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25 Applicative constructions in the Northwest Caucasian languages

Abstract: This chapter describes applicative constructions in the polysynthetic Northwest Caucasian languages, which are typologically unusual in several respects. First, these languages possess an extraordinarily rich system of applicatives whose semantic functions range from benefactive, comitative and malefactive to fairly specialized spatial meanings. Second, the Northwest Caucasian applicatives invariably introduce indirect objects, thus almost never affecting the ergative-absolutive alignment of core arguments and serving as important and often only means of integrating peripheral participants into clausal structure. We describe the morphology, syntax and semantics of applicatives, as well as a range of non-trivial phenomena such as the semantically impoverished and morphosyntactically special “dative” applicative and the uses of applicatives in agent demotion and clause combining.

1 Introduction

This chapter describes applicative constructions in the Northwest Caucasian (NWC) languages. NWC is interesting and instructive for the typology of applicative constructions for at least two reasons:

- these languages possess extraordinarily rich systems of applicative markers whose semantics ranges from the cross-linguistically common benefactive and comitative applicatives to applicatives with fairly specialized spatial meanings, and
- the NWC applicatives differ from canonical applicatives as discussed, for example, by Peterson (2007) in many respects, most notably in that the syntactic status of the AppP in NWC is indirect rather than direct object and that applicatives serve as important and often only means of integrating peripheral participants into clausal structure.

Applicatives in NWC languages are relatively well described. This survey is based mostly on our own fieldwork, but we also use data from various other sources, in particular, Smeets (1992), Paris (1987), Lomtadze (1976), O’Herin (2001), Letuchiy (2009), Fell

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(2012), Ponomareva (2013) and Chirikba (2020). For the sake of exposition, we illustrate the system primarily with examples from West Circassian, a language for which we have more detailed data and can use large corpora, but add examples from some other NWC languages to illustrate the parallel or distinct behavior. Whenever unmarked, examples come from corpora (Arkhangelskiy et al. 2018–2022; Bagirokova et al. 2020; Arkadiev et al. 2020; Panova et al. 2019), examples elicited or taken from other sources are marked as such.

The structure of this chapter is as follows. Section 2 provides the necessary background on NWC languages. In Section 3 we discuss morphological and syntactic aspects of applicative constructions in these languages. Section 4 is devoted to the semantic diversity of grammatical and locative applicatives, while Section 5 deals with dative applicatives, which show specific behavior. Section 6 focuses on the morpheme order in forms containing multiple applicatives. In Section 7 we touch upon non-applicative functions of applicatives, while in Section 8 we look at a phenomenon that is functionally similar to applicatives but is not related to the grammatical subsystem discussed here. The last section summarizes the main typological characteristics of NWC applicatives.

2 Background on Northwest Caucasian languages

2.1 General information

The NWC (or Abkhaz-Adyghean) family is one of the three autochthonous language families of the Caucasus (for a general background on NWC, see Hewitt 2005 and Arkadiev and Lander 2020). It comprises at least four living languages, namely Abkhaz (ISO 639–3: *abk*) and Abaza (*abq*), which constitute the Abkhaz-Abaza branch, and West Circassian (also known as *Adyghe*, *ady*) and Kabardian (sometimes called *East Circassian*, *kbd*), which constitute the Circassian branch. In addition, there is one extinct NWC language which has been thoroughly documented (though from few speakers) in the 20th century, namely *Ubykh* (*uby*), which is usually thought to be closer to Circassian languages than to Abkhaz-Abaza.

Originally, NWC languages were spoken in the West Caucasus: to the South of the Greater Caucasus Mountains in the territory of the Republic of Abkhazia and to the North of the mountains in the now territories of several regions belonging to the Russian Federation, namely Krasnodarskiy Kraj, Adyghe, Karachaevo-Cherkessia and Kabardino-Balkaria. In the 19th century, however, when these lands were occupied by the Russian Empire as a result of the Caucasian War, most speakers of NWC languages migrated into the Ottoman Empire, and the remaining speakers were resettled into a number of disconnected areas. As a result, currently there is also a large diaspora which uses NWC languages (but to different extents) in Turkey, Syria, Jordan, and Israel.

The sociolinguistic situation of the NWC languages is ambivalent. On the one hand, Abkhaz is the state language of Abkhazia, and West Circassian, Kabardian and Abaza are recognized as official languages with written standards and some presence in the media and education in the Russian republics of Adygea, Karachaevo-Cherkessia and Kabardino-Balkaria. On the other hand, both in Russia and in Abkhazia all NWC languages experience pressure from Russian, and their use is largely limited to rural areas and informal settings. Most if not all speakers of NWC languages in Russia and Abkhazia are bilingual in Russian, and for the younger generations Russian is becoming the dominant language. Bilingualism and/or the shift to a dominant language is also the norm in the diaspora, where the sociolinguistic situation varies from good and stable (e.g., among Circassians in Israel) to the complete language shift (e.g., in many communities in Turkey).

2.2 Basics of morphosyntax

NWC languages are generally characterized as polysynthetic, both prefixing and suffixing, ergative (morphologically but possibly also syntactically), predominantly head- (Abkhaz-Abaza) or double-marking (Circassian and Ubykh). Further, the languages are consistently left-branching, i.e. have possessors preceding the possessa, postpositions rather than prepositions and the basic Actor-Undergoer-Predicate word order. Example (1) illustrates some of these features: here we find two noun phrases marked with an “oblique” case expressing an ergative and an indirect object arguments, an absolutive noun phrase and a polysynthetic predicate whose morphology indexes (at least) two arguments.

(1) West Circassian

djeʒe-m djeʒe-m məše-r Ø-r-j-e-ʁe-wəʒʔə
 fool-OBL fool-OBL bear-ABS 3SG.IO-DAT-3SG.ERG-DYN-CAUS-kill
 ‘A fool makes a fool kill a bear.’

The core of the clause is constituted by the predicate, which includes indexing of up to four (in Abkhaz, Abaza and Ubykh) or probably even more (in Circassian languages) participants primarily expressed by prefixes; some 3rd person prefixes in some languages are null. All content words may serve as predicates and take predicate morphology, hence the distinction between nouns and verbs in this position is very weak, if exists at all; therefore, we prefer to use the term ‘predicate’ rather than ‘verb’. Much more important for the morphology is the distinction between stative and dynamic predicates, the former class including both noun-like words and some words expressing non-nominal concepts (e.g., certain posture predicates).

The make-up of the predicate is quite complex and includes several morphological zones, see Figure 1.

prefixes					root	suffixes			
argument structure zone				pre-stem elements	stem			endings	
absolutive	subordinators	applicatives and indirect objects	ergative	preradical negation	causative	root	temporal, aspectual, modal and evaluative operators	suffixal negation	illocutionary operators or subordinators
1	1	>1	1	1	1 or 2		>1	1	>1

Figure 1: The simplified structure of the NWC predicate (cf. Arkadiev and Lander 2020: 404).

Here we are concerned mainly with the argument structure zone, which occupies most of the prefixal part of the predicate, contains person/number indexing of all basic participants of the state-of-affairs and includes the applicative morphology (if any). The argument structure zone opens with the absolutive indexing prefix (which can be absent under conditions different for different languages) and ends with the ergative indexing (with transitive predicates). In-between we find directional prefixes ('hither' and 'thither'), whose position varies across languages, indirect objects and applicative complexes discussed in detail in subsequent sections, some subordination morphology (probably related to applicatives) and in Abaza and Abkhaz also some negation and aspectual prefixes. Cf. comparable forms (2) and (3), which demonstrate most kinds of prefixal morphology; square brackets indicate the boundaries of the argument structure zone.

(2) West Circassian

[z-ja-š^{wə}]-mə-t

RFL.ABS-3PL.IO+DAT-2PL.ERG-NEG-give[IMP]

'Do not give yourselves to them.'

(3) Abaza

[j-g'-ʃa-sə-rə]-m-t-χ-t

3SG.N.ABS-NEG.EMP-CSL-1SG.IO-3PL.ERG-NEG-give-RE[AOR]-DCL

'They didn't give it back to me.'

Cross-reference morphology indexes person-number and in Abkhaz-Abaza also gender. The same paradigms also include prefixes with the reflexive, reciprocal, and relative functions. It is commonly assumed that at least three series of indexing prefixes can be distinguished, namely absolutive, indirect object and ergative, although the latter two are hardly distinguishable in most contexts and/or person-number combinations. In addition, Ubykh distinguishes a separate series of possessive prefixes (also distinct mainly in the 3rd person), while West Circassian has a series of prefixes indexing post-positional objects.

Flagging morphology is limited. Abkhaz-Abaza only display adverbial and instrumental suffixes, while core noun phrases as well as adnominal possessors and objects

of postpositions are unmarked. By contrast, Circassian and Ubykh also have markers for core cases, i.e. absolutive (S/P) and oblique, the latter marking basically all non-absolutive arguments, including the ergative A, indirect objects, adnominal possessors and objects of postpositions, and in some marginal constructions even the absolutive argument (see Lander, Belyaev, and Bagirokova 2021). For example, in (1) above we observe a phrase referring to P and marked with the absolutive as well as two oblique-marked phrases, one referring to the ergative A and the other to the indirect object. Note, however, that in Ubykh the absolutive is unmarked in both singular and plural, while in Circassian core case markers are normally absent on personal pronouns, possessed nominals and are usually absent on non-specific nominals (cf. Arkadiev and Testeleits 2019).

2.3 A note on the transcription

Throughout this paper, examples from all NWC languages are given in the unified Caucasian transcription commonly employed in works on NWC and Kartvelian languages rather than in IPA (see Arkadiev and Lander 2020: 373–376). The most important divergences from IPA are as follows: ejective consonants are marked by a dot below or above the symbol; palatalization is marked by an apostrophe; *c, č, ś, ʒ, ʃ, ʒ* denote dento-alveolar affricates and fricatives; *š, ž, ĉ* denote the so-called hissing-hushing consonants usually identified as alveolo-palatal but whose exact phonetic interpretation is subject to variation and controversy. Glossing of examples is also unified or added if absent in the source.

3 Formal aspects of Northwest Caucasian applicatives

3.1 Morphology: Applicative complexes

NWC languages possess rich systems of applicative prefixes which typically specify the semantic roles of applied objects (see Section 4). Applicative markers usually appear together with indirect object prefixes indexing the participant they introduce within so-called **APPLICATIVE COMPLEXES**. The canonical applicative complex, then, consists of an indexing prefix and an applicative prefix, which immediately follows it. (Note that in Circassian languages and in Ubykh 3sg indirect prefixes are null, so it is quite typical to have an applicative without an overt indexing prefix.) Both the applicative prefixes and the cross-referencing prefixes can show (morpho)phonologically conditioned allo-morphy, such as consonant assimilation, vowel alternation or elision.

