CONTENT QUESTIONS IN ABAZA: SYNTAX IN MORPHOLOGICAL GUISE

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1. Introduction
Marking of polar questions by means of verbal morphology is a fairly widespread phenomenon cross-linguistically (Dryer 2013). By contrast, morphological marking of content questions has not been discussed in the theoretical and typological literature so far.
From the point of view of information structure, content questions consist of focus and presupposition (Lambrecht 1994: 282):

(1) What [are you reading] presupposition?

Hence it is no surprise that most languages of the world employ special lexical means to encode the focus of a question, i.e. question/wh-words like who or where (Ultan 1978: 53; Siemund 2001: 1018).
In many languages content questions are structurally similar to (pseudo)clefted focus constructions with the question word serving as the predicate and the presupposition expressed as a headless relative clause:

FRENCH

(2) a. [Qu'est-ce] [que tu lis]?
   what-is-it that you read
   ‘What are you reading?’
   b. le livre [que tu lis].
      the book that you read
      ‘the book that you read.’

This is the common strategy in the North Caucasian languages (Sumbatova 2009):

WEST CIRCASSIAN (Northwest Caucasian > Circassian; own fieldwork data)

(3) a. [səd-a] [wə-z-a-ʒ'e-re-r]?
   what-Q 2SG.ABS-REL.IO-DAT-read-DYN-ABS
   ‘What are you reading?’
   b. txəλ-ew wə-z-a-ʒ'e-re-r
      ‘the book that you are reading’

The Northwest Caucasian languages Abaza and Abkhaz also employ this strategy:

ABAZA (Northwest Caucasian > Abkhaz-Abaza; own fieldwork data)

(4) [á-jša j-ɔn-gə́l-wə] [ačʷə-ja]?
   DEF-table REL.ABS-LOC-stand-PRS.NFIN what-QN
   ‘What is (lit. stands) on the table?’ (lit. “What is it that stands on the table?”)

* However, overt question words in Abaza and Abkhaz are optional!

(4') á-jša j-ɔn-gōła-ja?
   DEF-table REL.ABS-LOC-stand-QN
   ‘= (4)’
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 a morphological phenomenon.

Despite the fact that basically the same strategy of formation of content questions has been described for the closely related Abkhaz in Hewitt (1979a: 10–23), this typological rarissimum has remained unnoticed by typologists, not being mentioned in such surveys as Ultan (1978), Siemund (2001), Velupillai (2012: 356–359); the only exception is Idiatov (2007: 271–278), whose discussion of Abaza is based on the data from Genko (1955: 105–107).

NB The fully productive interrogative inflectional morphology of Abkhaz-Abaza should not be confused with the so called interrogative verbs like Mandarin gàn má ‘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.

This paper is primarily based on the fieldwork data of Tapanta Abaza collected in July 2017 and July 2018 in the village Inžič-Čukun (jənǯəg’-č’ḳʷə́n), Abaza district of Republic Karachay-Cherkessia (Russia), during the fieldtrips organized by the Higher School of Economics and the Russian State University for the Humanities. The work is financed by the Russian Science Foundation, grant # 17-18-01184.

2. Basic features of Abaza

(i) Polysynthesis and consistent head-marking: all arguments of the predicate are expressed by prefixal pronominal markers in the verbal word (5); by contrast, overt nominals cross-referenced in the verb do not show any case marking (6).

(5) j-šə-z-j-a-s-hʷ-ṗ
   3SG.N.ABS-2PL.IO-BEN-3SG.M.IO-DAT-1SG.ERG-say-NPST.DCL
   ‘I will tell this to him about you.’ (textual example)

(6) phʷas-kᵢ l-sabajᵢ d insults q-aštələ-n
   woman-INDF 3SG.F.IO-child 3SG.H.ABS-DIR-3SG.F.IO-LOC-forget-PST.DCL
   ‘A woman forgot about her child.’ (textual example)

The verb also includes affixes expressing aspectual, modal, temporal and spatial meanings as well as the independent vs. dependent status of predication. See the schematic structure of the verbal word in Table 1.

Table 1. The structure of the Abaza verbal complex

| Wordhood criteria in Abaza, besides independent occurrence, include |
| rigid templatic organization; |
| morphologically determined stress assignment (Moroz 2018; cf. Spruit 1985 on Abkhaz); |
| processes targeting elements on both sides of the root (negation, relativization). |
(ii) Ergativity manifested in the *absolutive* vs. *oblique* (comprising ergative and indirect object) series of pronominal markers, see Table 2 and (7a–c). Note the important distinction between human and nonhuman 3SgAbs markers.

