

Peter M. Arkadiev*

Syntax in morphological guise: Interrogative verbal morphology in Abaza

<https://doi.org/10.1515/lingty-2020-5004>

Received January 30, 2019; revised April 14, 2019

Abstract: Abaza, a polysynthetic ergative Northwest Caucasian language, possesses a typologically unique system of forming content questions by means of inflectional marking in the verb. I offer a detailed description of this peculiar system, showing how it is grounded in the more general pattern of encoding relativization by means of prefixes forming part of the basic cross-referencing paradigms. I also discuss a tentative diachronic scenario, explaining how at least a subpart of the synthetic interrogative marking in Abaza (and its close relative Abkhaz) could have emerged via univerbation of pseudocleft focus constructions.

Keywords: Abaza, Abkhaz, Northwest Caucasian, polysynthesis, interrogative constructions, typological rarities

1 Introduction

Interrogative constructions have not been a popular subject in linguistic typology, despite the steadily growing body of literature in the “formalist” frameworks. Just a few broad cross-linguistic studies and surveys of question constructions can be mentioned, such as Ultan (1978), Chisholm (1984), Siemund (2001), Dryer (2005a, 2005b, 2005c), Idiatov (2007), Stolz et al. (2017) and Hölzl (2018). The typological landscape of question constructions and cross-linguistic variation in this domain is thus regrettably understudied. This paper aims at advancing the typology of interrogative constructions by presenting a detailed description of one language-particular system of interrogative marking – a system remarkable to such an extent that it can be considered unique, i. e. a typological *rarissimum* in the sense of Wohlgemuth and Cysouw (2010). The language in question is Abaza, a member of the polysynthetic Northwest Caucasian family, related to the better-known Abkhaz, the only other known language with a comparable system of interrogative constructions. The outstanding peculiarity of interrogative constructions in Abaza (and, *mutatis*

*Corresponding author: Peter M. Arkadiev [ˈpi:.tə arˈ.ka:.dʲɛv], Institute of Slavic Studies, Russian Academy of Sciences, Moscow, Russia; Russian State University for the Humanities, Moscow, Russia, E-mail: alpgurev@gmail.com

2 Some background on (content) interrogative constructions

From the point of view of information structure, content questions are considered to consist of focus and presupposition (cf. Lambrecht 1994: 282), as shown in (3):

- (3) English
 [*What*]_{focus} [*are you reading*]_{presupposition}?

Given the information-structural properties of content questions, it is no surprise that the default option for the languages of the world is to encode the focus of questions separately from their presupposition, in particular by employing special lexical means for the interrogative focus, i. e. interrogative pronouns (question/*wh*-words) like *who* or *where* (Ultan 1978: 53; Siemund 2001: 1018).

By contrast, polar, or *yes/no*-questions, which target the truth value of the proposition, do not involve a partitioning of the propositional content into focus and presupposition, and hence are cross-linguistically fairly frequently encoded in ways parallel to other types of non-declarative illocutionary acts, i. e. by means of special verbal morphology (164 out of 955 languages in the sample of Dryer 2005c).

The bipartite focus-presupposition information structure of content questions is in many languages directly reflected in morphosyntax in that content questions are structurally similar to (*pseudo*)*clefted focus constructions*, with the question word forming part of the (copular) predicate and the presupposition being expressed as a headless relative clause, as in the alternative rendition of the English example (3) in (4a) or in its neutral translation into (standard) French in (5a). Compare the corresponding adnominal relative clauses in (4b) and (5b).

- (4) English
 a. [*What is it*] [*that you are reading*]?
 b. *the book* [*that you are reading*]
- (5) French
 a. [*Qu'est-ce*] [*que tu lis*]?
 b. *le livre* [*que tu lis*]

Pseudoclefts constitute the common strategy for expressing content questions in the North Caucasian languages (Sumbatova 2009), the Northwest Caucasian family being no exception. Thus, in West Circassian, which belongs to a branch

of the family more distantly related to Abaza and Abkhaz, question words function as (one-place) nominal predicates and attach the interrogative marker *-a*, see example (6a), while the presupposition of the question is encoded as a normal headless relative clause with the verb containing the relative prefix *z-* and carrying the absolutive case marker *-r*, cf. its (internally) headed correspondence in (6b).

- (6) West Circassian (Northwest Caucasian > Circassian; own fieldwork data)
- a. [**səd-a**] [wə-z-a-ʒ'e-re-r]?
what-Q 2SG.ABS-REL.IO-DAT-read-DYN-ABS
 'What are you reading?' (lit.=4a)
- b. txəl-ew wə-z-a-ʒ'e-re-r
 book-ADV 2SG.ABS-REL.IO-DAT-read-DYN-ABS
 'the book that you are reading'

This strategy is also employed in Abaza, which has independent question words (of sorts, see more details in Section 4) appearing as main predicates in pseudoclefts, as shown in example (7a). However, such independent question words in Abaza are optional, the same content being perfectly well expressed by verbal morphology, as in example (7b).

- (7) Abaza (Northwest Caucasian > Abkhaz-Abaza; own fieldwork data)
- a. [ájša j-χʷən-gəl-əw] [ačə-ja]?
 DEF.table REL.ABS-LOC-stand-PRS.NFIN **what-Q.N**
 'What is (lit. stands) on the table?' (lit. "That stands on the table what is it?")
- b. ájša j-χʷən-gəla-ja?
 DEF.table REL.ABS-LOC-stand-Q.N
 '=(7a)'

Importantly, as will be shown in greater detail in Section 4, the interrogative verbal morphology in Abaza is in most respects identical to that employed in relativization and thus wears its historical relationship to pseudoclefts on its sleeve.

Thus, Abaza is typologically outstanding in that it can express both focus and presupposition of content questions morphologically in the single polysynthetic verbal form. Hence, question formation in this language is not only a syntactic, but also – and primarily – a morphological phenomenon, or, to put it differently, the borderline between morphology and syntax is drawn in Abaza differently than in (most) other languages.

Despite the fact that basically the same morphological strategy of formation of content questions has been described for the closely related Abkhaz by Hewitt (1979a: 10–23), this typological *rarissimum* has remained unnoticed by typologists, not being mentioned in such surveys as Ultan (1978), Siemund (2001), and Velupillai (2012: 356–359); the only exception is Idiatov (2007: 271–278), whose discussion of Abaza is based on the rather limited data from Genko (1955: 105–107).² The goal of this paper is, first, to offer a more detailed and sophisticated description of the Abaza facts and, second, to discuss their possible typological and historical motivations.

As a side-note of caution, it is necessary to point out that the fully productive interrogative inflectional morphology of Abaza and Abkhaz should not be confused with the so called *interrogative verbs* like Mandarin *gànmá* ‘do.what’ (see Hagège 2008): the latter express interrogativity and often indefiniteness (Munro 2012) as part of their lexical meaning and always form closed classes. Northwest Caucasian languages do not have interrogative verbs of this type.

3 A brief introduction to Abaza

Abaza (*abáza bəzšá*, ISO 639–3 abq) is spoken by some 50,000 people, mainly in the Abazinsky district of the Karachay-Cherkess Republic in the Russian North Caucasus and in Turkey. In Russia, Abaza is one of the official languages of the Karachay-Cherkess Republic and has a written standard used in media including the internet. Its current use, however, is mostly limited to colloquial situations and rural environments. Most if not all speakers of Abaza in Russia are bilingual in Abaza and Russian, and many are also fluent in Kabardian (East Circassian); Abaza has experienced considerable influence from the latter, including lexical and even morphological borrowings as well as morpholexical and morphosyntactic calques. Even though Abaza is strictly speaking not endangered (classified by Ethnologue as “developing”),³ it, together with other local languages, undergoes constant pressure from Russian. The major dialect of Abaza is Tapanta, often considered to be the only “Abaza-proper” variant (cf. e. g. the genealogical tree of the Abkhaz-Abaza dialects in Chirikba 2003: 14).

The current paper is mainly based on the data collected in 2017 and 2018 in the village Inzhich-Chukun (*jənʒʹəgʹ-čʹkʹən*) of the Abazinsky district of the Karachay-Cherkess Republic during fieldtrips organized by the National Research University

² Another work specifically dealing with question formation in Abaza is the recent paper by Pazov (2016), written in Russian and not addressing typological issues.

³ <https://www.ethnologue.com/cloud/abq>

“Higher School of Economics” and the Russian State University for the Humanities (Moscow). Most examples are elicited, but data from a small collection of oral narratives recorded and annotated by the members of our research team as well as from published texts was also used. Published descriptions of Abaza include the grammars by Genko (1955) and Tabulova (1976) (in Russian), a short sketch by Lomtadidze, Klychev and Hewitt (1989) and a generative account of certain aspects of morphosyntax by O’Herin (2002) (in English).

Like all languages of the Northwest Caucasian family (see Lander & Testelefs 2017 on West Circassian; Arkadiev & Lander forthcoming for a general overview), Abaza is polysynthetic and predominantly morphologically ergative. Its basic morphosyntax is consistently head-marking, all arguments being expressed by prefixal pronominal markers on argument-taking expressions including verbs, possessed nouns and postpositions. By contrast, overt nominals cross-referenced by pronominal prefixes do not show any case marking. This is illustrated by examples (8a) and (8b), both coming from recorded narratives.

(8) Abaza (textual examples)

a. *j-šə-z-j-á-s-h^w-p̃*

3SG.N.ABS-2PL.IO-BEN-3SG.M.IO-DAT-1SG.ERG-say-NPST.DCL

‘I will tell this to him about you.’

b. *ph^wəs-k̄_i l-sabəj_j d_i-ʕa-l_i-q-áštələ-n*

woman-INDF 3SG.F.IO-child 3SG.H.ABS-DIR-3SG.F.IO-LOC-forget-PST.DCL

‘A woman forgot about her child.’