The following examples display simple applicative complexes taken in brackets:

- (4) West Circassian
qə-[d-de]-psewə-ʁ
 CSL-1PL.IO-COM-live-PST
 ‘S/he lived with us.’
- (5) Kabardian, Besleney dialect
qə-[s-x^we]-f-xə-ž’
 CSL-1SG.IO-BEN-2PL.ERG-carry-RE[IMP]
 ‘Bring it back to me.’
- (6) Ubykh (Fenwick 2011: 111)
š’əʁ^we š’ə-məz a-[š’-čə]-d^w-ewt^w-qə-jt
 1PL.POSS 1PL.PR-child 3SG.ABS-1PL.IO-MAL-die-FUT-PST-RS.SG
 ‘Our child would have died [and been taken] from us.’
- (7) Abkhaz (Hewitt 1979: 114)
a-žah^wa s-[a-la]-jə-sə-jt
 DEF-hammer 1SG.ABS-3SG.IO.N-INSTR-3SG.M.IO-hit[AOR]-DCL
 ‘I hit him with the/a hammer.’

There are several deviations from this canon. First, an applicative complex may contain more than one prefix specifying the role of the applied object. In such cases, the general rule is that a prefix has wider semantic scope with respect to the preceding part of the applicative complex. In the following example an applicative preverb introducing “a flat, broad or open surface or area” (Fenwick 2011: 112) is followed by a translative preverb, while their combination is introduced by a general locative applicative:

- (8) Ubykh (Fenwick 2011: 115)
ze-q’əšə-n [Ø-g’ə-ʁe-le]-χ^we-g’ə
 one-village-OBL 3SG.IO-LOC:area-TRANS-LOC-pass-CVB
 ‘As he was passing through a village. . .’

Where a single participant is introduced by several applicatives proper, as in (9a), we may still assume a layered structure (albeit such examples also allow other interpretations such as postulating a kind of coordination of applicatives). Reversing the order of applicatives in such examples does not change the meaning, cf. a similar Kabardian example with the opposite order of applicatives, (9b).

- (9) West Circassian (elicited) and Kabardian (Applebaum 2013: 52)
 a. WC *[[p-fə]-de]-s-šə-ʁ*
 2SG.IO-BEN-COM-1SG.ERG-do-PST
 ‘I did it with and for you.’

- b. K *sə-šə-[[b-də]-x^we]-ʒež-a-m*
 1SG.ABS-TEMP-2SG.IO-COM-BEN-work-PST-OBL
 ‘When I had worked with you, for you.’

The second deviation relates to the fact that in Circassian some cross-reference prefixes may “move to the left” and become separated from their applicatives. A widely attested situation is the separation of the 3rd person plural affix from its applicative by a directional preverb, as in (10b). However, under circumstances which still wait for research such indexing prefix can be separated from its applicative by another applicative (11). In some Circassian subdialects, the speakers also allow the separation of the reflexive/relative prefix (12b). Moreover, some varieties of West Circassian even display the rearrangement of indexing prefixes before the applicative (Kumakhova 1972: 72–76), but this phenomenon is still worthy of investigation.

- (10) West Circassian (Kumakhov and Vamling 2009: 110)

- a. *we š^wəzə-xe-m wə-q-[a-de]-čə-ʁ*
 2SG wife-PL-OBL 2SG.ABS-CSL-3PL.IO-COM-run-PST
 b. *we š^wəzə-xe-m w-[a]-qə-[de]-čə-ʁ*
 2SG wife-PL-OBL 2SG.ABS-3PL.IO-CSL-COM-run-PST
 Both: ‘You ran here together with women.’

- (11) West Circassian

- a-ʁe-wəc^wə-ʁe q^waž^ʔe-m meš^ʔət*
 3PL.ERG-CAUS-stand-PST village-OBL mosque
q-[a]-š^ʔə-[ʃ]-a-šə-ʁa-ʁ
 CSL-3PL.IO-LOC-BEN-3PL.ERG-make-PST-PST
 ‘They made a mosque for them in the village founded by them.’

- (12) Kabardian, Besleney dialect (elicited)

- a. *qə-[z-f]-je-s-a*
 CSL-RFL.IO-MAL-DAT-swim-PST
 b. *[zə]-qə-[f]-je-s-a*
 RFL.IO-CSL-MAL-DAT-swim-PST
 Both: ‘He swam here against his own will.’

The third deviation is found in Abaza and Abkhaz and concerns a number of applicative prefixes with spatial meanings that normally do not take person-number prefixes cross-referencing the AppP (see e.g. Avidzba 2017: 115–122), at least when the latter is singular non-human, cf. (13) with a “regular” and “bare” occurrence of the same applicative.

(13) Abaza (Klychev 1995: 111–112)

- a. *a-ʒə a-s j-[a-kʷ]-kʷkʷ-əj-t*
 DEF-water DEF-shirt 3SG.N.ABS-3SG.N.IO-LOC:top-drip-PRS-DCL
 ‘Water is dripping on the shirt.’
- b. *a-divan də-[kʷ]-naʃa-t*
 DEF-sofa 3SG.H.ABS-LOC:top-recline[AOR]-DCL
 ‘S/he reclined on the sofa.’

In fact, as argued by Lomtadze (1983) and Avidzba (2017: 115), even those applicatives that never co-occur with the third person singular non-human indirect object prefix *a-* (14a) can be preceded by other cross-referencing prefixes, such as the third person plural prefix *r-* (14b) or the relativization prefix *z-* (14c), on which see Section 3.2.

(14) Abaza (Klychev 1995: 57)

- a. *a-wasa-kʷa a-kʷar j-[bʒ'a]-r-kʷab-əw-n*
 DEF-sheep-PL DEF-canyon 3PL.ABS-LOC:middle-3PL.ERG-bathe-IPF-PST
 ‘They were bathing sheep in the canyon.’
- b. *awat ɕla-dəw-kʰ [r-bʒ'a]-jə-t*
 DEM.PL tree-big-INDF 3PL.IO-LOC:middle-come[AOR]-DCL
 ‘A large tree grew between them.’¹
- c. *a-c j-ʃa-[z-bʒ'a]-kʃa-z ɕla-ta*
 DEF-thunder 3SG.N.ABS-CSL-REL.IO-LOC:middle-hit-PST.NFIN tree-ADV
 ‘like a tree struck by a thunder’

Usually, applicative complexes modify their bases in a manner akin to adjuncts in syntax (cf. Colarusso 2006: 29–30 for Kabardian and Lander 2015 for West Circassian). There are two pieces of evidence for this. First, applicative complexes are normally non-obligatory, although there are some *applicativa tantum* predicates involving “bound” roots (e.g., in Circassian posture roots ‘sit’, ‘stand’, ‘lie’, as well as ‘be’, roots expressing directed motion such as ‘go in’ and ‘go out’ and some others) which cannot be used without locative preverbs introducing the landmark argument, as in examples (15a) and (15b). Example (15c), by contrast, shows a clearly optional and even occasional use of an applicative.

(15) West Circassian

- a. *ʔaʃe [z-gʷe]-λ-ep / *λ-ep*
 weapon 1SG.IO-LOC:near-lie-NEG lie-NEG
 ‘I have no weapon with me (lit. weapon does not lie next to me).’

¹ We use the en-dash to separate stems within productive nominal compounds, the so-called nominal complexes (see Lander 2017).

- b. *çaf-weterə-m* [*pxə-rə*]-*ç'ə-Ɂ* / **ç'ə-Ɂ*
 person-crowd-OBL [3SG.IO]LOC:through-TRANS-go_out-PST go_out-PST
 '(He) went through the human crowd.'
- c. *weš'x q-[a-f]-je-š'xə-r-ep*
 rain CSL-3PL.IO-BEN-DAT-rain-DYN-NEG
 'It does not rain for them.'

Second, there may be several applicative complexes within the same predicate, i.e. they allow recursion (see e.g. Lander and Letuchiy 2010); see Section 6 for the order of complexes in such forms. In fact, even the same applicative can occur twice, albeit in different meanings, cf. (16), with two instances of the benefactive, one introducing the addressee and the other the beneficiary:

- (16) West Circassian (Lander and Letuchiy 2010: 269)
s-[a-fə]-[Ø-f]-e-txe
 1SG.ABS-3PL.IO-BEN-3SG.IO-BEN-DYN-write
 'I write to him for their benefit.'
 'I write to them for his benefit.'

However, the stacking of applicative complexes has different productivity in different languages of the family. Thus, while Circassian texts present numerous forms containing several complexes, for Abaza, O'Herin (2001: 483–485) presents only elicited examples of multiple applicatives and reports that "many speakers consider some forms either degraded or completely unacceptable" (O'Herin 2001: 483, fn. 8). Our own fieldwork experience on Abaza confirms this impression.

In all examples provided above, applicative complexes occur in the argument structure zone. It is worth noting, however, that there are some exceptions to this. In particular, "neutralized applicatives" whose combinations with the root are lexicalized appear in the stem (see Section 7.3). Furthermore, Hewitt (2008a) provides Abkhaz examples like (17), where applicative complexes exceptionally occur to the right of the negative prefix:

- (17) Abkhaz (Hewitt 2008a: 310)
də-m-[rə-č'wχa]-sə-jt
 3SG.H.ABS-NEG-3PL.IO-APPL-hit[AOR]-DCL
 'S/he did not shove them.'

3.2 Syntax

All applicatives in NWC can be considered D-applicatives, since the argument they introduce is invariably an indirect object sharing its morphosyntactic properties with the recipient/goal argument of ditransitive predicates. The latter statement, however, can be

considered to some extent circular; since, as will be shown in Section 5, at least in Circassian languages there are simply no indirect objects not introduced by some applicative, including the recipient of ‘give’. Taking this into account, we could perhaps say that Circassian applicatives introduce a special type of argument having no parallels with arguments of simplex verbs. In any case, the syntactic status and morphosyntactic encoding of the arguments of the BC normally remain intact in the AC; in particular, applicativization never affects the absolutive argument (cf. Letuchiy 2012 on West Circassian).

As shown in the following examples, NWC applicatives in principle combine with predicates of any valency, so any restrictions on such combinations are motivated by the degree of complexity allowed by the language:

- (18) West Circassian: applicative + monovalent intransitive

fe-ʒ'egʷə-š'tə-be-x
[3SG.IO]BEN-play-AUX-PST-PL
‘They were playing for him.’

- (19) West Circassian: applicative + bivalent intransitive

w-jə-gʷəxeλə-š'wə *qə-b-de-xʷə-n-ew*
2SG.IO-POSS-intention-good CSL-2SG.IO-COM-happen-MOD-ADV
the-m *sə-p-f-j-e-leʔwə*
god-OBL 1SG.ABS-2SG.IO-BEN-[3SG.IO]DAT-DYN-ask
‘I ask God for you to make your good intentions come true.’

- (20) Besleney Kabardian: applicative + bivalent intransitive

sadikə-m *mjeste-xe-r* *ja-xʷə-r-jəqʷ-qəm*
kindergarten-OBL place-PL-ABS 3PL.IO-BEN-[3SG.IO]LOC:inside-be_enough-NEG
‘There are not enough vacant places in the kindergarten for them.’

- (21) West Circassian: applicative + monotransitive

xʷeχʷə-daxe-xe-r *qə-f-a-ʔwə-š'tə-be*
toast-beautiful-PL-ABS CSL-[3SG.IO]BEN-3PL.ERG-say-AUX-PST
‘They said beautiful toasts for him.’

- (22) West Circassian: applicative + ditransitive

se *p-f-j-e-s-ʔwə-n*
1SG 2SG.IO-BEN-[3SG.IO]DAT-1SG.ERG-say-MOD
‘I will tell him (that) instead of (lit. for) you.’