**Table 2. Pronominal prefixes**

<table>
<thead>
<tr>
<th></th>
<th>absolutive</th>
<th>oblique</th>
<th>absolutive</th>
<th>oblique</th>
</tr>
</thead>
<tbody>
<tr>
<td>1Sg</td>
<td>s(ə)-/z-</td>
<td></td>
<td>h(ə)-/f-</td>
<td></td>
</tr>
<tr>
<td>2SgM</td>
<td>w(ə)-</td>
<td></td>
<td>ŝ(ə)-/ʔ-</td>
<td></td>
</tr>
<tr>
<td>2SgF</td>
<td>b(ə)-/p-</td>
<td></td>
<td>j(ə)-</td>
<td>r(ə)-/d(ə)-</td>
</tr>
<tr>
<td>3SgM</td>
<td>d(ə)-</td>
<td></td>
<td>j(ə)-</td>
<td>z(ə)-</td>
</tr>
<tr>
<td>3SgF</td>
<td>l(ə)-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3SgN</td>
<td>j(ə)-/∅</td>
<td>na-/a-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(7) a. **h**-bzáza-**d**

1PL.ABS-live(AOR)-DCL

‘We lived.’ (textual example)

b. **awáʔa** hə-ca-da-r-ca-χ-nās

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

‘so that they bury us there’ (textual example)

c. **á-sabəj-kʷa-g’aj** bzəj jə-f-b-áj-t

DEF-child-PL-ADD good 3PL.ABS-1PL.ERG-see-PRS-DCL

‘We love children.’ (textual example)

(iii) A distinction between “finite” (declarative) and “non-finite” TAM-forms, see Table 3; the latter serve as the basis for negative and interrogative forms occurring as independent predicates. Note that declarative forms are often more complex.

**Table 3. Declarative vs. non-finite forms of major tenses**

<table>
<thead>
<tr>
<th></th>
<th>declarative</th>
<th>non-finite</th>
</tr>
</thead>
<tbody>
<tr>
<td>static verbs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>present</td>
<td>-p/-b</td>
<td>-wə</td>
</tr>
<tr>
<td>past</td>
<td>-n</td>
<td>-z</td>
</tr>
<tr>
<td>dynamic verbs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>present</td>
<td>-aj-t/-aj-d</td>
<td>-wa</td>
</tr>
<tr>
<td>imperfect</td>
<td>-wa-n</td>
<td>-wa-z</td>
</tr>
<tr>
<td>aorist</td>
<td>-t/-d</td>
<td>(-z)</td>
</tr>
<tr>
<td>future</td>
<td>-wa-s-t/-wa-s-d</td>
<td>-wa-s</td>
</tr>
</tbody>
</table>

(iv) Omnipredicativity: each content word can serve as a predicate and bear (static) verbal morphology without any further derivational means:

(8) **j**-kʷə́ǯ’mə-**p**

3SG.N.ABS-wolf-NPST.DCL

‘It is a wolf.’ (Tabulova 1976: 104)

(v) Relativization marking of the “West Caucasian type” (Hewitt 1979b, Kibrik 1992, Caponigro & Polinsky 2011, Lander 2012): relative markers belong to the paradigm of pronominal prefixes (see REL in Table 2) and occupy the same position in the wordform (cf. the notion of “wh-agreement”, O’Herin 2002: Ch. 8):

(9) a. **sara** a-ph’wəspa ća la-s-t-t

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

‘I gave an apple to the girl.’
b. [sara a-ph"əspa j-1-o-s-tɔ-ɔ] a-ča₁
1SG DEF-girl REL.ABS-3SG,F,IO-1SG.ERG-give-PST.NFIN DEF-apple
‘the apple I gave to the girl’

c. [sara ća za-s-tɔ-ɔ] a-ph"əspa₁
1SG apple [3SG,N,ABS]REL.IO-1SG.ERG-give-PST.NFIN DEF-girl
‘the girl whom I gave an apple’

d. [a-ph"əspa ća 1-o-z-tɔ-ɔ] a-č’kʷon₁
DEF-girl apple [3SG,N,ABS]3SG,F,IO-REL.ERG-give-PST.NFIN DEF-boy
‘the boy who gave an apple to the girl’

Some adjunct verbal forms also follow this pattern:

(10) (textual examples)

a. q"ərjóq̄ an-s-χ-wɔ-ɔ z ásqan
service REL.TEMP-1SG.carry-IPF-PST.NFIN time
‘at the time I was at the military service’

b. [h-ʔa-ŋχa-wá] ápχ’arta
1PL.ABS-REL.LOC-work-IPF DEF.school
‘the school where we work’

c. a-sabōj-kʷa... á-rqa a-pnό jə-š-ná-r-g-wa-ɔ
DEF-child-PL DEF-field 3SG,N,IO-to 3PL,ABS,MNR-DIR-3PL.ERG-bring-IPF-PST.NFIN
‘how they brought children to the field’

3. Interrogative verbal forms in Abaza

3.1. Argument questions
Relative verbal forms with a relative prefix indicating the role of the question variable in the proposition + an interrogative suffix showing the human (-da) vs. non-human (-ja) class of the variable.

– absolutive intransitive subject

(11) a. j-ʃə-ka-šə-ja?
REL.ABS-DIR-LOC-fall(AOR)-QN
‘What fell?’

b. j-ʃə-ka-šə-da?
REL.ABS-DIR-LOC-fall(AOR)-QH
‘Who fell?’

– absolutive transitive object

(12) a. jə-b-bá-da?
REL.ABS-2SG,F,ERG-see(AOR)-QH
‘Whom did you see?’

b. j-ʃə-b-g-ja?
REL.ABS-DIR-2SG,F,ERG-bring(AOR)-QH
‘What did you bring?’

– ergative transitive subject

(13) a. w-ʃə-z-rə-há-ja?
2SG,M,ABS-DIR-REL.ERG-CAUS-fear(AOR)-QN
‘What frightened you?’

b. wə-z-bá-da?
2SG,M,ABS-REL.ERG-see(AOR)-QH
‘Who saw you?’

– indirect object

(14) wə-z-pš-wá-da?
2SG,M,ABS-REL.IO-look-IPF-QH
‘Whom are you looking at?’
– objects of applicatives (on Abaza applicatives see O’Herin 2001)

(15) *j-z-zə-b-χʷʕá-da?*

3SG.N.ABS-REL.IO-BEN-2SG.F.ERG-buy(AOR)-QH

‘Whom did you buy it for?’ (benefactive)

(16) *wə-χ-z-č-ša-wá-ja?*

2SG.M.ABS-REL.IO-MAL-fear-IPF-QN

‘What do you fear?’ (malefactive)

(17) *bə-z-c-nōqʷa-wa-da?*

2SG.F.ABS-REL.IO-COM-walk-IPF-QH

‘With whom do you walk?’ (comitative)

(18) *swəp z-la-r̥-ź-wa-ja?*

soup REL.IO-INS-3PL.ERG-drink-IPF-QN

‘What do people eat soup with?’ (instrumental)

Adnominal possessors are encoded as indirect objects (19a), and questions about the possessor are formed accordingly, cf. (19b) with the possessed noun as predicate.

(19) a. *s-pa*

1SG.IO-son

b. *do-z-p-wó-da?

3SG.H.ABS-REL.IO-SON-PRS.NFIN-QH

‘my son’

‘Whose son is he?’

Questioning the possessor of an argument is achieved by (i) forming a pseudocleft structure with the relevant nominal as the predicate and (ii) questioning the possessor of the latter in the regular way, cf. (20).

(20) *jo-z-k-sabóji-wə-da*

3PL.ABS-REL.IO-CHIL-PRS.NFIN-QH

[*[a-páχ’ j-i-na-ʕʷʕá-wa]*]

DEF-yard REL.ABS-LOC-run-IPF

‘Whose children are running in the garden?’ (lit. Who is the one whose children are those who are running in the garden?)

Questions targeting the objects of postpositions are formed “analytically” by adding the relative prefix to the postposition and the interrogative suffix to the verb (21):

(21) *z-ackós lasó wó-ʕʷ-wa-da?*

REL.IO-than fast 2SG.M.ABS-run-IPF-QH

lit. ‘You run faster than who?’

‘Which’-questions are based on predicates ‘be like’ (22a) or ‘belong’ (22b) forming a single nominal complex with the noun and functioning as the regular interrogative predicate of a pseudocleft structure:

(22) a. *z-ap̥-kní-ga-ja ja-ʕa-wə-l-tə-z?*

REL.IO-be.like–book-QN REL.ABS-DIR-2SG.M.IO-3SG.F.ERG-give-PST.NFIN

‘Which book did she give you?’

b. *d-z-ačʷ-phʷəspa-ja [sa-z-ба-rnós z-taq-wó]?