The Abaza verb also includes affixes expressing valency increase (causative and a host of applicatives, often with quite specific semantics, see O’Herin 2001), various evaluative, aspectual, modal, temporal and spatial meanings, as well as the independent vs. dependent status of predication. The schematic structure of the verbal complex is shown in Table 1.

The template shown in Table 1 is not 100% rigid, with some affixes appearing in different slots depending on their semantic scope and some slots, e. g. –8, –6 and +2, admitting multiple affixes. Form-meaning relations are quite complex, especially in the domains of tense-aspect, negation and finiteness, where multiple exponence and dependencies between non-adjacent slots are observed.

Abaza shows quite a robust division between morphology and syntax, at least in that the boundaries of grammatical verbal words are in most cases uncontroversial. Apart from a number of clearly delineated cases, every verbal form in Abaza starts with an absolutive prefix in slot –12 and ends in a suffix from one of the slots to the right of +3, with no proper part of this string being able to occur on its own. Besides that, wordhood criteria in Abaza include the

morphologically determined stress assignment (see Moroz 2018; cf. Spruit 1985 on Abkhaz) and a number of processes targeting elements on both sides of the root (such as negation and relativization, see e. g. Panova 2018).

Morphological ergativity in Abaza is primarily manifested in the distinction between the *absolutive* (intransitive S and transitive P) and the *oblique* (comprising ergative, i. e. transitive A, and indirect object, such as ditransitive R as well as the objects of applicatives) series of pronominal and relative markers, see Table 2 and examples (9a–d). Note the important distinction between human and nonhuman 3SgAbs markers.⁴

Table 2: Abaza pronominal prefixes.

	absolutive	oblique		absolutive	oblique
1Sg	<i>s(ə)-/z-</i>		1Pl	<i>h(ə)-/ʃ-</i>	
2SgM	<i>w(ə)-</i>		2Pl	<i>š(ə)-/ž-</i>	
2SgF	<i>b(ə)-/p-</i>		3Pl	<i>j(ə)-</i>	<i>r(ə)-/d(ə)-</i>
3SgM	<i>d(ə)-</i>	<i>j(ə)-</i>	REL	<i>j(ə)-</i>	<i>z(ə)-</i>
3SgF		<i>l(ə)-</i>			
3SgN	<i>j(ə)-/∅-</i>	<i>a-/na-</i>			

(9) Abaza (textual examples)

a. *h-bzáza-d*

1PL.ABS-live(AOR)-DCL

‘We lived.’

b. *awáʔa hə-ca-də-r-ça-χ-nəs*

there **1PL.ABS**-LOC-**3PL.ERG**-CAUS-lie-RE-PURP

‘so that they bury us there’

c. *j-rə-z-ʃá-ʃ-ga-ʧ*

3SG.N.ABS-3PL.IO-BEN-DIR-**1PL.ERG**-bring(AOR)-DCL

‘We brought it for them.’

d. *j-ʃa-hə-r-tə-n*

3SG.N.ABS-DIR-**1PL.IO**-3PL.ERG-give-PST

‘They gave it to us.’

Like all other Northwest Caucasian languages, Abaza formally distinguishes between stative and dynamic verbs. Stative verbs have an impoverished

⁴ The absolutive prefixes of the 3rd person singular non-human and 3rd person plural may be dropped, usually only if the corresponding noun phrase immediately precedes the verb.

paradigm (see below) and comprise a closed class of verbal predicates denoting posture, location, possession, and certain modal notions, as well as resultative derivatives of dynamic verbs; besides that, any non-verbal lexical stem assumes stative verbal inflection when used predicatively, see example (10). Dynamic verbs form an open class, including not only activities and events, but some state-denoting predicates as well, e. g. ‘know’.

(10) Abaza (textual example)

sará s-an d-adəg’á-b
 1SG 1SG.IO-mother 3SG.H.ABS-Circassian-NPST.DCL
 ‘My mother is Circassian.’

An important division exists in Abaza between “finite” and “non-finite”, or rather, declarative and non-declarative, verbal forms, cross-cutting the tense-aspect paradigm. The non-finite forms can be considered in some way morphologically basic, in that, first, some affirmative finite forms differ from the corresponding non-finite ones by the presence of special declarative markers, and, second, in that the non-finite paradigm serves as the basis for a much wider array of forms, such as relativization, converbs, non-declarative moods, as well as (partly) for both the finite and non-finite negative forms. Tables 3 and 4 show the affirmative and negative finite and non-finite forms of basic tenses for both stative and dynamic verbs.

Table 3: Affirmative finite vs. non-finite forms of major tenses.

		finite	non-finite
stative verbs	present	- <i>ḥ</i> /- <i>b</i> ^a	- <i>əw</i> ^b
	past	- <i>n</i>	- <i>z</i>
dynamic verbs	present	- <i>əj</i> - <i>ḥ</i>	- <i>wa</i> ^c
	orist	- <i>ḥ</i> /- <i>d</i> ^a	(- <i>z</i>)
	imperfect	- <i>wa-n</i>	- <i>wa-z</i>
	future I	- <i>wa-š-ḥ</i>	- <i>wa-š</i>
	future II	- <i>ḥ</i> /- <i>b</i>	- <i>ra</i>

^aIn the variant of Tapanta Abaza spoken in Inzhich-Chukun, the declarative endings have both glottalized and voiced variants, the latter being considered more colloquial.

^bThis marker is dropped before the non-human interrogative suffix *-ja*.

^cIn *a*-final stems, the sequence *a-wa* changes into *əw* [u] before certain affixes.

As can be seen from Table 4, the expression of negation in Abaza involves extended exponence in the finite forms, with the general variable-position

Table 4: Negative finite vs. non-finite forms of major tenses.

		finite	non-finite
stative verbs	present	g' - Π - Σ - m	Π - Σ - m
	past	g' - Π - Σ - $m\grave{a}$ - z - \grave{t}	Π - Σ - $m\grave{a}$ - z
dynamic verbs	present	g' - Π - Σ - wa - m	Π - m - Σ - wa
	aorist	g' - Π - m - Σ - \grave{t}	Π - m - Σ
	imperfect	g' - Π - m - Σ - wa - z - \grave{t}	Π - m - Σ - wa - z
	future I	g' - Π - Σ - wa - $\grave{s}\grave{a}$ - m	Π - m - Σ - wa - \grave{s}
	future II	g' - Π - Σ - $r\grave{a}$ - m	Π - m - Σ - $r\grave{a}$

negative marker *-m-* supplemented by the negative prefix *g'* occurring in slot –11 and incompatible with those markers of subordination that occupy the same slot. The negation prefix is absent from all non-finite and, more broadly, non-declarative forms (including e. g. the imperative), regardless of whether they have any subordination prefix. The only exception to this rule is the negative polar interrogative forms, which combine non-finite tense-aspect morphology with prefixal negation (see Section 4.1).

Crucial for the analysis of content questions in Abaza is the formation of relative verbal forms. The Northwest Caucasian type of relativization, described by Hewitt (1979b) and Kibrik (1992) for Abkhaz and Caponigro and Polinsky (2011) and Lander (2010, 2012) for West Circassian, and, rather preliminarily, by O'Herin (2002: Ch. 8) for Abaza, involves markers of relativization forming part of the pronominal prefix system and occupying the same slots in the verbal template as the genuine person-number-gender markers (cf. the notion of “wh-agreement”, Chung 1994; O'Herin 2002: Ch. 8; also see Lander & Daniel 2019, for a typological interpretation of this relativization strategy). The relative prefixes are *j-* for the absolutive and *z-* for the oblique (cf. Table 2 above). Relativization is expressed by verbal forms from the non-finite paradigm with the slot that corresponds to the relativized argument occupied by a relative prefix, see examples (11a-d). The relative clause itself may either follow or precede the nominal head.

(11) Abaza (elicited)

a. *a-ph^w\acute{a}s\acute{p}a \acute{c}a j-l\acute{a}-s-t-\acute{t}*

DEF-girl apple 3SG.N.ABS-3SG.F.IO-1SG.ERG-give(AOR)-DCL

'I gave an apple to the girl.'

b. *a-\acute{c}\acute{a}; [a-ph^w\acute{a}s\acute{p}a j_i-l\acute{a}-s-t\grave{a}-z]*

DEF-apple DEF-girl REL.ABS-3SG.F.IO-1SG.ERG-give-PST.NFIN

'the apple I gave to the girl'

- c. *a-ph^wáspa_i* [çá z_i-s-tə-z]
 DEF-girl apple [3SG.N.ABS]REL.IO-1SG.ERG-give-PST.NFIN
 ‘the girl whom I gave an apple’
- d. *á-ç^wǰən_i* [*a-ph^wáspa çá ló-z_i-tə-z*]
 DEF-boy DEF-girl apple [3SG.N.ABS]3SG.F.IO-REL.ERG-give-PST.NFIN
 ‘the boy who gave an apple to the girl’

Relative clauses in Abaza often occur without a nominal head; such headless relative clauses are used as noun phrases referring to appropriate participants, cf. examples (12a–b).

(12) Abaza (textual examples)

- a. [*wəžəð jə-r-čpa-wá*] *máč[’]-p* *awəj*
 now REL.ABS-3PL.ERG-do-IPF little-NPST.DCL DIST
 ‘What they do now is just a little.’
- b. [*alláh jə-z-la-jə-h^wa-z*]
 god 3PL.ABS-REL.IO-INS-3SG.M.IO-ask-PST.NFIN
ʕa-rə-da-h^w-t
 DIR-3PL.IO-LOC-arrive(AOR)-DCL
 ‘They got what they had asked God about.’

