COND CSL-*(**LOC**-)dance-CVB-ADV
'regularly dancing at home' (Somin 2012: 222)

d. ***sə**-txe~*(**sə**-)mə-txe-m-jə*
1SG.ABS-write.ANTIP~*(**1SG.ABS**-)NEG-write.ANTIP-COND-ADD
dva q̇e-z-ležʼə-ne
poor_mark CSL-1SG.ERG-earn-FUT
'Whether I write or not, I'll get a poor mark.' (Loseva 2013b: 239)

Besides that, all types of construction studied by Loseva can (but again, need not) attach prefixal subordinators[9] only to V1 (116a) and suffixal subordinators only to V2 (116b); the similative suffix can also have the whole construction in its scope (116a).

Besleney Kabardian
(116) a. *b-ew-ṣe ʔʷexʷ **zer**-j-e-ṣe~jə-mə-ṣa-**fe**-r*
2SG.ERG-DYN-know work **FCT**-3SG.ERG-DYN-do~3SG.ERG-NEG-do-**SML**-ABS
'You know that s/he looks as though s/he is either working or not working.' (Loseva 2013: 241)

b. *də-zerə-šx~zerə-šxə-žʼə-**nə-r** je-d-ʁe-žʼ-a*
1PL.ABS-REC.ERG-eat~REC.ERG-eat-RE-**MOD-ABS** DAT-1PL.ERG-CAUS-start-PST
'We started to rebuke each other.' (Loseva 2013:240)

The West Circassian example (113) shows that the subordinating prefix *zere-* can also occur on both verbs.

The order of the verbs in reduplicative constructions is strictly fixed, and although both Somin (2012: 221–222) and Loseva (2013a: 3) report that some material can intervene between their components, this appears to be marginal.

As for negation, the construction expressing epistemic uncertainty stands apart in requiring V2 to bear prefixal negation. Those constructions that can occur as independent predicates can take suffixal negation occurring once on V2 (117a), while those that can only be non-finite and hence are negated by the prefix *mə-* must attach it to both components (117b).

Besleney Kabardian
(117) a. *də-ze-xʷe-ḳʷe~ze-xe-ḳʷe-žʼ-**te-q̇əm***
1PL.ABS-REC.IO-LOC-go~REC.IO-LOC-go-RE-**RS-NEG**
'we did not repeatedly come together and go apart' (Loseva 2013b: 233)

b. *a-bə ʔʷexʷ jə-**mə**-ṣe-me jə-**mə**-ṣ-əw-re*
DEM-OBL work 3SG.ERG-**NEG**-do-COND 3SG.ERG-**NEG**-do-ADV-CVB
thaməṣḳe χʷ-a
poor become-PST
'Not working for a long time, s/he became poor.' (Somin 2012: 222)

[9] Note the contrast between the factive/manner subordinator *zerə-* in (a) and the homonymous reciprocal marker in (b).

Those tense markers that are endings, e.g. the Kabardian retrospective shift marker *-te*, may attach to V2 (117a), while those that are suffixes must occur on each verb (118). Independent tense is impossible.

West Circassian

(118) *bəsəmə-m* *haç'e-r* *zə-xe-λə-***ʁ***-jə* *zə-xe-mə-λə-***ʁ***-jə*
host-OBL guest-ABS REL.IO-LOC-lie-**PST**-ADD REL.IO-LOC-NEG-lie-**PST**-ADD
wəne-m *qə-r-jə-teq^{w}ə-ʁ*
house-OBL CSL-LOC-3SG.ERG-throw-PST
'The host threw away everything that the guest had touched (lit. that he had lied in or not).' (WCCorp)

5.2.3. Argument sharing

All constructions with full-verb reduplication obligatorily share all their arguments. Interestingly, this can be manifested both by the absolutive prefixes attaching to the whole construction to the left of V1 and by the obligatory occurrence of all other argument-related morphology (ergative and indirect object personal prefixes, reciprocal and reflexive markers, as well as applicatives and causative) on both V1 and V2.

6. Grammaticalisation and lexicalisation

6.1. Grammaticalisation pathways

While Circassian VCPs illustrate quite a considerable number of grammaticalisation paths, only a small subset of those correspond to the list provided in the Questionnaire (Bisang et al. 2023: 8). Those are "become > potential", "do > causative" and "stand > continuous". Two of the source concepts in the list developed according to the pathways other than the ones provided in the Questionnaire, viz. "become > epistemic modality", "become > inceptive", "become > raritive" and "stand > obligation/necessity > epistemic modality", "stand > habitual" and "stand > proximative"; of these only "stand > obligation/necessity > epistemic modality" and "stand > habitual" are listed in Kuteva et al. (2019). Further three pathways attested in Circassian are listed in Kuteva et al. (2019): "descend > motion downwards" (with reference to Arkadiev & Maisak 2018: 125–126 on Circassian), "enter > motion into" (without reference to this source), and "need/want > necessity". The following source-target pairings attested in Circassian are mentioned neither in the Questionnaire nor in Kuteva et al. (2019): "be joined > frequentative", "be like > similative", "become > epistemic modality", "become > inceptive", "become > raritive", "carry > circular motion", "depart > inceptive", "exit/leave > motion out of", hit > similative", and "stand > proximative".