- (23) Abaza: applicative + ditransitive

j-šə-z-j-á-s-hʷ-p
3SG.N.ABS-2PL.IO-BEN-3SG.M.IO-DAT-1SG.ERG-say-NPST.DCL
‘I will tell this to him about you.’

In BCs many potential applied objects can be marked either with peripheral cases (24) and postpositions (25) or with constructions involving subordinate clauses (26).

(24) Abaza (elicited)

- a. *a-čə arqán-la jə-z-ɬəč'-t*
 DEF-horse rope-INS 3SG.N.ABS-1SG.ERG-steal[AOR]-DCL
- b. *a-čə arqán j-á-la-z-ɬəč'-t*
 DEF-horse rope 3SG.N.ABS-3SG.N.IO-INSTR-1SG.ERG-steal[AOR]-DCL
- Both: 'I stole the horse by means of a rope.'

(25) West Circassian (elicited)

- a. *a-xe-m a-dež' kʷa-ɬe*
 that-PL-OBL 3PL.PP-at go-PST
- b. *a-xe-m a-fe-kʷa-ɬ*
 that-PL-OBL 3PL.IO-BEN-go-PST
- Both: 'S/he went to their place.'

(26) West Circassian (elicited)

- a. *tə-w-jə-ɬʷəs-ew tə-šxe-š'tə-ɬ*
 1PL.ABS-2SG.IO-POSS-attendant-ADV 1PL.ABS-eat-AUX-PST
əč'jə t-je-šʷe-š'tə-ɬ
 and 1PL.ABS-DAT-drink-AUX-PST
- b. *tə-qə-b-da-šxe-š'tə-ɬ əč'jə*
 1PL.ABS-CSL-2SG.IO-COM-eat-AUX-PST and
tə-qə-b-d-je-šʷe-š'tə-ɬ
 1PL.ABS-CSL-2SG.IO-COM-DAT-drink-AUX-PST
- Both: 'We were eating and drinking together with you.'

In non-standard speech in Circassian languages, locations sometimes can appear without any locative markers (27), or with a spatial noun but without any locative preverb on the predicate (28a), but this is not a norm at all.

(27) West Circassian (elicited)

- š'egʷə-xe-m wereɖə-be q-(a-š')-a-ɣʷe*
 wedding-PL-OBL song-many CSL-3PL.IO-LOC-3PL.ERG-say
 'They sing a lot of songs at weddings.'

(28) Kabardian (Bagov (ed.) 1999: 42)

- a. *zə-gʷerə-m jə-bɬʷə-č'e wəvə-n*
 one-some-OBL POSS-side-INS stand_up-MSD
 'to stand up beside someone/something'

- b. *šaʒe-čəkʷə-r jə-ade-m bɛʷə-rə-wəv-a-š*
 boy-little-ABS POSS-father-OBL [3SG.IO]LOC:side-TRANS-stand_up-PST-DCL
 ‘The little boy stood up beside his father.’

In ACs, applied objects normally behave as core non-absolutive arguments. In Circassian and Ubykh AppPs appear in the oblique case and in Abkhaz-Abaza they remain unmarked, just as all core arguments.

Curiously, however, some participant expressions may (yet do not need to) retain their “adjunct” marking even when they are cross-referenced as applied objects. For instance, in (29) the beneficiary is introduced both by a postposition and an applicative, while in (30) the accompanier is present both in the adverbial clause and in the matrix predicate. Such doubling is also reported in locative constructions such as (31), where ‘the shadow of their grandfather’ is virtually introduced by an incorporating spatial noun and a cognate locative applicative in the predicate. In examples like the latter, it may also be the case that the whole phrase ‘the bottom of the shadow of their grandfather’ serves as an AppP of the applicative complex. The range of constructions that allow such doubling varies across NWC languages.

- (29) West Circassian (Lander 2015: 21)

dax-jə ʔeʃʷə-Ɂ-jə zə-p-λeɁʷə-čʻe,
 beautiful-ADD sweet-NMZ-ADD REL.TEMP-2SG.ERG-see-INS
se-šʻ paje s-fe-w-e-Ɂe-šʷe-žʻə
 1SG-OBL for 1SG.IO-BEN-2SG.ERG-DYN-CAUS-good-RE
 ‘When you see beautiful and sweet things, you keep (them) for me.’

- (30) West Circassian

wə-s-jə-Ɂʷəs-ew wəne-m
 2SG.ABS-1SG.PR-POSS-attendant-ADV house-OBL
qə-z-d-jə-h-jə Ɂʷeməle-m xa-ʔ
 CSL-1SG.IO-COM-LOC:inside-go_in[IMP]-ADD meal-OBL LOC:mass-taste[IMP]
 ‘Come home with me and have a snack.’

- (31) Ubykh (Fell 2012: 81)

ɁɁe-tʷ(ə)gʻəʒe Ɂe-žʻawe-beɁe-n beɁe-Ɂe-ne-n
 3PL.PR-grandfather 3SG.PR-shadow-under-OBL LOC:under-be-PRS-PL
 ‘(sitting) under the shadow of their grandfather’

Little is known about the syntactic differences between ACs and BCs in those cases when the same content can be expressed by both. For instance, O’Herin (2001: 487) reports that in Abaza the indirect object introduced by the instrumental applicative must be definite while no such restriction exists for the independent nominal in the instrumental case in the BC. However, he himself adds that such a contrast does not

exist for the other applicatives; moreover, our own elicited data from Abaza suggest that there is no systematic difference in definiteness between BC and AC even for the instrumental applicative.

The only clear difference concerns constructions involving coreference (in a broad sense, also including any kinds of coindexation), such as reflexive, reciprocal and relative clause constructions. AppP can undergo reflexivization and reciprocalization by regular or specialized means available in the individual languages. This is especially evident in Circassian (and to a certain extent also in Ubykh, see Fenwick 2011: 107), where the reflexive and reciprocal prefixes simply replace the person-number prefixes in their canonical position (see e.g. Letuchiy 2007 and Ershova 2019 on West Circassian and Kazenin 2007 on Kabardian), cf. examples in (32).

(32) West Circassian

- a. *wə-zə-fe-g^wəbžə-ž'-a?*
 2SG.ABS-RFL.IO-BEN-be_angry-RE-Q
 'Are you angry at yourself?' (Ershova 2019: 55)
- b. *te wəne-xe-r zə-fe-t-šə-x*
 1PL house-PL-ABS REC.IO-BEN-1PL.ERG-do-PST
 'We built houses for each other.' (Letuchiy 2007: 790)

Reflexivization of AppPs in Abaza and Abkhaz is usually achieved by employing the same regular person-number-gender prefixes (O'Herin 2001: 490–491; Arkadiev and Durneva 2023), see (33a), or by means of a free reflexive element (the noun 'head' with the possessive prefix coindexed with the agent) corresponding to the AppP (33b). The latter strategy is also used in Ubykh for transitive verbs, see Fenwick (2011: 82).

(33) Abaza

- a. *jə-w-zə-w-χ^wʕ-əj-t*
 3SG.N.ABS-2SG.M.IO-BEN-2SG.M.ERG-buy-PRS-DCL
 'You (M) buy it for yourself.' (elicited)
- b. *s-qa a-čə-s-χč'a-t*
 1SG.IO-head 3SG.N.IO-MAL-1SG.ERG-protect[AOR]-DCL
 'I protected myself / my head from it.' (Arkadiev and Durneva 2023: 249)

Reciprocalization of AppPs in Abaza is achieved by a non-trivial morphological strategy, i.e. reduplication of the combination of the applicative complex with the frozen prefix *a-* (34).

(34) Abaza (elicited)

- a. *sawʕá a.z~a.zə-h-χ^wʕa-d*
 present BEN~REC-1PL.ERG-buy[AOR]-DCL
 'We bought each other presents.'

- b. *h-a.ĉ~a.ĉ-bah-əj-ɬ*
 1PL.ABS-MAL~REC-be_angry-PRS-DCL
 ‘We are angry at each other.’

Finally, relativization of AppPs is generally fulfilled simply by replacing the corresponding indexing prefix with the relative prefix (which in Circassian coincides with the reflexive prefix; see Lander and Daniel 2019 for discussion), see (35).

- (35) Abaza (elicited)
- a. *a-ph^wəspa sə-[l-c]-qrafa-t*
 DEF-girl 1SG.ABS-3SG.F.IO-COM-help[AOR]-DCL
 ‘I helped the girl.’
- b. *sə-[z-c]-qrafa-z a-ph^wəspa*
 1SG.ABS-REL.IO-COM-help-PST.NFIN DEF-girl
 ‘the girl whom I helped’

Now, at least in Circassian, reflexivization, reciprocalization and relativization of an AppP marked in the predicate are preferred over similar operations with a parallel element of a BC. For example, relativization of an applied goal as in (36a) is considered much better than relativization of a goal introduced by a postposition like (36b) (the latter construction is found in corpora but is much rarer and is considered infelicitous by many speakers):

- (36) West Circassian (elicited)
- a. *zə-fe-k^wa-be-xe-r*
 REL.IO-BEN-go-PST-PL-ABS
 b. *zə-dež’ k^wa-be-xe-r*
 REL.PP-at go-PST-PL-ABS
 Both: ‘the place where they went’

In fact, there are even cases of relativization of AppPs, where the corresponding BCs do not exist; see Section 7.2.

4 Semantics

4.1 General information and etymology

NWC languages possess rich systems of applicative prefixes, which can be roughly divided into grammatical applicatives (benefactive, malefactive, comitative and possibly some others), locative applicatives and the dative applicative. The latter, which is

in a sense even more grammaticalized than so-called grammatical applicatives, differs from other applicatives in many important respects, so we discuss it in a dedicated section (Section 5).

The boundary between grammatical (sometimes called “relational”; cf. also the term “version” used in the works inspired by the tradition of the description of Georgian, e.g. most of the descriptions published during the Soviet period, cf. Lomtadze 1976) and locative applicatives is, however, fuzzy, since most grammatical applicatives clearly originate from locative ones. For example, the West Circassian malefactive *š^we-* goes back to the locative preverb with the very specific meaning ‘on the tip of smth.’ (see Mazurova 2009), the benefactive *fe-* is sometimes used with reference to the direction of motion, the comitative *de-* coincides with one of the basic locative applicatives, and the instrumental *rə-* can be treated as the same morpheme as the translative prefix introducing the path of motion. Hence in many cases the glosses contrasting the grammatical and locative applicatives may reflect a functional contrast rather than distinguishing between different morphemes.

Locative applicatives include a bunch of so-called locative preverbs and their combinations, too numerous to be listed here. The systems of locative preverbs (including polymorphemic ones) range from about two or three dozen in Circassian (see e.g. Smeets 1984: 259–261) to more than a hundred in Abkhaz–Abaza (see e.g. Spruit 1986: 22–31); however, in the latter only a subset of locative preverbs behave as genuine applicatives able to introduce arguments and host cross-referencing prefixes (Lomtadze 1983; Avidzba 2017).