In addition to the relativization of arguments, relativization of adjuncts, i. e. elements normally not cross-referenced in the predicate, such as temporal, locative and manner modifiers, is also possible and is achieved by adverbial relativization prefixes in the slot –11, see examples in (13). When used without a relativized nominal, such forms head locative, temporal, manner and some other subordinate clauses; hence, these prefixal markers may be considered adverbial subordinators.

(13) Abaza (textual examples)

- a. [*q^wərǰəq^w an-s-χ-əw-z*] *ásqan*
 service REL.TEMP-1SG.ERG-carry-IPF-PST.NFIN time
 ‘at the time I was at the military service’
- b. [*h-ʔa-n-χa-wá*] *ápχ’arta*
 1PL.ABS-REL.LOC-LOC-work-IPF DEF.school
 ‘the school where we work’
- c. *a-sabəj-k^wa...* *á-rqa a-pnə*
 DEF-child-PL DEF-field 3SG.N.IO-to
jə-š-ná-r-g-wa-z
 3PL.ABS-REL.MNR-DIR-3PL.ERG-bring-IPF-PST.NFIN
 ‘how they brought children to the field’

Now we are prepared to embark on a detailed discussion of interrogative verbal forms in Abaza.

4 Interrogative verbal forms in Abaza

Interrogative verbal forms in Abaza are primarily classified into polar interrogative forms and content interrogative forms, with the latter being further subdivided into argument interrogatives and adjunct interrogatives. In this section I will discuss all of them in turn, starting with polar interrogatives in subsection 4.1 and going to the two types of content interrogatives in subsections 4.2 and 4.3. In subsection 4.4 special properties of questions in complex clauses will be discussed.

4.1 Polar interrogatives

Polar interrogatives are formed by attaching the interrogative ending *-ma* (slot + 7) to non-finite tense-aspect forms; the cross-referencing of arguments remains intact. Examples (14a) and (14b) show the corresponding present tense declarative and interrogative forms for stative verbs, here formed on the basis of a nominal root borrowed from Russian.

(14) Abaza (textual examples)

a. *s-górec-ǰ*

1SG.ABS-highlander-NPST.DCL

‘I am a highlander.’

b. *wə-górec-əw-ma*

2SG.M.ABS-highlander-PRS.NFIN-Q

‘Are you a highlander?’

Examples below show polar interrogatives based on different tense forms of dynamic verbs: present in (15a), aorist in (15b), imperfect in (15c), and future in (15d).

(15) Abaza

a. *w-na-ʒ-əw-ma*

a-žʷánd a-qáχʷ

2SG.M.ABS-DIR-reach-IPF-Q DEF-sky 3SG.N.IO-surface

‘Does one (lit. you) reach the sky?’ (textual example)

b. *a-sažámšʷa-kʷa b-ʷə-ma*

DEF-letter-PL 2SG.F.ERG-write(AOR)-Q

‘Did you write the letters?’ (elicited)

- c. *s-anâ-câ* *âsqan*
 1SG.ABS-REL.TEMP-sleep time
jâ-z-dâr-ç-wa-z-ma *š'ta*
 3SG.N.ABS-1SG.ERG-know-RE-IPF-PST.NFIN-Q PTCL
 'How could I remember it when I had fallen asleep?' (textual example)
- d. *ârsa* *h-š'î-â-zl-âw-š-ma*
 this.way 1PL.ABS-lie-DYN-IPF-FUT-Q
 'Will we keep lying down this way?' (textual example)

Negative polar interrogatives in Abaza differ from all other forms of the non-finite paradigm in obligatorily featuring the negative prefix *g'*-, cf. a textual example in (16) and a minimal pair in (17) showing that the omission of this prefix leads to ungrammaticality.

- Abaza
- (16) *wâ-g'â-m-pçâš'-âw-ma*
 2SG.M.ABS-NEG-NEG-be.ashamed-IPF-Q
 'Aren't you ashamed?' (textual example)
- (17) *açč'â* **(g'-)bâ-ma-m-ma*
 DEF.money *(NEG-)2SG.F.IO-have-NEG-Q
 'Don't you have money?' (elicited)

As such, the Abaza polar interrogative verbal forms do not present anything special; as already mentioned above, it is fairly common for the languages of the world to encode polar interrogatives by means of verbal morphology. Other Northwest Caucasian languages are no exception to this; consider examples (18) from West Circassian and (19) from Ubykh, also showing dedicated interrogative endings closing the verbal form.

- (18) West Circassian (textual example)
sâ-qe-w-e-leb^w-a, *t-jat?*
 1SG.ABS-DIR-2SG.ERG-DYN-see-Q 1PL.PR-POSS+father
 'Do you see me, father?'
- (19) Ubykh (Fenwick 2011: 133; transcription and glossing adapted)
k^wénje-be *š^w-k'e-bžé-âe-ne-š*
 Konya-LOC 2PL.ABS-go-EMP-PST-PL-Q
 'Have you (pl) ever been to Konya?'

4.2 Content interrogatives I: Argument questions

Questions targeting arguments, i. e. participants encoded as absolutive, ergative, indirect object, or indirect objects introduced by the numerous applicatives, are formed on the basis of argument relativization. The syntactic role of the question variable is indicated by a relative prefix in the relevant position, and the interrogative status of the verbal form is indicated in slot +7 by one of the two suffixes additionally encoding the human (*-da*) vs. non-human (*-ja*) class of the variable. Note that these suffixes are formally similar to the 3rd person absolutive prefixes of the human (*d-*) and non-human (*j-*) class, respectively (this issue will be further discussed in Section 5).

Below I provide both elicited and textual examples of argument interrogatives for all relevant syntactic positions. Examples (20a,b) show the absolutive S of an intransitive verb, and examples (21a,b) the absolutive P of transitive verbs. In both cases the absolutive slot –12 is occupied by the relative prefix *j-*.

Abaza (elicited)

- (20) a. *j-ʕa-ka-ʂá-ja?*

REL.ABS-DIR-LOC-fall(AOR)-Q.N

‘What fell?’

- b. *j-ʕa-ka-ʂá-da?*

REL.ABS-DIR-LOC-fall(AOR)-Q.H

‘Who fell?’

- (21) a. *jə-b-bá-da?*

REL.ABS-2SG.F.ERG-see(AOR)-Q.H

‘Whom did you (woman) see?’

- b. *j-ʕá-b-g-ja?*

REL.ABS-DIR-2SG.F.ERG-bring(AOR)-Q.N

‘What did you bring?’

Turning to the positions marked with the relative prefix *z-*, consider examples (22a,b) with the transitive A in the ergative slot and examples (23a,b) with the indirect object of a ditransitive and an intransitive verb.

Abaza (elicited)

- (22) a. *w-ʕa-z-rə-há-ja?*

2SG.M.ABS-DIR-REL.ERG-CAUS-fear(AOR)-Q.N

‘What frightened you (man)?’

- b. *wə-z-bá-da?*
 2SG.M.ABS-REL.ERG-see(AOR)-Q.H
 ‘Who saw you (man)?’

- (23) a. *aráj a-k'táp zə-b-tá-da?*
 PROX DEF-book REL.IO-2SG.F.ERG-give(AOR)-Q.H
 ‘Whom did you (woman) give this book?’
 b. *wə-z-pš-wá-ja?*
 2SG.M.ABS-REL.IO-look-IPF-Q.N
 ‘What are you (man) looking at?’

Questions targeting the objects of applicatives are formed in the same way, i. e. by placing the relative prefix *z-* in front of the applicative prefix, i. e. to the position occupied by prefixes cross-referencing the applied indirect object. Consider examples (24a) with the benefactive,⁵ (24b) with the malefactive, (24c) with the comitative, and (24d) with the instrumental.

- (24) Abaza
- | | |
|---|---------------------------|
| a. <i>jə-z-zə-w-h^w-əw-š-ja</i> | <i>j-rə-wa-ta</i> |
| 3SG.N.ABS-REL.IO-BEN-2SG.M.ERG-say-IPF- | 3SG.N.ABS-3PL.IO-be.part- |
| FUT-Q.N | ADV |
| <i>a-wəs-naq^w-za-k^wa?</i> | |
| DEF-thing-base-INTF-PL | |
| ‘About what will you say that it is of the worst things?’ (AMPPR: 14) | |
| b. <i>wə-z-č-ša-wá-ja?</i> | |
| 2SG.M.ABS-REL.IO-MAL-fear-IPF-Q.N | |
| ‘What do you (man) fear (lit. against)?’ (elicited) | |
| c. <i>bə-z-c-náq^wa-wa-da?</i> | |
| 2SG.F.ABS-REL.IO-COM-walk-IPF-Q.H | |
| ‘With whom do you (woman) walk?’ (elicited) | |
| d. <i>səwp z-la-râ-z-wa-ja?</i> | |
| soup REL.IO-INS-3PL.ERG-drink-IPF-Q.N | |
| ‘What do people eat soup with?’ (elicited) | |

Relative forms in Abaza can optionally attach the plural suffix *-k^wa* in the slot +3, see example (25), and the interrogative forms do so as well, see examples (26a) (= 1) with the question about the absolutive and (26b) with the question about the

⁵ The use of the benefactive applicative to introduce the “topic” with verbs of speech is common across Northwest Caucasian languages.

Questions like ‘Which book did you read?’ are based on predicates ‘be like’ or ‘belong’, which occur as pronominal modifiers to the head noun, with which they form a single nominal complex behaving in many respects like a grammatical word, as do most non-possessive modifiers in the Northwest Caucasian languages (see e. g. Lander 2017 on West Circassian). The question targets the indirect object of these predicates, whose slot is occupied by the relative prefix, and the non-human interrogative suffix occurs at the end of the whole complex, i. e. on the head noun. The sentence, as in questions about the possessor of an argument, forms a pseudocleft with the main predicate relativized, see examples (31a,b). Alternatively, ‘be like’ can form the complete predicate by itself without combining with the head noun, as in example (31c).