As has already been mentioned (also in Arkadiev & Maisak 2018: 128), a striking feature of the system of auxiliary-verb constructions in Circassian is the variety of target functions developed from a single lexical source in distinct constructions; the lexical sources particularly prone to such polygrammaticalisation are "become" (> inceptive, raritive/habitual, deontic possibility, deontic necessity, epistemic modality) and "stand" (> durative/habitual, deontic necessity, epistemic modality). As noted in Arkadiev & Maisak (2018: 131–132), some forms of the Circassian verb *š'ət* 'stand' have developed into affixes, such as the West Circassian future (*-š't*), imperfective past (*-š'təʁe*) and probabilitive (*-š'tən*).

As has also been discussed earlier, different constructions show different degrees of grammaticalisation, also in semantic terms. For instance, directional root compounds with *je-ž'e* 'depart; start' are only formed from a handful of motion verbs, hence the meaning of V2 within the compound can — perhaps somewhat paradoxically — be considered better preserved than in its independent use, where the verb has developed a more general meaning of inception.

By contrast, root compounds with LOC-*he* ‘enter’ and LOC-*ç’ə* ‘exit’ combine with a considerable range of lexical verbs and have developed more abstract meanings such as low intensity.

All grammatical verbs involved in VCPs can in principle be used as lexical predicates, although *χʷə* ‘become, happen’ is considerably desemanticised and the use of *zepət* ‘be joined’ in its lexical meaning is at best marginal. The elements *de-...-je* ‘ascend’ and DAT-...-*λe* ‘approach’, which belong to the same formal paradigm as directional verbs participating in root serialisation, do not occur independently and are considered affixes.

6.2. Lexicalisation

Lexicalisation is widely attested with root-compounds, but not with auxiliary-verb constructions. Cases of lexicalisation of directional compounds include e.g. *λ-he* lie-carry ‘put’, *ze-ʒe-ç’ə* REC.IO-throw-exit ‘translate’, *jə-χʷə-ha* LOC-become-enter ‘decide’. As to the reduplicative root-compounds, all of them can be considered lexicalised, since none of the attested patterns is productive and in many cases neither the form nor the meaning of the compound is predictable, e.g. *λe-we~ŝha-we* foot-hit~head-hit ‘stagger’, *χʷə-pe~šə.pe* graze-?~gather ‘graze’ (Bersirov 2001: 212) etc.

7. Comparative and areal outlook

The counterparts of the Circassian directional root-compounds are found in Abaza and Abkhaz (Klychev 1972), see (119). In the descriptive tradition of these languages the second components of such compounds are considered suffixes or “suffixoids”, which is supported by the fact that of the three such elements that are able to attach to roots, one does not occur independently (Abaza *-ʕa* ~Abkhaz *-aa* ‘motion outwards’).

Abaza

(119) a. *ŝ-sə-d-**thawsəχ’a-l**-χ-əj-ṭ*
2PL.ABS-1SG.IO-LOC-complain-enter-RE-PRS-DCL
‘You come to me with complaints.’ (Klychev 1972: 96)

b. *d-a-ḳʷə-z-**ga-ša**-ṭ*
3SG.H.ABS-3SG.N.IO-LOC-1SG.ERG-carry-go_around-DCL
‘I carried it around.’ (Klychev 1995: 138)

By contrast, the rich system of auxiliary-verb constructions found in Circassian has virtually no counterpart in Abkhaz-Abaza. The only auxiliary-verb construction robustly attested in Abaza is the one based on the verb *taqə-* ‘want, need’ and expressing necessity or obligation, cf. (120a,b). This is an obvious parallel to the situation in Circassian, also in that in its modal function V2 does not inflect for the person of the experiencer (here expressed as an indirect object).