While the etymology of some of the most grammaticalized applicatives is obscure, a large part of them shows clear resemblance to postpositions, locational nouns and body-part terms (see e.g. Kumakhov 1964: 164–182, 1989: 200–228; Lomtadze 1983; Avidzba 2017; Arkadiev and Maisak 2018: 121–125). While examples like (37)–(38) from Abkhaz and Abaza may tempt one to assume that NWC applicatives have arisen via incorporation of postpositions (a putatively universal scenario proposed by Peterson 2007: 140–141, cf. Fell 2012 on Ubykh, Chirikba 2020: 575 fn. 3 on Abkhaz, or O’Herin 2001 on Abaza), there is evidence that at least some applicatives have rather arisen from incorporation of nouns while the cognate postpositions may have developed independently (see e.g. Arkadiev and Maisak 2018: 125). For instance, many postpositions feature extra morphology (sometimes fossilized) as compared to the applicatives, and, still more importantly, a number of applicatives do not have any cognate postpositions at all.

(37) Abkhaz (Hewitt 1979: 113, transcription adapted)

- a. *axra jə-zə jə-qa-s-çe-jt*
 A. 3SG.M.IO-for 3SG.N.ABS-PVB-1SG.ERG-do[AOR]-DCL
- b. *axra jə-zə-qa-s-çe-jt*
 A. 3SG.N.ABS+3SG.M.IO-BEN-PVB-1SG.ERG-do[AOR]-DCL
- Both: ‘I did it for Axra.’

(38) Abaza

- a. *a-warba j-š'ap-k^{wa} rə-3qa*
 DEF-eagle 3SG.M.PR-foot-PL 3PL.IO-near
j-ʕa-ka-ša-t
 3SG.N.ABS-CSL-LOC:down-fall[AOR]-DCL
 'The eagle fell at his feet.' (Tabulova 1976: 278)
- b. *d-ʕa-hə-3qa-jə-r-gəl-t*
 3SG.H.ABS-CSL-1PL.IO-LOC:beside-3SG.ERG-CAUS-stand[AOR]-DCL
 'He caused him/her to stand near to us.' (O'Herin 2001: 481)

The etymological sources of selected applicatives (mainly of locative preverbs) are given in Table 1, see Kumakhov (1964: 165–182) on Circassian, Dumézil and Esenç (1975: 103–130, 139–144) on Ubykh and Klychev (1994) on Abaza. Chirikba (1996: 380–381) also points to some putative relations between a number of Circassian, Ubykh and Abkhaz-Abaza preverbs.

Table 1: Lexical sources of selected NWC applicatives.

language	applicative	lexical source
West Circassian	<i>ʔeč'e</i> - inadvertitive	<i>ʔe</i> 'hand' + <i>č'e</i> 'bottom'
	<i>pe</i> - 'on the frontal part of the landmark'	<i>pe</i> 'nose'
	<i>ʔe</i> - 'following the landmark'	<i>ʔe</i> 'foot'
	<i>k^wečə</i> - 'inside/through the landmark'	<i>k^wečə</i> 'intestines'
	<i>ʔwə</i> - 'beside or near the front of the landmark'	<i>ʔwə</i> 'mouth, lips'
Ubykh	<i>g'ə</i> - 'on the surface of the landmark'	<i>g'ə</i> 'heart'
	<i>ʔeje</i> - 'under the landmark'	<i>ʔe</i> 'foot'
	<i>pš'e</i> 'behind'	<i>pš'e</i> 'buttocks'
Abaza	<i>cə</i> - comitative	<i>cə</i> 'be together with'
	<i>čə</i> - malefactive	<i>ʔčə</i> - 'skin'
	<i>čpə-nə</i> - 'edge of the landmark'	<i>čpə</i> 'bank, side'
	<i>čə</i> - 'slope, frontal surface'	<i>čə</i> 'mouth, face'
	<i>k^wə</i> - 'beside the landmark'	<i>k^wə</i> - 'bosom'
	<i>qə</i> - 'above the landmark'	<i>qə</i> 'head'
	<i>š'tə</i> - 'after the landmark'	<i>š'tə</i> 'trace'

4.2 Grammatical applicatives

Grammatical applicatives, i.e. applicatives that have regular non-locative functions, include at least benefactive, malefactive, comitative, and instrumental.

The semantics of the benefactive and malefactive applicatives in West Circassian has been described by Letuchiy (2009), who identifies the following functions for the benefactive: benefactive proper (39a), deputative 'instead of' (39b), inanimate goal

(39c) or animate recipient (39d), purpose (39e), external possessor (39f), stimulus of feeling or emotion (39g), judicans (person judging) (39h), and content of speech or thought ‘about’ (39i).

(39) West Circassian

- a. *a zə-r qə-s-fa-š^w-š*
DEM one-ABS CSL-1SG.IO-BEN-2PL.ERG-do[IMP]
‘Do this one thing for me!’
- b. *axš’e-r q-a-f-jə-g^wes’ə-n-ew je-leʔ^wə-be-x*
money-ABS CSL-3PL.IO-BEN-3SG.ERG-divide-MOD-ADV DAT-ask-PST-PL
‘They asked him to divide the money for them [because they could not agree how they should do it themselves].’
- c. *bze-šenəbe-m fe-be-ze-be nəbž’ə-č’e-xe-r*
language-knowledge-OBL BEN-CAUS-turn-RES age-new-PL-ABS
‘the young people devoted to linguistics’
- d. *qəbar-g^wəxeč’ qə-p-fe-t-hə-be-r*
news-sorrow CSL-2SG.IO-BEN-1PL.ERG-bring-PST-ABS
‘We have brought you bad news.’
- e. *ə-še-re-ba sə-qə-z-fe-k^wa-be-r*
3SG.ERG-know-DYN-EMP 1SG.ABS-CSL-REL.IO-BEN-go-PST-ABS
‘Doesn’t he know why (lit. what for) I have come?’
- f. *pəj-xe-m s-q^we s-f-a-wəč’ə-ʔ*
enemy-PL-OBL 1SG.PR-son 1SG.IO-BEN-3PL.ERG-kill-PST
‘The enemies killed my son.’ (Letuchiy 2009: 344)
- g. *bw-ew dwənajə-m sə-fe-reze-n-jə!*
much-ADV world-OBL 1SG.ABS-BEN-be_content-MOD-ADD
‘I would be very content with the world!’
- h. *šenəbe-dek^wə əč’jə ʔepeʔesenəbe z-jə-ʔe*
knowledge-good and talent REL.IO-POSS-be
ekskursovod-xe-r t-fe-mač’e-x
guide-PL-ABS 1PL.IO-BEN-little-PL
‘We are short of knowledgeable and talented guides’
- i. *wəč’epš’əje, pč’əhaʔəq’əje, neč’erezəje, neməč’-q^waž’e-xe-m-jə*
W. P. N. other-village-PL-OBL-ADD
č’ərk-jure wəred-xe-r a-f-jə-wəsə-be-x
Ch.-Y. song-PL-ABS 3PL.IO-BEN-3SG.ERG-compose-PST-PL
‘Yura Chirg composed songs about Wechepshiy, Pchyhatlukay, Necherezay and other villages.’

The range of functions of the benefactive attested in the other NWC languages is similar to those observed in West Circassian, although details may vary (cf. e.g. Chirikba 2020 on Abkhaz).

The malefactive, according to Letuchiy (2009), has the following functions in West Circassian: malefactive proper (40a), involuntary agent (40b), and judicans (40c) (the last is seemingly possible only with nominal predicates; cf. Lander and Bagirokova 2021).

(40) West Circassian

- a. *nepsə-r qə-s-š^wa-k^we*
 tear-ABS CSL-1SG.IO-MAL+DYN-go
 ‘Tears appear against my will.’
- b. *a-š’ č’aške-r š^we-q^wəta-ɤ*
 DEM-OBL cup-ABS MAL-break-PST
 ‘He accidentally broke a cup.’² (Letuchiy 2009: 363)
- c. *a-š’ fedjəz-ew p-pse p-š^we-ʔeš^w-me*
 DEM-OBL such-ADV 2SG.PR-soul 2SG.IO-MAL-sweet-COND
se wə-qe-z-ɤe-ne-ž’ə-n
 1SG 2SG.ABS-CSL-1SG.ERG-CAUS-remain-RE-MOD
 ‘If your life is so dear to you, I’ll save you.’

Other uses of the malefactive are also attested in NWC. For example, in Abaza it can introduce the stimulus of negative emotions:

(41) Abaza

- sə-z-č-pχaš’a-wa* *s-satər-k^wa*
 1SG.ABS-REL.IO-MAL-be.ashamed-IPF 1SG.IO-line-PL
 ‘my verses, which I am ashamed of’

The comitative is basically monosemous and expresses the co-participant, which can be either an agent, intransitive (42a) or transitive (42b), or a patient (42c) of the event:

(42) West Circassian

- a. *apere-me a-də-de-č’ə-ɤa-ɤe-x*
 first-OBL.PL 3PL.IO-COM-LOC:enclosure-go_out-PST-PST-PL
 ‘They left together with those who went first.’
- b. *a-ʔ^we-re-r a-d-jə-ʔ^wa-ɤ,*
 3PL.ERG-say-DYN-ABS 3PL.IO-COM-3SG.ERG-say-PST
a-š-e-re-r a-d-jə-š-a-ɤ
 3PL.ERG-do-DYN-ABS 3PL.IO-COM-3SG.ERG-do-PST
 ‘He said what they were saying together with them, he did what they were doing together with them.’

² Note that in this example the verbal root is labile; compare the dedicated inadvertitive constructions with agent demotion below.

- c. *fəgʷə-r-jə* *de-p-hə-n* *faje*
 millet-ABS-ADD COM-2SG.ERG-take-MOD must
 ‘You must also take millet [together with meat]!’

The instrumental applicative introduces the instrument (43a) or means, e.g. language (43b).

(43) West Circassian

- a. *njepe* *kʷembajn-jə-tfə-m* *ʔwef* *rə-t-e-ʃe*
 today harvester-LNK-five-OBL work INSTR-1PL.ERG-DYN-do
 ‘Today we are doing our work with five harvesters.’
- b. *adaga-bze-m* *qə-rə-mə-ʔwe-ʃwə-n*
 Circassian-language-OBL CSL-INSTR-2SG.ERG+NEG-say-POT-MOD
gʷəpʃəse *ʃə-ʔ-ep*
 thought LOC-be-NEG
 ‘There is no thought that one cannot express in Circassian.’

In Abkhaz, according to Chirikba (2020: 578), the means of transport can be introduced alternatively either by the comitative (44a) or by the instrumental (44b) applicatives.

(44) Abkhaz (Chirikba 2020: 578)

- a. *sará* *a-mašina* *s-á-c-aa-jt*
 1SG DEF-car 1SG.ABS-3SG.N.IO-COM-come[AOR]-DCL
- b. *sará* *a-mašina* *s-á-l-aa-jt*
 1SG DEF-car 1SG.ABS-3SG.N.IO-INSTR-come[AOR]-DCL
- Both: ‘I arrived by car.’

Besides that, Circassian languages have a possessive applicative (homonymous with one of the frequent locative applicatives, yet different from it in morphonological behavior) which is used with the predicate ‘be’ to introduce the possessor (45). In Circassian the same applicative appears on nouns in adnominal possessive constructions (in West Circassian and formerly in Besleney Kabardian only in alienable possessive constructions) (46).