(31) Abaza

- a. **z-apš-wás-ja** [wa á-mara
REL.IO-be.like–thing-**Q.N** 2SG.M DEF-sun
z-kʷə-w-mə-r-ḱka-rə-z?
REL.IO-LOC-2SG.ERG-NEG-CAUS-shine-FUT.NFIN-PST.NFIN
 ‘What kind of things wouldn’t you (man) let the sun shine upon?’ (lit. Like what are the things that you wouldn’t let the sun shine upon?) (AMPPR: 14)
- b. **d-z-aĉ-phʷáspa-ja** [sə-z-ba-más z-taq-áw]?
 3SG.H.ABS-**REL.IO-belong**– 1SG.ABS-**REL.ERG**-see- **REL.IO-need-PRS.**
 girl-**Q.N** PURP NFIN
 ‘Which girl wants to see me?’⁶ (elicited)
- c. **d-z-apšə-ja** a-phʷáspa [bzəj
 3SG.H.ABS-**REL.IO-be.like-Q.N** DEF-girl good
wə-z-ba-wa?
 2SG.M.ABS-**REL.ERG**-see-IPF
 ‘Which girl loves you?’ (lit. What is the girl like who loves you?) (elicited)

In a similar fashion, questions about quantity are formed by means of a specialized lexical item *ʔara* tentatively glossed ‘as much’, which takes an indirect object relative prefix and either forms a nominal complex with its head noun, the remainder of the clause being relativized, as in example (32a), or functions like a postposition yielding an analytic interrogative, as in example (32b).

⁶ The issue of multiple relative prefixes in (31b) will be discussed in Section 4.4.

(32) Abaza

a. *z-ʔara-ápx'aga-ja* *bə-z-pχ'á-z?*

REL.IO-as.much–book-**Q.N** 2SG.F.ABS-REL.IO-read-PST.NFIN

‘How many books have you read?’ (lit. How many books are such that you read?) (elicited)

b. *abaza-alfavit a-harəf-k^wa* *z-ʔara* *j-na-za-wa-ja?*

Abaza– 3SG.N.IO-letter- **REL.IO-as.** 3PL.ABS-DIR-reach-IPF-
alphabet PL **much** **Q.N**

‘How many letters are there in the Abaza alphabet?’ (ARPC)

In addition to the interrogative verbal forms described above, Abaza argument questions can be formed by means of independent interrogative words (corresponding to ‘what’ and ‘who’) occurring as predicates in pseudocleft structures, as shown in example (7a) above and in some further examples below. However, on closer inspection, these independent question words turn out to be either genuine interrogative verbal forms based on the root ‘belong’ (see e.g. Genko 1955: 105), like *d-z-ačə-ja* ‘who’, lit. ‘what does s/he belong to’, in example (33a), or transparently historically going back to such forms, like the slightly decategorized *ačə-ja* ‘what’ in example (33b) or the phonologically eroded *də-z-da* ‘who’, synchronically consisting of the human absolutive prefix, the relative indirect object prefix, and the human interrogative suffix, see example (33c) (see also Pazov 2016, who, among other things, argues that *də-z-da* and its fuller variant *d-a-z-əw-da* ‘who’ go back to the root *-wa-* ‘be part of’). Note that the argument question markers *-ja* and *-da* occur on these interrogative words and not on the lexical predicate. This naturally follows from the pseudoclefted structure of these constructions: the main predicate of the pseudocleft is the interrogative word furnished with the question marker, while the remainder of the sentence is a headless relative clause.

(33) Abaza (textual examples)

a. *š'ta awəj ašan d-z-ačə-ja*

PTCL DIST then 3SG.H.ABS-REL.IO-belong-**Q.N**

j-z-lə-r-b-əw-š?

3SG.N.ABS-**REL.IO**-3SG.F.ERG-CAUS-see-IPF-FUT

‘Whom will she show it then?’

b. *ačə-ja, š'ta, wəzə-g'əj j-ŋa-wə-z-t-wa*

belong-Q.N PTCL now-ADD 3SG.N.ABS-DIR-2SG.M.IO-**REL.ERG**-give-IPF

g^wəɾŋ^wará?

grief

‘What makes you grief?’ (lit. What is it that gives you grief?) (AMPFR: 15)

- c. *jə-z-dār-ra* *a-taq-əw*
 3SG.N.ABS-REL.ERG-know-MSD 3SG.N.IO-need-PRS.NFIN
də-z-dá?
3SG.H.ABS-REL.IO-Q.H
 ‘Who should know it?’

Such interrogative words can even inflect for tense, consider example (34) with the past tense suffix:

- (34) Abaza (textual example)
jə-h-č’p-əw-šə-z *ačə-z-ja* *š’ta?*
REL.ABS-1PL.ERG-do-IPF-FUT-PST.NFIN **belong-PST-Q.N** PTCL
 ‘What would we have done?’ (lit. What was it that we would have done?)

Thus even if it is legitimate to say that Abaza has independently occurring question words, which are used on a par with and perhaps even more frequently than the purely morphological interrogative forms, the affinity of these question words to the productive system of interrogative verbal morphology is still quite transparent. This is manifested not only in their morphological makeup and syntactic behaviour, but also in the fact that such items do not have any non-interrogative uses – in sharp contrast with e.g. Circassian question words, which not only have nothing in common with verbs in form, but also have prominent non-interrogative, i.e. indefinite, uses (see Kapitonov 2009; Nikolaeva 2012: 5–51), cf. examples (35a,b).

- (35) West Circassian (textual examples)
- a. *səd-a p-šə-re-r?*
what-Q 2SG.ERG-do-DYN-ABS
 ‘What are you doing?’
- b. *səd ja-s-ʔ^we-ž’ə-me,*
what 3PL.IO+DAT-1SG.ERG-say-RE-COND
wə-z-ke-reze-n?
 2SG.ABS-1SG.ERG-CAUS-glad-MOD
 ‘If I tell them something, will I make you happy?’

4.3 Content interrogatives II: Adjunct questions

Adjunct interrogative forms in Abaza are formally quite distinct from argument interrogative ones; nevertheless, they ultimately employ the same logic. The basis

An exception to this pattern is constituted by questions about purpose and reason, which follow the argument question model at least in that they employ the non-human interrogative suffix *-ja* instead of the adverbial interrogative prefix *-ba-*. The marker of purpose/reason is the prefix *z-* in slot –11, probably going back to the combination of the benefactive *z-* with the indirect object relative prefix *z-*. Example (37a) shows a reason non-finite form in a non-interrogative function, and example (37b) illustrates an interrogative form based thereupon. Both examples come from the same text, (37a) in fact being part of the answer to the question in (37b).

(37) Abaza (textual examples)

a. *awəj ák^w-p̣ jə-z-ʕa-s-m-áχ^wə-z*

DIST COP-NPST 3PL.ABS-**REL.RSN**-DIR-1SG.ERG-NEG-take-PST

‘That’s why I didn’t bring them here.’

b. *awása wə-nbž’aʕ^v-ča-k^wa z-ʕá-wə-m-d-ja?*

but 2M.IO-friend-PL.H-PL **REL.RSN**-DIR-2SG.M.ERG-NEG-lead-Q.N

‘But why didn’t you bring your friends here?’

Cross-linguistically, the pattern of encoding of purpose and reason questions similarly to questions about beneficiary is fairly common, cf. Lithuanian *kam* ‘to whom; what for’; see also Schmidtke-Bode (2010).

As to independent adverbial interrogatives of the kind shown above for argument interrogatives, it is fairly safe to say that Abaza has none. Despite the fact that in elicitation native speakers sometimes produce adjunct interrogative forms of the copula with the remaining part of the clause encoded as the corresponding adjunct relative, as in example (38), such forms only very rarely occur in texts.

(38) Abaza (elicited)

j-a-bá-k^w-əw

w-ʔa-bzáza-wa?

3SG.N.ABS-**REL.LOC-Q.ADV**-COP-NPST.NFIN 2SG.M.ABS-REL.LOC-live-IPF

‘Where do you live?’, lit. ‘Where is it where you live?’ (example courtesy of Anastasia Panova)

I would like to conclude this section by an observation that the strategy of encoding content questions found in Abaza naturally precludes formation of multiple interrogatives of the kind *Who bought what?* or *Where did who go?*. Indeed, since no more than one morphosyntactic position can be relativized at a time in the verbal morphology of Abaza (the only exception to this rule is the situations when distinct argument positions are referentially co-indexed, see

adjunct relative. Attaching any of the interrogative markers to such relatives leads to ungrammaticality, as shown in (40b).

(40) Abaza

a. [a-zə́ j-hə-z-ná-χa-z]

DEF-water **REL.ABS-1PL.IO-BEN-3SG.N.ERG-do-PST.NFIN**

gʷə-r-dá-ra-m

NEG-3PL.ERG-know-NEG

‘They don’t know what water did to us.’ (textual example)

b. sará də́-z-dər-ə́j-d [ça z-m-əw(*-da)]

1SG 3SG.H.ABS-1SG.ERG-know-PRS-DCL apple **REL.IO-have-PRS.NFIN(*-Q.H)**

‘I know who has apples.’ (elicited)

c. wə́žəjnás jə́-z-dər-p̄

hereafter 3SG.N.ABS-1SG.ERG-know-NPST.DCL

[nbžʷaΓʷ jə́-šə́-j-šʷta-nə́qʷ-ə́w-š]

friend 3SG.N.ABS-**REL.MNR**-3SG.M.IO-LOC-walk-IPF-FUT

‘From now on I’ll know how to behave with friends.’ (textual example)

Note that with argument embedded questions the human vs. non-human class of the relativized participant is indicated not on the embedded verb, but by the appropriate cross-referencing prefix in the matrix predicate, contrast the human absolutive prefix *də́-* in (40b) with the non-human absolutive prefix *jə́-* in (41).