Abaza

(120) a. *j-ŝ-á-s-hʷə-rnəs* ***j-s-taqə́-ṗ***
3SG.N.ABS-2PL.IO-DAT-1SG.ERG-say-PURP **3SG.N.ABS-1SG.IO-want-NPST.DCL**
‘I want to tell you.’ (afb170711profession:2[10])

b. *a-gawrawd* *h-χč’a-ra* ***a-taqə́-n***
DEF-garden 1PL.ERG-guard-NML **3SG.N.IO-need-RS.DCL**

[10] Examples thus attributed come from the small collection of Abaza oral texts recorded and analysed by our fieldwork team.

‘We had to guard the vegetable garden.’ (azd170711childhood:3)

From an areal perspective, the most obvious parallel to Circassian VCPs is constituted by the rich system of verb-verb complexes in Turkic languages (for general overviews, see Graschenkov 2015; Johanson 2021: Ch. 29; Shluinsky 2021), including Karachay-Balkar spoken close to the Circassian area (see e.g. Baskakov ed. 1976: 202–212; Graschenkov 2011). Such constructions consist of a non-finite form of the lexical verb and an auxiliary coming from such lexical sources as verbs of motion, posture, phasal verbs and verbs with such meanings as ‘give’, ‘take’, ‘put’, ‘throw’ etc. (Johanson 2021: 598). The semantics of these constructions ranges from more or less compositional, e.g. directed motion (121a) to highly grammaticalised, such as aspect or modality (121b). Biverbal constructions show a high degree of syntagmatic cohesion and in some languages are prone to fusion, whereby former auxiliaries become suffixes (Johanson 2021: 599–600).

Karachay-Balkar (Turkic; transcription and glossing mine)

(121) a. *uč-**up*** ***čiʁ-arʁa***
fly-**CVB** **exit-INF**
‘to fly out of smth.’ (Graschenkov 2011: 69)

b. *ol* *aur-**up*** ***bol-ʁan-di***
3SG be_ill-**CVB** **be(come)-PST-3SG**
‘he was ill’ (past durative) (Baskakov ed. 1976: 203)

A particularly interesting case is presented by the Karachay-Balkar auxiliary *tur* ‘stand’, which combines with various non-finite forms of V1 yielding different meanings (Baskakov ed. 1976: 206–207): progressive/habitual with the converb in *-a*/*-e* (122a), progressive or resultative with the converb in *-Vp* (on how the semantics of this construction relates to the actional properties of verbs, see Shluinsky 2013: 6–8), and proximative with the infinitive (122c). This range of uses resembles that of the Circassian constructions with the auxiliaries derived from the root *-t-* ‘stand’.

Karachay-Balkar (Turkic; transcription and glossing mine)

(122) a. *žaz-**a*** ***tur-a-di***
write-**CVB** **stand-IPF-3SG**
‘s/he is writing / writes regularly’ (Baskakov ed. 1976: 206)

b. *üj* *zan-**ip*** ***tur-a-di***
house burn-**CVB** **stand-IPF-3SG**
‘The house has burnt down.’ (Shluinsky 2021: 408)

c. *baʁana* *awa-**rʁa*** ***tur-a-di***
pole fall-**INF** **stand-IPF-3SG**
‘The pole is about to fall.’ (Baskakov ed. 1976: 206)

Since auxiliary-verb constructions similar to those just shown for Karachay-Balkar are found across all Turkic languages, it might be tempting to think that Karachay-Balkar or other Turkic languages that had been present in the area for more than a millennium could have influenced the development of at least some of the auxiliary-verb constructions in Circassian. Nenetheless, conclusive evidence for such contact scenarios are so far lacking, and e.g.

Johanson (2006) does not mention them in his survey of the contacts of Turkic languages in the Caucasus.

8. Conclusions

In this article I have presented a description of the verbal complex predicates in Circassian languages, focusing on two distinct varieties, (Standard) West Circassian and Besleney Kabardian, which, despite some notable differences, show a remarkable degree of similarity, partly due to strong contact influence of the former on the latter. Below I summarise my main fundings.

The types of VCPs found in Circassian languages include, from the semantico-syntactic perspective, both symmetrical and asymmetrical VCPs, and, from a morphological perspective, both root-compounds and combinations of full-fledged verbal forms. Symmetrical VCPs in Circassian mostly if not exclusively feature constructions with reduplication, a property only rarely discussed in the context of complex predicates. With respect to the morphosyntactic parameter, Circassian languages behave somewhat contrary to the expectations that linguists have about polysynthetic languages with highly complex verbal morphology, in that they possess only a rather restricted and unproductive system of verbal compounding, simultaneously featuring a plethora of much looser constructions with auxiliaries showing varying degrees of grammaticalisation and clausal integration. At the same time, there is clear evidence that these analytic structures have been feeding affixal verbal morphology through decategorialisation and fusion.