(45) West Circassian

- w-jane-w-jate-xe-r* *w-jə-ʔe-x-a?*
 2SG.PR-mother-2SG.PR-father-PL-ABS 2SG.IO-POSS-be-PL-Q
 ‘Do you have parents?’

(46) West Circassian

- w-jə-čʷezəw* *qe-sə-ʁ,* *s-jə-šaw*
 2SG.PR-POSS-time CSL-reach-PST 1SG.PR-POSS-son
 ‘Your time has come, my son.’

Abaza has a dedicated estimative (Jacques 2023) applicative *ma-* (presumably going back to the root ‘hold, have’) occurring with nominal stems and introducing a judicans participant (47) just like the malefactive in Circassian.

(47) Abaza (elicited)

- a. *aráj d-g^wəbzəka-b*
 DEM 3SG.H.ABS-clever-NPST.DCL
 ‘S/he is clever.’
- b. *aráj d-sə-ma-g^wəbzəka-b*
 DEM 3SG.H.ABS-1SG.IO-EST-clever-NPST.DCL
 ‘I consider her/him clever.’

Another curious phenomenon observed in Abaza and Abkhaz concerns the reciprocal prefix *aba-* whose basic use is illustrated in (48a). As shown in (48b), the same prefix can function as a sociative applicative and introduce an indirect object; note that the base predicate ‘know’ in this example is transitive, while its applicativized version is bivalent intransitive, obviously in line with the general rule that reciprocals detransitivize predicates (see also Section 7.1), cf. (48a). Such a use of the reciprocal does not seem to be productive, although is attested with a number of predicates denoting interpersonal interaction (e.g. ‘be acquainted’, ‘fight’).

(48) Abaza

- a. *a-sabəj-k^wa j-aba-ʒʒa-t*
 DEF-child-PL 3PL.ABS-REC-wash[AOR]-DCL
 ‘The children washed each other.’ (elicited)
- b. *rq^wəχəŋ^w-əa-g^əj h-r-aba-dər-nəs h-ajg^wə-əj-t*
 researcher-HPL-ADD 1PL.ABS-3PL.IO-REC-know-PURP 1PL.ABS-hope-PRS-DCL
 ‘We hope to get acquainted with the researchers.’

In all NWC languages we find irregular and non-predictable lexicalized combinations of grammatical applicatives and roots. Some examples include the use of the malefactive for an experiencer (49a) (which, however, may be related to its judicans use as in [40c] above) and the benefactive in combination with ‘happen’ for ‘enough’ in West Circassian (49b), the appearance of a benefactive in combination with the root ‘look’ for ‘wait’ in Abkhaz and Abaza (50), etc.

(49) West Circassian

- a. *sawəsəraq^we səd ə-ʃe-ka-b-ew qə-p-ʃ^we-ʃə-re we?*
 S. what 3SG.ERG-do-PST-PST-ADV CSL-2SG.IO-MAL-do-DYN 2SG
 ‘Do you guess what Sosruko did?’

- b. *p-fe-χ^wə-me* *t-je-pλə-n!*
 2SG.IO-BEN-happen-COND 1PL.ABS-DAT-look-MOD
 ‘We will see if that is enough for you.’

(50) Abkhaz (Hewitt 1979: 151)

- χ-ɥə-κ* *κ^wətola* *a-mašina* *j-a-zə-pš’ə-w-ḡ*
 three-CLH-NUM Kwitolian DEF-bus 3PL.ABS-3SG.N.IO-BEN-look-ST-NPST.DCL
 ‘Three Kwitolians are waiting for the bus.’

Moreover, one can find bound roots whose semantics cannot be determined without applicatives: in West Circassian and Kabardian, for example, there are predicates like *fe-je-* / *χ^w-jej* ‘must, want’ (with the benefactive prefix) and *jə-je-* / *jej-* (< *jə-jej-*) ‘belong to’ (with the possessive prefix), where the meaning of the root cannot be precisely formulated.

4.3 Locative applicatives

Basically, locative applicatives specify the spatial configuration of the event with respect to the landmark which they introduce as the indirect object, consider examples in (51).

(51) West Circassian

- a. *maš^we-m* *pe-t*
 fire-OBL LOC:front-stand
 ‘He is standing in front of the fire.’ (Rogava and Kerasheva 1966: 121)
- b. *he-r* *pče-m* *ʔ^wə-λ*
 dog-ABS door-OBL LOC:near-lie
 ‘The dog is lying near the door.’ (Rogava and Kerasheva 1966: 126)
- c. *čər-ženəste-r* *λ-jə-ʒə-ɸ*
 steel-scissors-ABS LOC:after-3SG.ERG-throw-PST
 ‘He threw steel scissors after him.’ (Rogava and Kerasheva 1966: 128)

However, in many cases the choice of a particular preverb can also be described as dependent on the semantic features of the landmark itself (Kerasheva 1957, 1992; Paris 1995). Consider the examples in (52), where the spatial configuration is apparently constant while the preverbs differ with respect to the topological properties of the locative argument they introduce.

(52) Standard Kabardian (Kumakhov 1964: 165)

- a. *tjepšec’ə-m* *jə-λə-n*
 plate-OBL LOC:container-lie-MSD
 ‘to be on a plate’

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

Locative applicatives are too numerous to be adequately treated here; moreover, many aspects of their semantics and usage are not yet fully described, despite the continuing interest of linguists. On the Circassian preverbs, see primarily Kumakhov (1964: 164–182), Kerasheva (1957, 1992) and Adyshesova (1999); on Abaza and Abkhaz, see Klychev (1994, 1995) and Avidzba (2017); on Ubykh, see Dumézil and Esenç (1975: 103–130). Some of the locative applicatives have very specific meanings, e.g., West Circassian *qʷe-* 'corner' or Abaza *χə-* 'down a vertical surface'. A number of locative applicatives, especially in Abaza and Abkhaz, can be considered incorporated body-part nouns, the argument they introduce corresponding to the possessor of the body-part, e.g. (53). In Circassian this is only possible when a noun is part of a complex preverb (54), even though many simplex preverbs, as already been said above, are etymologically related to body-part nouns.

- (53) Abkhaz (Spruit 1986: 28)
a-mačʷaz lə-mxa-s-χə-jt
DEF-ring 3SG.F.IO-LOC:finger-1SG.ERG-take[AOR]-DCL
'I took the ring from her finger.'

- (54) West Circassian
wex-wex gʷəšʔəʔe-r pstewə-m-jə q-a-že-de-zə-ʁ
oh-oh word-ABS all-OBL-ADD CSL-3PL.IO-mouth-LOC:enclosure-fall-PST
'Everyone blurted out the word "Oh-oh!"'
(Lit. For all, the word "Oh-oh!" fell from their mouth(s).')

All languages have a translocative preverb which introduces the path of motion (55)–(56). In Circassian and Abkhaz–Abaza these preverbs also have instrumental functions described above, while the Ubykh *ʁe-* lacks it and, moreover, only appears in the translocative meaning following other preverbs, see (8) above (Fenwick 2011: 115). Complex applicatives containing the translocative are also common in Circassian (57).

- (55) West Circassian

g^wə-r ma-pλe, ne-r λaβ^we-m r-e-k^we
 heart-ABS DYN-look eye-ABS path-OBL TRANS-DYN-go
 ‘The heart watches, the eye goes along the path.’ (a proverb)

- (56) Abaza (elicited)

aslán dačá-mʃ^wa-k d-á-la-ʃa-j-χ-t
 A. other-road-INDF 3SG.H.ABS-3SG.N.IO-TRANS-CSL-go-RE[AOR]-DCL
 ‘Aslan returned by another road.’

- (57) West Circassian (Rogava and Kerasheva 1966: 133)

meza-m k^weçə-rə-çʻə-βe-x
 forest-OBL LOC:inside-TRANS-go_out-PST-PL
 ‘They went through the forest.’

Circassian and Ubykh also have general locative preverbs which introduce location without specifying its details (58). Such preverbs can further co-occur with other locative preverbs following them in an applicative complex (59).

- (58) West Circassian

nahə-čʻ-ew anzawər bjerlin šʻ-e-psewə, šʻ-e-ħažʻe
 COMP-new-ADV A. B. LOC-DYN-live LOC-DYN-work
 ‘The younger, Anzaur, lives and works in Berlin.’

- (59) Ubykh (Fenwick 2011: 116)

a-čʻə-n a-wawe-mβʻat^we leje-βe-le-sə-χ^we-qe
 DEF-horse-OBL DEF-saddle-strap LOC:under-TRANS-LOC-1SG.ERG-[CAUS]pass-PST
 ‘I passed the saddle strap under the horse.’

Locative (and dative) applicatives may interact with partly grammaticalized roots conveying the semantics of directional motion and occurring with roots of different semantic types (see Arkadiev and Maisak 2018: 125–127 on Circassian). For instance, in Circassian, a fixed combination of the locative preverb *de-* ‘enclosure’ and the directional suffix *-je* creates predicates expressing upwards motion; in (60a) the preverb introduces the landmark argument, while in (60b) no landmark is apparently implied.

- (60) West Circassian

a. *ʔ^wešhe-λage-g^were-m de-k^we-ja-βe-x*
 hill-high-some-OBL LOC:enclosure-go-UP-PST-PL
 ‘They climbed some high hill.’

- b. *čəbeš^wə-xe-m* *a-wase* *leš-ew* *de-k^we-ja-ɤ*
 fertilizer-PL-OBL 3PL.PR-price strong-ADV LOC:enclosure-go-UP-PST
 ‘The price of fertilizers has risen considerably.’

Locative applicatives can participate in lexicalized non-compositional root-applicative combinations just like grammatical ones (see e.g. Spruit 1986: 33–34 for Abkhaz), and sometimes such combinations contain roots that do not occur elsewhere; cf. the predicate in (61) which is based on a root that is not found outside of this combination:

- (61) West Circassian
č'etəw-ɤase-r-jə *dəše-m* *xe-nə-ɤ*
 cat-trainer-ABS-ADD gold-OBL LOC:mass-be.deprived-PST
 ‘The cat trainer was left without gold, too.’

Finally, for Ubykh Fenwick (2011: 113–114) notes a number of locative preverbs which only combine with a single root, and such preverbs are also attested in Abaza and Abkhaz as well (for Abaza, see e.g. Klychev 1995).

5 Dative applicatives

All NWC languages can introduce an indirect object by means of a so-called dative applicative. Dative applicatives follow all other applicative complexes in the prefixal string and show considerable differences from them in their behavior.

Semantically, dative applicatives are unspecified, i.e. the thematic relation of a “dative” indirect object is determined by the semantics of the stem. Typical arguments introduced by means of the dative applicative include the recipient of ‘give’ (62a), the addressee of ‘say’ (62b), and the causees in causatives derived from transitive stems (62c).