(41) Abaza (elicited)

j-ka-sá-z jə́-w-dər-ə́w-ma?

REL.ABS-LOC-fall-PST.NFIN 3SG.N.ABS-2SG.M.ERG-know-PRS.NFIN-Q

‘Do you (man) know what fell down?’ (elicited)

Embedded alternative questions do not employ the interrogative verbal forms, either. Embedded propositions with an unknown truth value are encoded either as a conjunction of the positive and negative versions of the same clause, as in example (42a), or by means of the conditional converb, as in example (42b). The use of polar interrogative forms in *-ma* in any of these contexts leads to ungrammaticality.

(42) Abaza (elicited)

a. j-ŋa-s-á-bə́-m-hʷ-ə́w-ma

3SG.N.ABS-DIR-1SG.IO-DAT-2SG.F.ERG-NEG-say-IPF-Q

(46) Abaza (elicited)

a. *ápχ'arta s-c-əj-ʈ [arápχ'aʃ^w*
 DEF.school 1SG.ABS-go-PRS-DCL DEF.teacher
də-z-ba-más]
 3SG.H.ABS-1SG.ERG-see-PURP

'I am going to school in order to see the teacher.'

b. [*jə-w-ba-más]* *ápχ'arta*
REL.ABS-2SG.M.ERG-see-PURP DEF.school
w-zə-z-ca-wá-da?
 2SG.M.ABS-**REL.IO-BEN-go-IPF-Q.H**

'In order to see whom do you go to school?' (lit. For whom do you go to school to see (them)?)

On the basis of the above data it is possible to offer a tentative generalization that relativization in the matrix clause is required when the embedded clause containing the questioned participant does not occupy the absolutive position. This is confirmed by the data on relativization proper, compare example (47a) with the verb 'want' (no relativization in the matrix) and (47b) with the verb 'start' (obligatory relativization in the matrix and optional in the embedded clause).

(47) Abaza (elicited)

a. *sará arəj ápχ'aga w-aš'á j-ák^w-p̄*
 1SG PROX DEF.book 2SG.M.IO-brother 3SG.M.IO-COP-NPST.DCL
jə-z-s-tə-χə-məs s-taq-əw
 3SG.N.ABS-**REL.IO-1SG.ERG-give-RE-PURP** 1SG.IO-want/need-PRS.NFIN

'It is your brother whom I want to give this book.'

b. *abár ápχ'aga [jacə*
 here DEF.book yesterday
s-á-pχ'a-məs / sə-z-pχ'a-məs sə-z-la-gá-z]
 1SG.ABS-**3SG.N.IO-read-PURP** / 1SG.ABS-**REL.** 1SG.ABS-**REL.IO-LOC-begin-**
IO-read-PURP PST.NFIN

'Here is the book that I started reading yesterday.'

The obligatory indexing of the relativized participant of embedded clauses in the matrix verb has been described for Abkhaz by Hewitt (1979b: 168–182) and for West Circassian by Lander (2009: 631–643). However, Abaza differs from Abkhaz in that in the latter such relativization is required regardless of the position of the embedded clause – e. g. the Abkhaz matrix verb 'want, need' takes the absolutive relative prefix, while the embedded verb remains intact, cf. example (48), which is a mirror-image of the Abaza pattern in (47a).

- (48) Abkhaz (Hewitt 1979b: 172; transcription and glossing adapted)
[d-bô-l-ta-rc] *jô-s-taχ-əw*
3SG.H.ABS-2SG.M.IO-3SG.F.ERG-give-PURP REL.ABS-1SG.IO-need-PRS.NFIN
a-wauǰ
 DEF-man
 ‘The man whom I want her to give to you.’

If we now turn to adjunct questions, we observe a still more surprising situation. First, native speakers tend to favour constructions where only the matrix verb bears relative and interrogative morphology, even though the question variable belongs to the embedded clause, consider examples (49a,b) with the questions about place with the verbs ‘want’ and ‘begin’.¹⁰

- (49) Abaza (elicited)
 a. *w-bzázə-məs* *j-a-bá-w-taq-əw?*
 2SG.M.ABS-live-PURP 3SG.N.ABS-**REL.LOC-Q.ADV**-2SG.M.IO-need-PRS.NFIN
 ‘Where do you want to live?’
 b. *wə-n-χa-wá* *w-a-bá-la-ga?*
 2SG.M.ABS-LOC-work-IPF 2SG.M.ABS-**REL.LOC-Q.ADV**-LOC-begin(AOR)
 ‘Where did you start working?’

The alternative pattern which some of my consultants allow with the verb ‘want, need’ features both the embedded and the matrix verb bearing relative and interrogative prefixes, consider example (50a), parallel to example (49a), and example (50b) with the same predicate used as a deontic modal.

- (50) Abaza (elicited)
 a. %*w-a-bá-bzazə-məs*
 2SG.M.ABS-**REL.LOC-Q.ADV**-live-PURP
j-a-bá-w-taq-əw?
 3SG.N.ABS-**REL.LOC-Q.ADV**-2SG.M.IO-need-PRS.NFIN
 ‘=(49a)’
 b. %*ruslân d-an-bá-ŋa-gəl-ra*
 Ruslan 3SG.H.ABS-**REL.TEMP-Q.ADV**-DIR-stand-MSD
an-bá-taq-əw?
REL.TEMP-Q.ADV-need-PRS.NFIN
 ‘When should Ruslan get up?’

¹⁰ An anonymous reviewer suggests that this situation can be indicative of clause union or restructuring. At present, however, I have no independent evidence that would speak in favour of such an analysis.

In non-interrogative constructions involving relativization, both options are attested with the verb ‘need, want’, i. e. relativization just on the matrix verb, as in example (51a), and both on the matrix and the embedded verb, as in examples (51b).

(51) Abaza (elicited)

a. *wará aráj a-pájš’ ak^w-p wá-ê-ra*
 2SG.N PROX DEF-ROOM COP-NPST.DCL 2SG.M.ABS-sleep-MSD

ʔa-taq-áw

REL.LOC-need-PRS.NFIN

b. *wará aráj a-pájš’ ak^w-p w-ʔá-ê-ra*
 2SG.N PROX DEF-ROOM COP-NPST.DCL 2SG.M.ABS-REL.LOC-sleep-MSD

ʔa-taq-áw

REL.LOC-need-PRS.NFIN

‘a=b It’s this room that you should sleep in.’

Such doubling of the interrogative morphology is marginally attested in other complement constructions as well, e. g. with the verb ‘say’ in example (52a), but consistently rejected with others, like with the verb ‘begin’ in example (52b).

(52) Abaza (elicited)

a. *%w-ába w-a-bá-êa-zla-rmäs*
 2SG.N.IO-father 2SG.M.ABS-REL.LOC-Q.ADV-sit-DYN-PURP

j-a-bá-j-h^wa-z?

3SG.N.ABS-REL.LOC-Q.ADV-3SG.M.ERG-say-PST.NFIN

‘Where did your father tell you to sit?’

b. **w-a-bá-n-χa-wa w-a-bá-la-ga?*
 2SG.M.ABS-REL.LOC-Q.ADV-LOC- 2SG.M.ABS-REL.LOC-Q.ADV-LOC-

work-IPF

begin(AOR)

intended: ‘Where did you start working?’ (cf. 49b)

Note that the option of omitting the adverbial interrogative prefix from any of the verbs, matrix and embedded alike, leaving it with just the appropriate adverbial relativizer, is consistently rejected. Such doubling of interrogative morphology, although reminiscent of the so-called *wh*-scope marking attested in various languages (see e. g. Dayal 1994, Dayal 2000),¹¹ remains puzzling in the context of Abaza.

¹¹ I thank an anonymous reviewer for pointing this out.

4.4.3 Multiple relativization with shared arguments

Northwest Caucasian languages have a rather peculiar morphosyntactic rule requiring that all pronominal indexes coreferential to the relativized argument (including, of course, arguments targeted in questions) be substituted by the appropriate relative prefixes – the so-called multiple relativization (see O’Herin 2002: 264–265 for Abaza, Hewitt 1979b: 163, 167 for Abkhaz, and especially Lander 2009 for West Circassian). The peculiarity of multiple relativization lies in that, first, it creates a situation when a morphosyntactic operation targeting a clause also affects clauses subordinate to it, and, second, it tracks co-reference relations not marked explicitly without relativization. In more technical terms, multiple relativization overtly marks relations of syntactic operator-binding, which in other environments are often left implicit.

Multiple relativization may operate in three types of domains, viz. in complex clauses with shared participants, in simple clauses with a coreference relation between the possessor of an argument and its co-argument, and even in single verbal forms. Let us first consider simple clauses. Example (53a) shows a clause with a possessed argument; the 3rd person possessor prefix on the nominal allows both a bound (‘his own’) and a free (‘someone else’s’) interpretation. When a question targeting the absolutive argument of this sentence is formed, there are two marking options for the possessor of the locative phrase: either with the personal prefix and an obligatorily free interpretation in (53b), or with the relative prefix and an obligatorily bound reading in (53c). Thus multiple relativization effectively disambiguates between the two readings available for simplex clauses.