In asymmetrical VCPs the order of components is mostly strict, with the grammatical verb following the lexical one. Some of the looser auxiliary constructions allow this order to be reversed, but this seems to be a marginal option. In most root compounds, the grammatical verb is actually bipartite, containing a (locative) applicative preverb, and this preverb occupies the slot before the root of the lexical verb, in accordance with the requirements of the Circassian verbal template.

Root compounds of all types, symmetrical and asymmetrical alike, show complete phonological and morphosyntactic integration, behaving in all respects like simplex verbal lexemes. By contrast, VCPs involving full verbal forms reveal a considerable degree of variation in terms of morphosyntactic integration and monoclausality. An immediately obvious parameter is the form of V1, i.e. whether it appears as the so-called bare stem or attaches any markers of non-finiteness (adverbial, modal, conditional) or their combinations. While some of the VCPs with the bare stem form of V1 show quite a considerable degree of integration bordering on univerbation whereby V2 becomes an affix, some of the other VCPs even allow their components to bear independent specification for tense and negation. The latter in particular shows considerable freedom, with most auxiliary constructions allowing narrow-scope negation on V1. Among the constructions with full-verb reduplication, one juxtaposes a negated and a non-negated versions of the same verb, and at least one of the others shows obligatory repetition of negation on both verbs with scope over the whole VCP.

In general, with respect to many of the auxiliary constructions it can be observed that it is their semantics and scopal properties that determine the availability and position of negation and tense markers. While auxiliaries expressing aspect and situational modality have narrow scope with respect to propositional operators and hence can attach tense and negation markers themselves, the auxiliaries expressing epistemic modality scope over whole propositions and consequently tense and negation marking occurs only on the lexical verb.

Given the above, it is not always easy to determine objectively the status of constructions as mono- or biclausal. While the clearest cases can be shown to be mono- resp. biclausal by all relevant diagnostics (an example of an unequivocally biclausal construction is

the West Circassian periphrastic causative with ‘do’), the remaining constructions actually form a cline, and any boundary drawn within this cline would be arbitrary.

In terms of juncture and argument sharing the Circassian VCPs fall into three types. To the first type, clearly showing nuclear juncture with consistent argument sharing, belong root-compounds and constructions with reduplicated verbs. The second type is constituted by the majority of constructions with auxiliaries, which can be argued to take the lexical verb (phrase) as its only argument; evidence for this comes from these auxiliaries’ consistent inability to take the absolutive cross-referencing prefix. The third type is constituted by the two constructions with auxiliaries inflected for person, the similative construction with Besleney Kabardian ‘stand on’ / West Circassian ‘hit’ and the West Circassian causative construction with ‘do’. In these constructions, the auxiliaries not only take their own argument(s), but the latter can actually correspond to a variety of participants of the embedded predication, even those that are not formally arguments of V1.

In terms of productivity, there is a sharp divide between root-compounds, on the one hand, which are non-productive and tend towards lexicalisation, and constructions with auxiliaries and full-verb reduplication, which are virtually unrestricted as regards their lexical input.

Circassian languages show a number of additional source and target concepts of grammaticalisation, with respect to both the list in the Questionnaire and Kuteva et al. (2019). A notable feature of grammaticalisation in Circassian is polygrammaticalisation whereby the same verb participates in a considerable number of auxiliary constructions differing in their semantics and morphosyntactic properties.

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Abbreviations

1 — 1st person; 2 — 2nd person; 3 — 3rd person; ABS — absolutive; ADD — additive; ADV — adverbial; ANTIP — antipassive; AUX — auxiliary suffix; BEN — benefactive; CAUS — causative; COM — comitative; COMP — comparative; COND — conditional; CSL — cislocative; CVB — converb; DAT — dative applicative; DCL — declarative; DEF — definiteness; DEM — demonstrative; DYN — dynamic; ERG — ergative; FCT — factive subordinator; FUT — future; H — human; HBL — habilitive; IMP — imperative; INF — infinitive; INS — instrumental; INTFX — interfix; IO — indirect object; IPF — imperfective; ITRJ — interjection; LNK — linking affix; LOC — locative; M — masculine; MAL — malefactive; MNR — manner subordinator; MOD — modal; N — neuter; NEG — negation; NFIN — non-finite; NML — nominalisation; NPST — non-past; OBL — oblique case; PL — plural; POSS — possessive; PR — possessor; PRED — predicative; PRS — present; PST — past; PTCL — particle; PURP — purposive; PVB — preverb; RE — refactive; REC — reciprocal; REL — relativizer; RES — resultative; RFL — reflexive; RS — retrospective shift; RSN — reason subordinator; SG — singular; SIM — simultaneous; SML — similative; TMP — temporal subordinator; TRANS — translative.

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