- (62) West Circassian
- a. *qə-s-e-š^w-t*
 CSL-1SG.IO-DAT-2PL.ERG-give[IMP]
 ‘Give it to me!’
 - b. *zə-g^were* *qə-w-e-s-ʔ^we-š^t*
 one-some CSL-2SG.IO-DAT-1SG.ERG-say-FUT
 ‘I will tell you something.’
 - c. *the-m* *ɤ^weg^wə-nefə-r* *qə-r-jə-ɤe-leɤ^wə-ɤ*
 god-OBL road-light-ABS CSL-[3SG.IO]DAT-3SG.ERG-CAUS-see-PST
 ‘God has shown him the radiant road.’

At least in Circassian languages, dative applicatives are the main means of expressing the goal-like participant of ditransitive predicates, as well as of the second argument of many bivalent intransitive predicates denoting events with low semantic transitivity, in particular, not implying any salient change of state. These include both physical and mental activities, speech, and perception, see a representative list of West Circassian predicates in (63) based on the dictionary Tharkaho (1991: 74–84).

(63) West Circassian

- a. physical activity: *je-we* ‘hit, strike, shoot’, *je-ceqe* ‘bite’, *je-ṭeχʷə* ‘scratch’, *je-ʔʷənɕʰə* ‘push’, *je-bewə* ‘kiss’, *je-benə* ‘wrestle’, *je-ṭesḵʷə* ‘pinch’, *je-ʔe* ‘touch’, *je-šʷe* ‘drink’, *je-pšʰe* ‘blow’;
- b. speech: *je-λeʔʷə* ‘ask (a favor)’, *je-wəpɕə* ‘ask (a question)’, *je-χʷenə* ‘curse’, *je-gəjə* ‘scold’, *je-žʰe* ‘call’, *je-psele* ‘talk to’, *je-ʔʷəšəše* ‘whisper to’;
- c. perception: *je-ṭlə* ‘look, watch’, *je-deʔʷə* ‘listen to’, *je-pemə* ‘smell’;
- d. mental activity: *je-gʷəpšəse* ‘think about’, *je-žʰe* ‘read, learn’, *je-se* ‘get used to’.

Formally, dative applicatives manifest manifold peculiarities. First, in Circassian, they display complex morphophonologically conditioned allomorphy (see e.g. Smeets 1984: 217–226, 264–267), partly shown in the examples above. The basic allomorph of the dative applicative is *je-*; however, depending on the morphological context it can show up as *e-*, *jə-*, *r(ə)-* and even null, as in (64). In Abkhaz-Abaza the occurrence of the dative prefix appears to be lexically determined, cf. ‘say’ vs. ‘give’ in (65). Probably because of all this, the dative complex is sometimes described just as a peculiar expression of an indirect object coming without an applicative (Smeets 1984: 264; Kumakhov 1971: 266–269, 297–308; Kumakhov and Vamling 2009: 37–40).

(64) West Circassian

xetə qə-s-Ø-jə-ʔʷe-n

who CSL-1SG.IO-DAT-3SG.ERG-say-POT

‘Who will tell me [how you were killed]?’

(65) Abkhaz

- a. *ak-gʰə s-a-lə-m-hʷa-jt*

one-ADD 1SG.IO-DAT-3SG.F.ERG-NEG-say[AOR]-DCL

‘She said nothing to me.’ (Hewitt 2008a: 311)

- b. *jə-wə-s-ta-wa-jt*

3SG.N.ABS-2SG.M.IO-1SG.ERG-give-IPF-DCL

‘I am giving it to you.’ (Chirikba 2003: 50)

Second, like other applicative complexes, dative complexes can normally be omitted (66)–(67), but there are exceptions and complications. In particular, dative complexes introducing causees in causative predicates, like (62c) above, are usually required (68).

(66) West Circassian

qe-s-tə-š't-ep *zə* *aχš'-jə*
 CSL-1SG.ERG-give-FUT-NEG one money-ADD
 'I will give no money.'

(67) Kabardian, Besleney dialect (Arkadiev and Letuchiy 2021: 494)

- a. *ha-r* *qə-š'ə-w-e-zaqə-č'e* *vračə-m=dej* *kʷe*
 dog-ABS CSL-TEMP-2SG.IO-DAT-bite-INS doctor-OBL=to go[IMP]
 'If a dog bites you, go to the doctor.'
- b. *ha-r* *me-zaqə*
 dog-ABS DYN-bite
 'The dog bites.'

(68) West Circassian

**q-jə-βe-λeβʷə-β*
 CSL-3SG.ERG-CAUS-see-PST
 Intended: 'S/he has shown.'

Third, in Circassian with many predicates, omission of the dative applicative is accompanied by the change of the stem-final vowel /ə/ into /e/ (69), which is also found with antipassive derivatives from transitive predicates (70), see Arkadiev and Letuchiy (2021). This shows that the dative applicative and the argument it introduces in some way belong to the lexical representation of the predicate.

(69) West Circassian

- a. *adre-xe-r* *qe-zə-bgəne-xe-re* *š'ə?enəβe-m* *je-bgə-x*
 other-PL-ABS CSL-REL.ERG-leave-PL-DYN life-OBL DAT-curse-PL
 'Others are cursing the life that leaves them.'
- b. *ad-č'-jə* *feqʷeλ-gʷere* *ma-bge*
 there-INS-ADD peasant-some DYN-curse
 'Some peasant is cursing there as well.'

(70) Kabardian, Kuban dialect (Arkadiev and Letuchiy 2021: 491)

- a. *se* *ž'ane-r* *z-də-ne*
 1SG dress-ABS 1SG.ERG-sew-FUT
 'I will sew a dress.'
- b. *zə-z-βe-psexʷ-me* *jəʔane* *sə-de-ne*
 RFL.IO-1SG.ERG-CAUS-relax-COND then 1SG.ABS-sew.ANTIP-FUT
 'I will take a rest and then will do my sewing.'

Finally, in Ubykh (Fenwick 2011: 115–116) the dative is the only applicative preverb that takes cross-reference prefixes from the possessive series rather than from the regular indirect object one, compare (71a) and (71b).

(71) Ubykh (Fenwick 2011: 115, 110)

- a. *sə-ʁ-a-ʒʁe-n*
 1SG.ABS-3SG.PR-DAT-ask-PRS
 ‘I am asking him.’
- b. *ze-nejns^wə-n* Ø-ʒ’ə-na-k’e-qe
 one-young_man-OBL 3SG.IO-COM-3PL.ERG[CAUS]-go-PST
 ‘They married her (lit. made her go with) a young man.’

Dative complexes also show some peculiarities related to their ordering, see the next section.

6 Order of applicative complexes

When a predicate contains several applicative complexes, their order, at least partially, can be described via a default template. In particular, the following template seems to hold for all NWC languages: GRAMMATICAL APPLICATIVE(S) < SPECIAL LOCATIVE APPLICATIVE(S) < DATIVE APPLICATIVE(S). (72) shows a form containing all these kinds of applicatives:

(72) West Circassian

- t-jə-wəram* *asfal’t*
 1PL.PR-POSS-street asphalt
qə-t-fə-tər-a-r-jə-ʁe-λ-ha-ʁ
 CSL-1PL.IO-BEN-[3SG.IO]LOC:ON-3PL.IO-DAT-3SG.ERG-CAUS-lie-LAT-PST
 ‘He made them cover our street with asphalt (lit. put asphalt on our street) for us.’

In Abkhaz and Abaza, there is additional evidence that grammatical and locative applicatives occupy distinct slots in the wordform (see O’Herin 2001: 481–482), with the former farther from the root than the latter and separated from them by directional prefixes:

(73) Abaza

- j-[s-zə]-ʔa-[n]-χa-t*
 3SG.N.ABS-1SG.IO-BEN-CSL-LOC:inside-remain[AOR]-DCL
 ‘It has remained for me.’

The general locative applicatives found in Circassian and Ubykh behave differently from special locative applicatives. In West Circassian, according to Lander and Arkhangelskiy (2015), who provided the results of an experimental study of the ordering of the general locative, benefactive and comitative complexes, these preverbs tend (albeit are not obliged) to occur in that order (74). As a mirror image of that, for Ubykh Fenwick (2011: 98) argues that the general locative follows all other preverbs (although he notes that Charachidzé 1989: 384 proposed a different template, where the general locative applicative preceded all other applicatives), cf. (8) above and (75).

(74) West Circassian (elicited)

ʒʹane ʃʹə-fə-d-jə-də-ʁ

dress LOC-BEN-COM-3SG.ERG-sew-PST

‘S/he sewed a dress there for him/her together with him/her’

(75) Ubykh (Fenwick 2011: 98)

ʃʷeʎe-gʹə ʁe-beʒe ʃʷ-χʹe-le-gʹətʷ-qe-n

2PL-ADD 3SG.PR-penis 2PL.IO-BEN-LOC-remain-PST-PL

‘His penis remained for you all.’

Indeed, the order of applicative complexes cannot be reduced to any template, as first noticed by Jakovlev and Ashkhamaf (1941: 103–106). Importantly, at least in Circassian, we also observe scope-based effects in the order of applicatives. For example, the default association of a situation with some participant may require positioning of its applicative closer to the stem, probably that is why in (76a) the benefactive applicative expressing the addressee occurs to the right of the comitative applicative. Similarly, in causatives, a complex occurring closer to the stem is more likely to be interpreted with respect to the caused rather than the causing situation (76b). At the same time, if an applied object is relativized, i.e. presumably has wide scope over other arguments, it is normal to “move” its complex to the left of other complexes (76c).

(76) West Circassian (elicited)

a. *mwe s-jə-čʹaʒe pisʹme-r a-xe-me*

DEM 1SG.IO-POSS-boy letter-ABS DEM-PL-OBL.PL

[a-də]-[fe]-s-txə-šʹtə-ʁ / ***[ʃ]-[a-de]-s-txə-šʹtə-ʁ**

3PL.IO-COM-[3SG.IO]BEN-1SG.ERG-write-AUX-PST [3SG.IO]BEN-3PL.IO-COM. . .

‘I was writing a letter to my son together with them.’

b. *sportsmʹen-xe-r spartakiade-m*

athlete-PL-ABS competition-OBL

[šʹə]-[ze-de]-d-ʁe-bena-ʁ

[3SG.IO]LOC-REC.IO-COM-1PL.ERG-CAUS-compete-PST

‘We made the athletes participate in the competition together.’

*‘We together made the athletes participate in the competition.’

- c. *mwe pis'me-r [zə-f]-[a-de]-p-txə-š'tə-ke-r*
 DEM letter-ABS REL.IO-BEN-3PL.IO-COM-2SG.ERG-write-AUX-PST-ABS
 'The one whom you were writing this letter together with them'

Caponigro and Polinsky (2011: 80–81) also reported that the order of the complexes in West Circassian may correspond to the scope of the quantifiers, so that the appearance of an applicative complex farther from the root implies its broader scope. In (77) the beneficiary phrase has scope over the comitative phrase (i.e. only the interpretation 'There is a girl for whom he made it with all the boys' is preferred with respect to the interpretation 'For all the boys with whom he made it there is some girl for whom this was done'). However, our consultants only partly confirm this.