(53) Abaza (elicited)

- a. $j_{i/j}$ -*pájsʹ* *da*_i- Γ^w *na-ĉá-b*
3SG.M.IO-room **3SG.H.ABS**-LOC-sit-NPST.DCL
 i. ‘S/he_i stays in his_j (someone else’s) room.’
 ii. ‘He stays in his own room.’
- b. $j_{j/*i}$ -*pájsʹ* *ja*_i- Γ^w *na-ĉ-áw-da?*
3SG.M.IO-room **REL.ABS**-LOC-sit-PRS.NFIN-Q.H
 ‘Who_i stays in his_j (someone else’s) room?’
- c. $z_{j/*i}$ -*pájsʹ* *ja*_i- Γ^w *na-ĉ-wá-da?*
REL.IO-room **REL.ABS**-LOC-sit-PRS.NFIN-Q.H
 ‘Who_i stays in his/her_i own room?’

The same occurs in complex clauses, consider examples (54a–c) with the matrix verb ‘want’:

(54) Abaza (elicited)

- a. *d_{i/j}-sə-c-na-jə-məs* *jə-l_i-taqə-b*
3SG.H.ABS-1SG.IO-COM-DIR-go-PURP **3SG.N.ABS-3SG.F.IO-need-NPST.DCL**
 i. ‘She wants to go with me.’
 ii. ‘She wants him/her to go with me.’
- b. *d_{j/*i}-sə-c-na-jə-məs* *jə-z_i-taq-əw-da?*
3SG.H.ABS-1SG.IO-COM-DIR-go-PURP **3SG.N.ABS-REL.IO-need-PRS.NFIN-Q.H**
 ‘Who_i wants him/her_{j/*i} to go with me?’
- c. *j_{i/*j}-sə-c-na-jə-məs* *jə-z_i-taq-əw-da?*
REL.ABS-1SG.IO-COM-DIR-go-PURP **3SG.N.ABS-REL.IO-need-PRS.NFIN-Q.H**
 ‘Who wants to go with me?’

Finally, the same phenomenon can be observed within single verbal forms. Reflexivization of verbs with indirect objects is expressed by doubling the relevant pronominal prefix, as in example (55a); in accordance with the multiple relativization rule, in relative and interrogative forms targeting the subject of such verbs the relative prefix is also doubled, see example (55b).

(55) Abaza (elicited)

- a. *hará čəc-ra š’árda h_i-hə_i-r-dăr-d.*
 we new-MSD many **1PL.IO-1PL.ERG-CAUS-know(AOR)-DCL**
 ‘We learned (lit. caused ourselves to know) a lot of new things.’
- b. *awəj z_i-zə_i-r-dăr-wa-z-da?*
 that **REL.IO-REL.ERG-CAUS-know-IPF-PST.NFIN-Q.H**
 ‘Who learned that?’

This does not occur in absolutive (direct-object) reflexives, which employ the reflexive prefix č-; the latter is not substituted by the relative prefix, see examples in (56). On reflexivization in Abaza see Arkadiev & Durneva (submitted).

(56) Abaza (elicited)

- a. *a-Γ^wəga a-pnə čə-z-ba-χ-əj-ť*
 DEF-mirror 3SG.N.IO-at RFL.ABS-1SG.ERG-see-RE-PRS-DCL
 ‘I see myself in the mirror.’
- b. *zən-g’əj a-Γ^wəga a-pnə*
 one.time-ADD DEF-mirror 3SG.N.IO-at
čə-zə-m-bá-s-da?
RFL.ABS-REL.ERG-NEG-see-NONDUM-Q.H
 ‘Who has never seen oneself in the mirror?’

5 Discussion and conclusions

Having described the formation of interrogative verbal forms in Abaza, with primary attention to content questions, let us now discuss its typological significance and possible historical origins.

5.1 A typological *rarissimum*

It is clear that the expression of content questions by means of productive affixal morphology found in Abaza and, *mutatis mutandis*, in Abkhaz, is typologically uncommon if not downright unique (see Plank 2018 for a discussion of the possible causes of the rarity of interrogative inflection). The only other languages reported in the literature where *some* content interrogatives are expressed by verbal morphology is Baure (Arawak, Danielsen 2007: 368–370) and Marind (Anim, Olsson 2017: 556–557), see examples (57a) with a nominalization in Baure and (58a) with an interrogative auxiliary construction in Marind. In both of these, the synthetic interrogative constructions are restricted to just a small subset of content questions (location in Baure and manner in Marind), with the majority of questions employing some type of independent interrogative words, cf. examples (57b) and (58b). Note that in both synthetic and analytic interrogative constructions Baure and Marind employ similar verbal morphology, i. e. nominalization (Baure) and “locative orientation” and dedicated interrogative marking (Marind).

(57) Baure (Arawak, Bolivia; glossing slightly adapted)

a. **pi=toraki-yi-no** *te* *him* *čo-po-ča?*
 2SG=find-LOC-NML DEM.M fish big-CLF:tiny-AUG
 ‘Where did you find this big fish?’ (Danielsen 2007: 368)

b. **kon** *to* *niko-no* *to* *kanikon?*
 who/what ART eat-NML ART food
 ‘Who will eat the food?’ (Danielsen 2007: 360)

(58) Marind (Anim, Indonesia, New Guinea; glossing slightly adapted)

a. **nda-ha-b-w-a** *hi-y?*
 LOR-Q-ACT[3SG.A]–3SG.U-AUX fall-2SG.U
 ‘How did you fall?’ (Olsson 2017: 556)

b. **en** *nda-ha-b-hamat-a?*
 where LOR-Q-ACT[3SG.A]–many.sit-EXT
 ‘Where are they sitting?’ (Olsson 2017: 554)

A different case is presented by the Eskimoan languages, where interrogative words can either be used independently or attach regular verbalizing morphology, thus yielding interrogative verbal forms (see e. g. Sadock 1984: 204–206 on West Greenlandic), see examples (59a–b), which, however, are treated by Sadock as “lexicalized” and thus rather fall into the category of interrogative verbs (Hagège 2008). Derived interrogative predicates of a partly similar kind are also attested in Wakashan languages, see Rose (1981: 106–109) on Kyuquot and Davidson (2002: 287–288) on Nuuchahnulth, see examples (60a–b).

(59) West Greenlandic (Eskimoan, Greenland; glossing slightly adapted)

- a. **Sumik** *nerivit?*
 what.INS eat.Q.2SG
 ‘What are you eating?’ (Sadock 1984: 204)
- b. **Sutorpit?**
 what.consume.Q.2SG
 ‘=a’ (Sadock 1984: 205)

(60) Nuuchahnulth (Wakashan, British Columbia; glossing slightly adapted; Davidson 2002: 287)

- a. **wa’si=ħa** *Tom wa’=ħat=si*
 where-Q Tom say=PINV=1SG
 ‘“Where is Tom?” he asked me.’
- b. **wa’s-ca-čič=ħa**
 where-go.to-PFV=TEMP=Q
 ‘Where has he gone?’

What makes the interrogative verbal forms in Eskimoan and Wakashan languages sharply different from those of Abaza is the fact that the former are based on independently occurring interrogative roots attaching regular verbalizing and verbal morphology, while the latter are inflectional forms built from ordinary verbal lexical stems by means of (partly specialized) morphology. As said above, Abaza lacks any kind of lexical interrogatives.

Incorporation of interrogative words as attested, e. g. in Nivkh, is also a phenomenon distinct from the Abaza interrogative inflection, even though, as will be discussed in the next subsection, the latter may historically go back to the former. First, incorporation of interrogative words is just a subtype of the more general phenomenon of nominal incorporation, cf. examples (61a–b) from Nivkh showing parallel behaviour of interrogative words and ordinary nouns. Second, in languages with incorporation interrogatives can still occur as independent words. Thus, in Nivkh, where incorporation (“dependent-head synthesis”, see Mattissen

2003, 2017), *inter alia*, is signalled by root-initial consonant alternations (Mattissen 2003: 44–53; Nedjalkov & Otaina 2013: 15–17, 25–28), it is the object which is normally incorporated into the verb, as in (61a–b), while the subject occurs as a free word, as in (61c).

- (61) Nivkh (isolate, Russian Far East)
- a. *atak* *k'e-seu-ḏ*
 grandfather net-dry-IND/NML
 'Grandfather dried the net.' (Mattissen 2003: 137)
- b. *if* *aŋ-q'a-ḏ?*
 3SG who-shoot-IND/NML
 'Who did he shoot at?' (Mattissen 2003: 151)
- c. *aŋ* *χa-ḏ?*
 who shoot-IND/NML
 'Who shoot at it?' (Mattissen 2003: 151)

Moreover, the strategy of content question formation in Abaza and Abkhaz is unique in the context of their own language family: both Circassian languages and Ubykh use interrogative pronouns of the familiar kind, even though Ubykh allows some of its interrogative pronouns to procliticize to the verb (Fenwick 2011: 83–86, 134). Consider, for instance, the following examples from Besleney Kabardian¹²:

- (62) Besleney Kabardian (textual examples)
- a. *xet* *wə-ḡe-z-βe-k^w-a-r?*
 who 2SG.ABS-DIR-REL.ERG-CAUS-go-PST-ABS
 'Who sent you here?'
- b. *sjə* *hje* *ḡə-ž'-jə-s-ʔe-ne-xe-r?*
 what PTCL [REL.ABS]DIR-LOC-DAT-1SG.ERG-say-FUT-PL-ABS
 'What can I tell?'
- c. *tene* *wə-ḡ-jə-č'-a?*
 where 2SG.ABS-DIR-LOC-go.out-PST
 'Where are you from?'

Note that in the Besleney examples (62a) and (62b), showing questions targeting arguments, the clause has pseudoclefted structure with the main predicate relativized and bearing the absolutive case marker. However, the adjunct

¹² The Besleney Kabardian examples come from the oral narratives collected in the village Ulyap (Krasnogvardejsky district, Republic Adygeya) during fieldtrips in 2011–2013.

interrogative in (62c) shows a simple clause structure with a finite verb. Pseudoclefted adjunct interrogatives are possible in Circassian languages, though appear to be a less frequent option, consider the West Circassian example (63) with the main verb furnished with an indirect object relative prefix introduced by a locative applicative.

(63) West Circassian (textual example)

təd-a wə-z-š'-je-ž'e-re-r?

where-Q 2SG.ABS-REL.IO-LOC-DAT-learn-DYN-ABS

'Where do you study?'

Despite their typological uniqueness, the peculiar interrogative verbal morphology of Abaza and Abkhaz naturally falls out from an interaction of several more general strategies common for all Northwest Caucasian languages, i. e. (i) the cross-linguistically common formation of content questions by means of pseudoclefts with headless relative clauses, (ii) morphological marking of relativization by means of prefixes forming an integral part of the general cross-referencing paradigm, coupled with (iii) a highly elaborated expression of grammatical and semantic roles of participants in the polysynthetic verbal complex, including not only the core arguments, but arguments introduced by various specialized applicatives and even some adjuncts as well. The conjunction of these three factors appears to be the necessary prerequisite for the emergence of such a strategy of marking of content questions as we observe in Abaza, however, it is clearly insufficient. Indeed, all of the properties (i)–(iii) are to a greater or lesser extent attested in the other Northwest Caucasian languages, yet none of the latter has developed interrogative verbal morphology.

5.2 Towards a diachronic explanation

The most important and peculiar part of the Abaza interrogative verbal morphology are the question markers *-da*, *-ja* and *-ba-*, in conjunction with a conspicuous lack of any counterparts to the Circassian or Ubykh interrogative pronouns. The most obscure of these is the adverbial interrogative prefix *-ba-*, whose origins are unclear (see tentative suggestions in Genko 1955: 109; Idiatov 2007: 272, fn. 31; cf. also Bgažba 1964: 191 fn. 1, 196 for the corresponding prefix in Abkhaz) and whose occurrence in the midst of the prefixal string hardly betrays any clear origin as an independent word. However, the argument interrogative suffixes, which, first, occupy the rightmost position in the verbal form and seem to never bear stress, and, second, as has been mentioned above, appear to

Moreover, the admittedly cognate interrogative suffix *-j* is used to mark all types of content questions in Ubykh (Fenwick 2011: 133–134), which does not employ relativization in its question formation featuring question words in argument and adjunct positions, as evidenced by examples (67a–b).

(67) Ubykh (Fenwick 2011: 133–134, transcription and glossing adapted)

- a. *jəné š'ə-n* *ɛe-š^wə-wɫ^w-qé-ne-j?*
 this **who-OBL** LOC-2PL.ERG-take.out-PST-PL-Q
 'From whom did you (pl) take this?'
- b. *sabe we-bəjwəq^{wɛ}e-dəwšeqe-n wə-je-qe-j?*
why PROX-shepherd-poor-OBL 2SG.ABS-[3SG.OBL]hit-PST-Q
 'Why did you hit that poor shepherd?'

Thus even though it would be tempting to propose for the Abaza non-human interrogative *-ja* an origin similar to that hypothesized for the human interrogative *-da*, i. e. from the cliticization of a reduced version of something like the Abkhaz non-human question word *j-árban* (Hewitt 1979a: 13), it may well be the case that the Abaza-Abkhaz interrogative forms with *-j(a)* and *-da* may have different origins. Indeed, that their symmetry observed in Abaza may rather be an innovation is suggested by the fact that the *-ja* variant of the suffix is found only in the Tapanta dialect (Čkadua 1970: 18).

Regardless of the necessarily speculative diachronic scenarios leading to their emergence, I hope to have shown that the Abaza (and Abkhaz) interrogative verbal forms make a valuable and unique contribution to the linguists' understanding of the ways content questions can be formed, as well as of the extent to which morphology can take over the functions of syntax in polysynthetic languages. It remains to be hoped that further descriptive and cross-linguistic work on typologically peculiar interrogative constructions is conducted before many of them yield to more trivial ones due to either language shift or convergence.¹³

Abbreviations: 1 – 1st person; 2 – 2nd person; 3 – 3rd person; A – actor; ABS – absolutive; ACT – actualis; ADD – additive; ADV – adverbial; AOR – aorist; ART – article; AUG – augmentative; AUX – auxiliary; BEN – benefactive; CAUS – causative; CLF – classifier; COM – comitative; COND – conditional; COP – copula; DAT – dative; DCL – declarative; DEF – definite; DEM – demonstrative; DIR – directional;

¹³ This appears to have happened in the variety of Abaza spoken in Turkey; as shown by Dumézil (1968: 276), the originally predicative question words *dəzda* 'who' and *zəčəja* 'what' now function as interrogative pronouns in non-pseudoclefted clauses, while the interrogative verbal morphology has fallen into misuse.

DIST — distal; DYN — dynamic; ELAT — elative; EMP — emphatic; ERG — ergative; EXT — extended; F — feminine; FOC — focus; FUT — future; H — human; INC — inchoative; IND — indicative; INDF — indefinite; INS — instrumental; INTF — intensifier; INTR — intransitive; IO — indirect object; IPF — imperfective; LOC — locative; LOR — locational orientation; M — masculine; MAL — malefactive; MNR — manner; MOD — modal; MSD — masdar; N — non-human; NEG — negation; NFIN — non-finite; NML — nominalization; NONDUM — ‘not yet’ tense; NPST — nonpast; OBL — oblique; PFV — perfective; PINV — passive-inverse; PL — plural; POSS — possessive; POT — potential; PR — possessor; PRF — perfect; PROX — proximal; PRS — present; PST — past; PTCL — particle; PURP — purposive; Q — question marker; RE — reflexive; REL — relativizer; RFL — reflexive; RSN — reason; SG — singular; TEMP — temporal; U — undergoer.

Acknowledgements: The work has been supported by the Russian Science Foundation, grant # 17-18-01184. I thank all my Abaza consultants, in particular Dina Usha, for their patience and hospitality, and all the participants of the 2017 and 2018 fieldtrips, especially Alexey Fedorenko, Yury Lander, George (Garik) Moroz, Anastasia Panova, Anna Sorokina and Yakov Testelets, for their friendship, interest, help, criticism and insightful remarks. Preliminary versions of this paper have been presented at the conferences “Minority languages in big linguistics” (Moscow State University, November 2017), 18th International Morphology Meeting (Budapest, May 2018) and “Syntax of the World’s Languages 8” (Paris, September 2018), as well as at the seminar of the Department of Typology and Comparative Linguistics of the Institute of Slavic Studies of the Russian Academy of Sciences (Moscow, May 2018). I thank the participants of all these events, as well as Eitan Grossman, Dmitry Idiatov, Alessio Muro, Frans Plank and three anonymous reviewers and Maria Koptjevskaja-Tamm for their feedback, and to Alexander Thomson for volunteering to improve my English. All faults and shortcomings remain mine.

References

- AMPPR: *Sovremennaja literatura narodov Rossii. Poëzija. Antologija*. [Anthology of the Modern Poetry of the Peoples of Russia]. Moscow, 2017.
- Aristava, Šota K., et al. 1968. *Grammatika abxazskogo jazyka. Fonetika i morfologija* [A grammar of Abkhaz. Phonetics and morphology]. Sukhumi: Alašara.
- Arkadiev, Peter M. & Sonia Durneva. submitted. Reflexivization in Abaza.

- Arkadiev, Peter M. & Yury A. Lander. Forthcoming. The North-West Caucasian languages. To appear in Maria Polinsky (ed.), *The Oxford handbook of the languages of the Caucasus*. Oxford: Oxford University Press.
- ARPC: Abaza-Russian Parallel Corpus, constructed by Anna Sorokina: https://linghub.ru/abaza_rus_corpus/search.
- Bgažba, Xuxut S. 1964. *Bzybskij dialekt abxazskogo jazyka (issledovanie i teksty)* [The Bzyp dialect of Abkhaz: Grammatical sketch and texts]. Tbilisi: Izdatel'stvo Akademii Nauk Gruzinskoj SSR.
- Caponigro, Ivano & Maria Polinsky. 2011. Relative embeddings: A Circassian puzzle for the syntax/semantics interface. *Natural Language and Linguistic Theory* 29(1). 71–122.
- Chirikba, Vyacheslav. 2003. *Abkhaz*. München: LINCOM Europa.
- Chisholm, William S. (ed.). 1984. *Interrogativity: A colloquium on the grammar, typology and pragmatics of questions in seven diverse languages*. Amsterdam, Philadelphia: John Benjamins.
- Chung, Sandra. 1994. Wh-Agreement and “Referentiality” in Chamorro. *Linguistic Inquiry* 25(1). 1–44.
- Čkadua, Lilia P. 1970. *Sistema vremën i modal'nyx obrazovanij v abxazo-abazinskix dialektax* [System of Tenses and Modal Formations in Abkhaz-Abaza Dialects]. Tbilisi: Mecniereba.
- Danielsen, Swintha. 2007. *Baure: An Arawak language of Bolivia*. Leiden: CNWS Publications.
- Davidson, Matthew. 2002. *Studies in Southern Wakashan (Nootkan) Grammar*. PhD Thesis, SUNY Buffalo.
- Dayal, Veneeta. 1994. Scope marking as indirect *wh*-dependency. *Natural Language Semantics* 2. 137–170.
- Dayal, Veneeta. 2000. Scope marking: Cross-linguistic variation in indirect dependency. In Uli Lutz, Gereon Müller & Arnim von Stechow (eds.), *Wh-scope marking*, 157–193. Amsterdam, Philadelphia: John Benjamins.
- Dryer, Matthew S. 2005a. Position of polar question particles. In Matthew Dryer, Martin Haspelmath, David Gil & Bernard Comrie (eds.), *World atlas of language structures*, 374–377. Oxford: Oxford University Press.
- Dryer, Matthew S. 2005b. Position of interrogative phrases in content questions. In Matthew Dryer, Martin Haspelmath, David Gil & Bernard Comrie (eds.), *World atlas of language structures*, 378–381. Oxford: Oxford University Press.
- Dryer, Matthew S. 2005c. Polar questions. In Matthew Dryer, Martin Haspelmath, David Gil & Bernard Comrie (eds.), *World atlas of language structures*, 470–473. Oxford: Oxford University Press.
- Dumézil, Georges. 1968. Note sur le parler des abazas d'Anatolie. *Folia Linguistica* 2. 275–278.
- Fenwick, Rohan S. H. 2011. *A grammar of Ubykh*. München: LINCOM Europa.
- Genko, Anatolij N. 1955. *Abazinskij jazyk. Grammatičeskij očerk narečija tapanta* [The Abaza Language. A Grammatical Sketch of the Tapanta Dialect]. Moscow: Izdatel'stvo Akademii Nauk SSSR.
- Grossman, Eitan. 2014. Predicate-centered focus in Coptic: A synchronic lay of the land and a diachronic puzzle. Paper presented at the *Workshop on Information Structure in Ancient Egyptian*, Berlin, June 2014.
- Hagège, Claude. 2008. Towards a typology of interrogative verbs. *Linguistic Typology* 12(1). 1–44.
- Haspelmath, Martin. 2015. Grammatical overview of Egyptian and Coptic. In Eitan Grossman, Martin Haspelmath & Tonio Sebastian Richter (eds.), *Egyptian-Coptic in typological perspective*, 103–143. Berlin, Boston: De Gruyter Mouton.