- (77) West Circassian (Caponigro and Polinsky 2011: 81)
zeč'e-m-jə č'aḱe-xe-m zə pšaše-m [fə]-[ra-d]-jə-šə-ḱ
 all-OBL-ADD boy-PL-OBL one girl-OBL [3SG.IO]BEN-3PL.IO-COM-3SG.ERG-do-PST
 'He made it for one girl with all the boys.' (one > all, *all > one)

Finally, it is worth noting that at least in West Circassian the order of multiple dative complexes (possible when one of them introduces the causee in a causative construction involving a ditransitive stem) may depend on various factors including a person/number hierarchy (cf. Bagirokova, Lander, and Moroz 2017). Normally, the dative complex expressing the causee follows the dative indirect object belonging to the caused situation (78a), but if the latter is higher than the causee in the hierarchy 1SG > 2SG > 1PL > 2PL (presumably combined from the hierarchies 1 > 2 and SG > PL) both orders are possible, as shown by the ambiguity in (78b):

- (78) West Circassian (elicited)
 a. *qə-w-a-r-jə-ke-ʔ^wa-ḱ*
 CSL-2SG.IO[DAT]-3PL.IO-DAT-3SG.ERG-CAUS-say-PST
 's/he made them tell you that' / *'s/he made you tell them that'
 b. *qə-w-ə-s-jə-ke-ʔ^wa-ḱ*
 CSL-2SG.IO-DAT-1SG.IO[DAT]-3SG.ERG-CAUS-say-PST
 's/he made me tell you that' / 's/he made you tell me that'

7 Special uses of applicatives

7.1 A-demotion

Probably the least expected function of applicatives, given their basic function of promotion of arguments, is the demotion of ergative arguments to indirect objects. This is

found mainly in potential constructions expressing ability, where the potential ergative argument is introduced via the benefactive applicative complex (79), and in inadvertitive constructions expressing that the expected ergative argument behaves as an accidental causer of the event and hence appears as an indirect object (80), but also probably in some reciprocal constructions (see below). Note that in most typical cases such indirect objects retain some properties of the transitive agent – e.g., the use of such constructions is almost restricted to transitive stems (i.e. stems that otherwise require an ergative agent) and, unlike prototypical applicative complexes, such expressions of the agent cannot be omitted. This goes against the idea that such constructions involve agentless (i.e. intransitive) stems which combine with applicatives introducing a completely distinct semantic role (see Lander 2022 for discussion).

(79) West Circassian (Letuchiy 2009: 355)

- a. *se harəfə-xe-r s-e-txə*
 1SG character-PL-ABS 1SG.ERG-DYN-write
 ‘I am writing characters.’
- b. *se harəfə-xe-r s-fe-txə-r-ep*
 1SG character-PL-ABS 1SG.IO-BEN-write-DYN-NEG
 ‘I cannot write characters.’

(80) West Circassian (Arkadiev and Letuchiy 2011: 503–504)

- a. *se s-jə-š'eweḅʷə-r sə-wəʔa-ḅ*
 1SG 1SG.PR-POSS-friend-ABS 1SG.ERG-wound-PST
 ‘I wounded my friend’
- b. *se səməʃaxew s-jə-š'eweḅʷə-r s-ʔeč'e-wəʔa-ḅ*
 1SG unintentionally 1SG.PR-POSS-friend-ABS 1SG.IO-INADV-wound-PST
 ‘I unintentionally wounded my friend’

In Circassian, the potential use of the benefactive is only available for transitive predicates, cf. an ungrammatical example based on an intransitive predicate in (81), see also Letuchiy (2012: 336–339). In general, it is also impossible to attach the inadvertitive to an intransitive predicate adding to it an involuntary agent or cause; however, the borderline between such putative constructions and the use of the same preverb in its etymological meaning ‘from under hand’ attested in Circassian and Ubykh is sometimes fuzzy, as shown in (82).

(81) West Circassian (Letuchiy 2009: 358)

- *č'aḱe-r / *č'aḱe-m fa-kʷe-r-ep*
 boy-ABS boy-OBL BEN-go-DYN-NEG
 Ungrammatical in the intended meaning: ‘The boy cannot go.’

(82) West Circassian

- a. *senefə-bʒe-r qə-ʔe-čʼ-e-zə*
 wine-horn-ABS CSL-hand-LOC:under-DYN-fall
 'The horn with wine falls from his hand.' (Rogava and Kerasheva 1966: 130)
- b. *pšʼə-m sə-ʔe-čʼe-kʷede-n*
 prince-OBL 1SG.ABS-hand-LOC:under-vanish.LAT-MOD
 'I'll perish from the hand of the prince.' (Rogava and Kerasheva 1966: 282)

The situation in Abkhaz-Abaza and Ubykh is different. Here the potential and inadvertitive markers appear both with transitive (83a), (84b) (usually behaving similarly to their Circassian counterparts, but see below) and intransitive (83b), (84a) predicates (see Hewitt 2008b *inter alia*). In the latter case, the most agentive absolutive argument retains its syntactic status while the potential and inadvertitive markers do not function as applicatives introducing any indirect object anymore.

(83) Abaza

- a. *knigá gʼ-s-zə-m-χʷf-əw-z-ʔ*
 book NEG-1SG.IO-POT-NEG-buy-IPF-PST.NFIN-DCL
 'I could not buy books.'
- b. *jará d-gʼə-z-fá-mə-j-ʔ*
 3SG.M 3SG.H.ABS-NEG.EMP-POT-CSL-NEG-come[AOR]-DCL
 'He could not come himself.'

(84) Ubykh (Fenwick 2011: 114)

- a. *q̇ex̣e-sʷečʼe-q̇e*
 INADV-laugh-PST
 'He could not help but burst out laughing.'
- b. *jə-χʼə-n ze-tát-gʷere q̇ex̣e-kʷ-q̇e*
 DEM-prince-OBL one-man-certain INADV-kill-PST
 'This prince accidentally killed a man.'

Curiously, Hewitt (1999) reports that in Abkhaz, in potential and inadvertitive forms derived from transitive stems, the ergative indexing can even be retained on a par (85a) or instead of (85b) the indirect object indexing.

(85) Abkhaz (Hewitt 1999: 201)

- a. *j-a-z-a-m-ga-jt*
 3SG.N.ABS-3SG.N.IO-POT-3SG.N.ERG-NEG-take[AOR]-DCL
 'It could not take it.'
- b. *a-xba f-yə-k z-a-m-ga-jt*
 DEF-boat five-CLH-NUM POT-3SG.N.ERG-NEG-take[AOR]-DCL
 'The boat could not carry five persons.'

Finally, according to one of the interpretations (see e.g. Lander and Letuchiy 2010: 270), reciprocal constructions coindexing the absolutive and ergative arguments are basically formed by demoting the ergative argument by means of some applicative prefix (in Circassian probably related to the instrumental applicative) and replacing the corresponding indexing prefix with a reciprocal morpheme. This interpretation, which is illustrated by glosses in (86a), explains the typologically unusual binding of the agent by the patient (under such an account treated as binding of an indirect object by the absolutive argument) as well as some morphophonological facts not to be discussed here, but perhaps implies a violation of the rule stating that the dative applicative follows all others (see Section 5). Moreover, some speakers of West Circassian marginally allow even a combination of this “reciprocal” applicative affix with the inadvertive applicative (86b). Yet the standard description presented, for example, in Letuchiy (2007) treats the sequences such as *ze-re-* in (86a) as single reciprocal prefixes, and it cannot be excluded that examples like (86b) result from morphological reanalysis of reciprocal markers as applicative complexes.

(86) West Circassian

- a. *ade tade tə-š'ə-ze-re-k'etə-ž'ə-š't?*
 but where 1PL.ABS-LOC-REC.IO-REC-find-RE-FUT
 ‘But where will we find each other again?’
- b. *tə-ze-ʔeč'e-re-wəʔa-be-x*
 1PL.ABS-REC.IO-INADV-REC-wound-PST-PL
 ‘We wounded each other accidentally.’ (elicited; Lander and Letuchiy 2010: 270)

7.2 Last resort applicative relativization in Circassian

As mentioned in Section 3.2, applicatives may facilitate relativization. Besides that, in Circassian there are cases where the appearance of an applicative is possible only if the corresponding argument is relativized, e.g. in embedded clauses referring to place, time or reason. For example, the destination with the predicate ‘go’ is not normally introduced via an applicative (87a), but relativization of this participant requires an applicative (87b):

(87) West Circassian (elicited)

- a. *a-š' sə(*-de)-k'wa-b*
 that-OBL 1PL.ABS-LOC:enclosure-go-PST
 ‘I went there.’
- b. *sə-zə-de-k'wa-be-r*
 1SG.ABS-REL.IO-LOC:enclosure-go-PST-ABS
 ‘(the place) where I went’

In other cases, an argument cannot be expressed in independent clauses at all but can be relativized after applicativization. For example, reason cannot appear as an argument in independent clauses (88a) but appears as a relativized applied indirect object in relative clauses (88b). The applicative morpheme introducing reason coincides with the locative preverb ‘under’.

(88) West Circassian (elicited, Lander 2012: 290)

- a. *we-dejə-m wəʒape sə-kʷa-ʁ-ep* / **sə-čʰe-kʷa-ʁ-ep*
 weather-bad-OBL U. 1SG.ABS-go-PST 1SG.ABS-RSN-go-PST-NEG
 ‘I did not go to Ulyap due to bad weather.’
- b. [*wəʒape sə-(z)-čʰe-mə-kʷa-ʁe we-r*]
 U. 1SG.ABS-REL.IO-RSN-NEG-go-PST weather-ABS
qə-ze-čʰe-čʰə-žʰə-ʁ
 CSL-REC.IO-LOC:under-go_out-RE-PST
 ‘The weather, due to which I did not go to Ulyap, improved.’

Interestingly, since an applicative occurs only if the applied object is relativized, the appearance of the relative prefix turns out to be optional. The subsequent development where a (former?) applicative becomes the sole marker of relativization is observed in Kabardian constructions with relativization of time. In both Circassian languages relativization of time can exploit the general locative applicative, but in Kabardian it is regularly used as the only marker of subordinate temporal clauses (89):

(89) Kabardian, Besleney dialect

- bzəlxʷəʁe-r šʰə-ʔʷə-čʰə-žʰə-m psəne-m jə-h-a*
 woman-ABS TEMP-LOC:near-go_out-RE-OBL well-OBL LOC:inside-go_in-PST
pšexʷə-m-čʰe
 chain-OBL-INS
 ‘When the woman went away, he used the chain to get into the well.’

A different path of development which retains the relative prefix is found in Circassian subordinate clauses describing the manner (90) and the fact of the event (91). Such clauses display properties of relativization but contain a dedicated marker (*zere-* in West Circassian, *zerə-* in Kabardian). At least diachronically but probably synchronically as well this marker can be analyzed as a sequence of the relative prefix and an applicative introducing it and presumably related to the instrumental applicative (for a discussion, see Bizhiov 1991: 89–91; Gerasimov and Lander 2008; Arkadiev and Gerasimov 2019):

(90) West Circassian

muzəke-r qə-b-g^wə-rə-ʔ^we-nə-m feš
 music-ABS CSL-2SG.IO-heart-INSTR-say-MOD-OBL for
maqe-xe-r zere-txə-ʔe-xe-m wə-q-je-ʒ'e-n (. . .) faje
 sound-PL-ABS REL.MNR-write-RES-PL-OBL 2SG.ABS-CSL-DAT-read-MOD must
 'To understand music, you should (be able to) read how sounds are written down.'