- Hewitt, B. George. 1979a. *Abkhaz*. Amsterdam: North Holland.
- Hewitt, B. George. 1979b. The relative clause in Abkhaz (Abžui dialect). *Lingua* 47. 151–188.
- Hewitt, B. George. 2005. The syntax of complementation in Abkhaz. *Iran & the Caucasus* 9(2). 331–379.
- Hözl, Andreas. 2018. *A typology of questions in Northeast Asia and beyond: An ecological perspective*. Berlin: Language Science Press. <http://langsci-press.org/catalog/book/174>
- Ildiatov, Dmitry. 2007. *A typology of non-selective interrogative pronominals*. PhD Dissertation, Universiteit Antwerpen.
- Kapitonov, Ivan S. 2009. *Neopredelënyye mestoimenija adygejskogo jazyka* [Indefinite pronouns in West Circassian]. Senior Thesis, Institute for Linguistics, Russian State University for the Humanities, Moscow.
- Kibrik, Andrej A. 1992. Relativization in polysynthetic languages. *International Journal of American Linguistics* 58(2). 135–157.
- Lambrecht, Knud. 1994. *Information structure and sentence form*. Cambridge: Cambridge University Press.
- Lander, Yury A. 2009. Množestvennaja reljativizacija: podlinnaja i mnimaja [The real and sham multiple relativization]. In Yakov G. Testeleťs, et al. (ed.), *Aspekty polisintetizma: Očerki po grammatike adygejskogo jazyka* [Aspects of polysynthesis: Studies in West Circassian grammar], 612–653. Moscow: Izdatel'stvo RGGU.
- Lander, Yury A. 2010. Relativization in Shapsug Adyghe. *Rice University Working Papers in Linguistics* 2: 75–91.
- Lander, Yury A. 2012. *Reljativizacija v polisintetičeskom jazyke: adygejskie otnositel'nye konstrukcii v tipologičeskoj perspektive* [Relativization in a polysynthetic language: West Circassian relative clauses in typological perspective]. PhD Dissertation, Russian State University for the Humanities, Moscow.
- Lander, Yury A. 2017. Nominal complex in West Circassian: Between morphology and syntax. *Studies in Language* 41(1). 76–98.
- Lander, Yury A. & Michael A. Daniel. 2019. West Caucasian relative pronouns as resumptives. *Linguistics* 57(6). 1239–1279.
- Lander, Yury A. & Yakov G. Testeleťs. 2017. Adyghe. In Michael Fortescue, Marianne Mithun & Nicholas Evans (eds.), *The Oxford handbook of polysynthesis*, 948–970. Oxford: Oxford University Press.
- Lomtatidze, Ketevan, Rauf N. Klyčev & B. George Hewitt. 1989. Abaza. In B. George Hewitt (ed.), *The indigenous languages of the Caucasus. Vol. 2. The North West Caucasian languages*, 91–154. Delmar, N.Y.: Caravan.
- Mattissen, Johanna. 2003. *Dependent-head synthesis in Nivkh: A contribution to a typology of polysynthesis*. Amsterdam, Philadelphia: John Benjamins.
- Mattissen, Johanna. 2017. Nivkh. In Michael Fortescue, Marianne Mithun & Nicholas Evans (eds.), *The Oxford handbook of polysynthesis*, 851–881. Oxford: Oxford University Press.
- Moroz, George. 2018. Abaza vowels: Phonology and acoustics. Unpublished manuscript.
- Munro, Pamela. 2012. Interrogative verbs in Takic. *UCLA Working Papers in Linguistics* 17. 274–284.
- Nedjalkov, Vladimir P. & Galina A. Otaina. 2013. *A syntax of the Nivkh language: The Amur dialect* (Tranls. from Russian by Emma Geniušienė, ed. by Emma Geniušienė & Ekaterina Gruzdeva.). Amsterdam, Philadelphia: John Benjamins.
- Nikolaeva, Liudmila. 2012. Quantifiers in Adyghe. In Edward L. Keenan & Denis A. Paperno (eds.), *Handbook of quantifiers in natural language*, 21–82. Dordrecht: Springer.
- O'Herin, Brian. 2001. Abaza applicatives. *Language* 77(3). 477–493.

- O'Herin, Brian. 2002. *Case and agreement in Abaza*. Arlington: SIL International.
- Olsson, Bruno. 2017. *The coastal Marind language*. PhD Dissertation, Nanyang Technological University, Singapore.
- Panova, Anastasia. 2018. Derivational verbal suffixes in Abaza. Higher School of Economics Working Papers in Linguistics.
- Pazov, Sergej U. 2016. Voprositel'nye glagol'nye formy v strukture voprositel'nogo predloženija v abazinskom jazyke. [Interrogative verbal forms in the structure of interrogative sentences in Abaza] In *Adige filolojisi. Güncel konular*, 129–137. Düzce üniversitesi.
- Plank, Frans. 2018. Interrogative verb inflection: Why rare, though easily grammaticalised? Presentation at the *Berkeley Germanic Linguistics Roundtable*, UC Berkeley, 6–7 April 2018.
- Reintges, Chris. 2007. Coptic relative tenses: The profile of a morphosyntactic flagging device. In Enoch Oladé Aboh, Katharina Hartmann & Malte Zimmermann (eds.), *Focus strategies in African languages: The interaction of focus and grammar in Niger-Congo and Afro-Asiatic*, 185–220. Berlin, New York: Mouton De Gruyter.
- Rose, Suzanne Maria. 1981. *Kyugot grammar*. PhD Dissertation, University of Victoria.
- Sadock, Jerrold M. 1984. West Greenlandic. In William S. Chisholm Jr. (ed.), *Interrogativity: A colloquium on the grammar, typology and pragmatics of questions in seven diverse languages*, 189–214. Amsterdam, Philadelphia: John Benjamins.
- Šakryl, Konstantin S. 1961. *Affiksacija v abazskom jazyke* [Affixation in Abkhaz]. Sukhumi: Abgosizdat.
- Schmidtke-Bode, Karsten. 2010. The role of benefactive and related notions in the typology of purpose clauses. In Fernando Zúñiga & Seppo Kittilä (eds.), *Benefactives and malefactives: Typological perspectives and case studies*, 121–146. Amsterdam, Philadelphia: John Benjamins.
- Siemund, Peter. 2001. Interrogative constructions. In Martin Haspelmath, Ekkehard König, Wulf Oesterreicher & Wolfgang Raible (eds.), *Language typology and language universals: An international handbook*, vol. 2, 1010–1028. Berlin, New York: Mouton de Gruyter.
- Spruit, Arie. 1985. Stress in Abkhaz. *Studia Caucasica* 6. 31–81.
- Stolz, Thomas, Nataliya Levkovych, Aina Urdze, Julia Nintemann & Maja Robbers. 2017. *Spatial interrogatives in Europe and beyond: Where, whither, whence*. Berlin, Boston: De Gruyter Mouton.
- Stoyanova, Marina. 2008. *Unique focus: Languages without multiple Wh-questions*. Amsterdam, Philadelphia: John Benjamins.
- Sumbatova, Nina R. 2009. Constituent questions and argument-focus constructions: Some data from the North-Caucasian languages. In Johannes Helmbrecht, Yoko Nishima, Yon-Ming Shin, Stavros Skopeteas & Elisabeth Verhoeven (eds.), *Form and function in language research: A festschrift for Christian Lehmann*, 313–328. Berlin, New York: Mouton de Gruyter.
- Tabulova, Nurya T. 1976. *Grammatika abazinskogo jazyka. Fonetika i morfologija* [A grammar of Abaza: Phonetics and morphology]. Čerkessk: Karačaevo-Čerkesskoe otdelenie Stavropol'skogo knižnogo izdatel'stva.
- Ultan, Russell. 1978. Some general characteristics of interrogative systems. *Universals of Human Language* 4. 211–248.
- Velupillai, Viveka. 2012. *An introduction to linguistic typology*. Amsterdam, Philadelphia: John Benjamins.
- Wohlgemuth, Jan & Michael Cysouw (eds.). 2010. *Rethinking universals: How rarities affect linguistic theories*. Berlin, New York: Mouton de Gruyter.