(91) West Circassian

s-ja-šewex^w ʒaž'e ze.r-ja-mə-ʔe-r d-ʔe-wənefə-ʔe
 1SG.PR-POSS-friend fault REL.FACT-POSS-NEG-be-ABS 1PL.ERG-CAUS-turn_out-PST
 'We found out that it was not my friend's fault (lit. that my friend has no fault).'

In Abkhaz-Abaza, subordinate clauses parallel to the ones described in this section also have syntactic properties of relative clauses, but there is no morphological evidence that their markers can be treated as applicatives synchronically or diachronically.

7.3 Neutralized applicatives

In some examples, we observe frozen applicatives whose combinations with the root are lexicalized to the extent that they appear together with the root in a stem rather than in the argument structure zone. Such applicatives do not introduce any indirect objects. An example is presented by the Circassian monovalent intransitive predicate 'search', whose root combines with the "former" locative applicative *lə-* 'after' (as shown in [92a], where it follows the negative prefix and hence belongs to the stem). Interestingly, Circassian languages also have an intransitive predicate 'search', where the argument being searched is introduced by the same applicative as a genuine indirect object (92b).

(92) West Circassian

- a. *berə mə-lə-χ^wa-ʔe-ew ʔeχ^weʔə-r q-ə-ʔ^wetə-ž'ə-ʔ*
 long NEG-search-PST-ADV herd-ABS CSL-3SG.ERG-find-RE-PST
 'He found the herd without a long search (lit. not having searched for a long time).'
- b. *təʔ^waʔ^we-m berə lə-mə-χ^wa-ʔe-ew q-a-ʔ^wetə-ʔ*
 thief-OBL long LOC:after-NEG-search-PL-ADV CSL-3PL.ERG-find-PST
 'They found the thief without searching him for a long time.'

In fact, Gishev (1983: 109) also provides some other examples where special locative preverbs no longer appear in the argument zone but come together with the root. However, Circassian languages even show an example where a whole complex involving a dative applicative does not change the argument structure but rather fulfills a derivational function. In (93) the combination of the reciprocal suffix introduced by

the dative applicative and the root ‘hit’ is interpreted as ‘fight’, but the corresponding patient-like argument may be introduced by a further dative applicative:

(93) West Circassian

je-[z-e-wa]-x-a, ə-wəčʰə-x-a?
 DAT-REC.IO-DAT-hit-PST-Q 3SG.ERG-kill-PST-Q
 ‘Did he fight with him? Did he kill him?’

A similar case is found in Abaza. Here the prefix *a(j)-* (regularly used as reciprocal) combining with the root ‘hit’ occupies the slot immediately preceding the root rather than the regular slot in the middle of the prefixal chain; this is shown by the fact that it can be separated from the cross-referencing prefix it introduces by other material such as negation, see (94).

(94) Abaza (elicited)

w-ʕa-s-m-áj-sə-n
 2SG.M.ABS-CSL-1SG.IO-NEG-APPL-hit-NEG.IMP
 ‘Don’t beat me!’

While such frozen applicatives usually do not introduce any arguments anymore, there is no evidence that they have been reanalyzed as parts of the root, either.

8 Lookalike: transitivizing ablaut

In Circassian languages, there are applicative-like constructions not fitting into the canonical picture described above. They mainly concern intransitive predicates of motion like *kʷe* ‘go’, which can be transitivized by changing the final vowel /e/ into /ə/, whereby the absolutive argument of the BC denoting the moving entity becomes the ergative A, while the new absolutive object denotes the path or distance covered by motion, compare (95a) and (95b).

(95) West Circassian

- a. *a-r kʷa-xe*
 DEM-ABS go-PST
 ‘S/he went.’ (elicited)
- b. *a-šʰ xʷegʷə-be ə-kʷə-x*
 DEM-OBL way-many[ABS] 3SG.ERG-go.TR-PST
 ‘He has traveled many roads.’

The transitive versions of such predicates are systematically used in constructions denoting circular or perambulatory motion, which employ directional suffixes. Such predicates can be used both with an absolutive argument denoting the spatial region encircled or covered by motion (96a), as well as without any referential second argument (96b) or with such an argument introduced as a locative AppP rather than an absolutive (96c).

(96) West Circassian

- a. *t-jə-g^wap-ew* *jeʒ'ape-r* *qe-t-k^wə-ha-ɐ*
 1PL.PR-POSS-pleasure-ADV school-ABS CSL-1PL.ERG-go.TR-CIRCUM-PST
 'We visited (lit. went over) the school with pleasure.'
- b. *mefe-rjenə-m* *qe-s-k^wə-ha-ɐe-m-jə*
 day-whole-OBL CSL-1SG.ERG-go.TR-CIRCUM-PST-COND-ADD
šə-xe-m-re *zeweλ-xe-m-re* *a-neməč'*
 horse-PL-OBL-COORD soldier-PL-OBL-COORD 3PL.IO-except
s-λeɐ^wə-r-ep
 1SG.ERG-see-DYN-NEG
 'Even though I have walked around / traveled for the whole day, I don't see anybody but horses and soldiers.'
- c. *məjeq^wape* *jə-wəram-xe-m* *q-a-š'-a-k^wə-ha-ɐ*
 M. POSS-street-PL-OBL CSL-3PL.IO-LOC-3PL.ERG-go.TR-CIRCUM-PST
 'They walked around the streets of Maykop.'

This use of ablaut for transitivity of basic intransitive predicates (for more on the /e/ ~ /ə/ ablaut in Circassian, see Kumakhov 1974; Kumakhov and Vamling 2009: 34–35) is a mirror-image of the more productive antipassive formation mentioned above in Section 5, which changes the root-final /ə/ into /e/. Cf. (97) and Arkadiev and Letuchiy (2021) for more details and a discussion of the problematic directionality of these derivations.

(97) West Circassian

- a. *haləɐ^w-jə-blə-r* *se* *s-šxə-ɐe*
 bread-LNK-seven-ABS 1SG 1SG.ERG-eat-PST
 'I ate seven pieces of bread.'
- b. *a-xe-r* *ma-šxe-xe-me,* *te-rjə* *t-e-šxe*
 DEM-PL-ABS DYN-eat.ANTIP-PL-COND 1PL-ADD 1PL.ABS-DYN-eat.ANTIP
 'If they eat, we eat, too.'

The same pattern of ablaut has another productive use only indirectly related to valency and more clearly equipollent than the ones manipulating transitivity, i.e. the so-called introvert (lative) and extravert (relative) forms of verbs denoting real or

metaphorical motion and always requiring a locative applicative (see e.g. Smeets 1984: 442–445; Arkadiev and Letuchiy 2011: 500), shown in examples (98).

(98) West Circassian (Smeets 1984: 442)

- a. *məʒ^we-r tje-sə-ʒe-š't*
 stone-ABS LOC:top-1SG.ERG-throw.LAT-FUT
 'I will throw the stone on it.'
- b. *məʒ^we-r tje-sə-ʒə-š't*
 stone-ABS LOC:top-1SG.ERG-throw.ELAT-FUT
 'I will throw the stone from it.'

9 Conclusions

In this chapter we have offered a necessarily incomplete survey of the rich system of applicatives in the Northwest Caucasian languages, focusing primarily on West Circassian. According to the questionnaire proposed as a guideline for this volume's contributions, the constructions presented can be characterized as follows:

Morphology

- All NWC applicatives are prefixes occurring in the argument structure zone of the prefixal chain.
- Canonically, applicative prefixes are immediately preceded by person-number(-gender) prefixes indexing the applicativized participant. Deviations from this pattern include prefix displacement in Circassian, absence of third person singular non-human prefixes with some applicatives in Abkhaz and Abaza, and instances of complex applicative prefixes introducing the same argument.
- There are special “dative” applicatives that show idiosyncratic allomorphy and occupy a dedicated slot in the verbal template closest to the root.
- Applicativized predicates do not show any morphological idiosyncrasies in their inflection.

Syntax

- Abaza, Abkhaz and Ubykh applicative constructions are D-applicatives introducing indirect objects encoded like the recipient of ‘give’; applicative constructions in Circassian, however, introduce arguments which have no parallels with non-derived verbs, for the simple reason that even the recipient of ‘give’ in these languages is introduced by an applicative.
- Applicatives combine with both intransitive and transitive base predicates.

- In general, applicativization is optional in that in many cases the participant expressed by an AppP can be encoded by alternative means.
- Apart from the potential, inadvertitive and (arguably) detransitivizing reciprocal applicatives that reassign the original transitive agent from the ergative slot to that of the indirect object, applicativization does not in any way affect the encoding and syntactic status of the core arguments (S, A and P).
- With the same exception, applicativization is valency-increasing.
- Applicativization does not show restrictions in combination with such valency-changing operations as causativization, reflexivization and reciprocalization; in Circassian, bivalent intransitive predicates whose patient-like argument is introduced by the dative applicative can undergo antipassivization eliminating that participant.

Semantics

- The applied phrase bears such semantic relations as beneficiary, external possessor, maleficiary, co-participant, instrument, means, path, location, and a large number of more concrete spatial meanings. The semantic roles of the AppPs introduced by the dative applicatives include ditransitive recipients, causees of causative constructions based on transitive predicates, and low-affected non-agentive participants of verbs of impact, speech, perception, and cognition.
- The special uses of applicatives in relative clause constructions include the expression of such meanings as location, time, reason, manner and, by extension, fact.

Lookalikes

A potential lookalike involves an unproductive transitivizing derivation attested with a few verbs of motion and introducing the P participant expressing path or distance.

Abbreviations

ABS	absolutive
ADD	additive
ADV	adverbial marker
ANTIP	antipassive
AOR	aorist
APPL	applicative
AUX	auxiliary marker
BEN	benefactive
CAUS	causative
CIRCUM	circumferential 'around'
CLH	human classifier
COM	comitative

COMP	comparative
COND	conditional
COORD	coordination marker
CSL	cislocative
CVB	converb
DAT	dative applicative
DCL	declarative
DEF	definite
DEM	demonstrative
DYN	dynamic
ELAT	elative
EMP	emphatic
ERG	ergative
EST	estimative
F	feminine
FACT	factual
FUT	future
H	human
HPL	human plural
IMP	imperative
INADV	inadvertitive
INDF	indefinite
INS	instrumental case
INSTR	instrumental applicative
IO	indirect object
IPF	imperfective
LAT	lative
LNK	linking morpheme
LOC	locative preverb
M	masculine
MAL	malefactive
MNR	manner
MOD	modal marker
MSD	masdar
N	nonhuman
NEG	negation
NFIN	nonfinite
NMZ	nominalization
NPST	nonpast
NUM	numeral marker
OBL	oblique case
PL	plural
POSS	possessive
POT	potential
PP	postpositional series of personal prefixes
PR	possessor
PRS	present
PST	past
PURP	purposive

PVB	preverb
Q	interrogative
RE	refactive
REC	reciprocal
REL	relativization
RES	resultative
RFL	reflexive
RS	retrospective shift
RSN	reason
SG	singular
ST	stative
TEMP	temporal
TR	transitive
TRANS	translative
UP	motion upwards
-	default morpheme boundary
–	productive nominal compound boundary
=	clitic boundary

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