3SG.H.ABS-REL.IO-belong–girl-QN 1SG.ABS-REL.ERG-see-PURP REL.IO-need-PRS.NFIN

‘Which girl wants to see me?’

‘How many’-questions are formed way with the lexicalized predicate referring to quantity either forming a nominal complex with the noun (23a) or functioning similarly to postpositions (23b):
3.2. Adjunct questions

Adverbial relative forms with the adverbial interrogative prefix -ba-/pa- immediately following the relative prefix, cf. (10a–c) above.

(24) arə́j áχč’a n-bá-ʕa-z-ʁəč’
PROX DEF.money REL.TEMP-QADV-DIR-1SG.ERG-steal
‘When did I steal this money?’ (textual example)

(25) j-a-bá-ʃa-z-ʁəč’ arə ́j áχč’a j-sá-m-wə
3SG.N.ABS-REL.LOC-QADV-1SG.ERG-steal PROX DEF.money 3SG.N.ABS-1SG.IO-be-NPST.NFIN
‘Where did I steal this money that I have here?’ (textual example)

(26) r-wəs š-pa-c-wə-ʃ?
3 PL.IO-work REL.MNR-QADV-go-IPF-FUT
‘How will their work go on?’ (textual example)

However, questions targeting goal and purpose follow the model of argument questions and are indistinguishable from questions about indirect objects but for the fact that the reason relative prefix occurs farther from the root (27):

(27) wə́-nbǯ’aʕʷ-ča-kʷa ʒ-ʃá-wə-m-d-ja?
2 SG.M.IO-friend-PL.H-PL REL.RSN-DIR-2SG.M.ERG-NEG-lead(AOR)-QN
‘Why didn’t you bring your friends with you?’ (textual example)

Cross-linguistically, this pattern of encoding of goal/purpose questions is fairly common, cf. Lithuanian wh-word kam ‘to whom; what for’.

3.3. Independent question words?

Independently occurring question words ‘who’, ‘what’ or ‘where’ in Abaza (cf. O’Herin 2002: Ch. 8) are either synchronically or transparently diachronically interrogative verbal forms of the same type (Genko 1955: 105–107; Idiatov 2007: 271–278) forming the predicate of a pseudocleft construction:

(28) d-z-ač’ə-ja awat a-č-kʷa ʃa-ʃə-ha-ʒ?
3 SG.H.ABS-REL.IO-belong-QN DIST.PL DEF-horse-PL DIR-REL.ERG-Causes-be.afraid-PST.NFIN
‘Who frightened those horses?’, lit. ‘What does the one who frightened those horses belong to?’ (Pazov 2016)

(29) j-a-bá-kʷ-wə w-ʔa-bzaza-wa?
3SG.N.ABS-REL.LOC-QADV-COP-NPST.NFIN 2 SG.M.ABS-REL.LOC-Live-IPF
‘Where do you live?’, lit. ‘Where is it where you live?’

Notably, if ‘who’ or ‘what’ question words occur in Abaza texts with some frequency, adjunct interrogatives are overwhelmingly formed synthetically.

* From such a strategy of forming content questions logically follows the impossibility to form multiple wh-questions of the type Who bought what? Cf. Hewitt (1979a: 21) on Abkhaz: “Is it possible to question more than one thing in a sentence? No.” On other languages with such a ban see Stoyanova (2008).
The closest Abaza comes to multiple wh-questions is coordination of question words (30); note that here only the ‘who’ question word is represented by a relative prefix in the main verb.

(30) \[d\-z\-aĉ̣ə\-ja \quad jg'oj \quad j\-an\-ba\-kʷ\-wə\]
\[\text{3SG.H.ABS-REL.IO-belong-QN and 3SG.N.ABS-REL.LOC-QADV-be-NPST.NFIN}\]
\[araj \quad a\-tekst \quad ʃarap\-bəzša \quad j\-ʃa\-qa\-z\-χ\-ta\]
\[\text{PROX DEF-text Arab-language 3SG.N.ABS-DIR-LOC-REL.ERG-take-ADV}\]
\[aba\-zə\-bəzša\-la \quad j\-a\-ta\-kə\-z \quad <...> ?\]
\[\text{Abaza-language-INS 3SG.N.ABS-3SG.N.IO-LOC-REL.ERG-hold-PST.NFIN}\]
‘Who and when translated this text from Arabic to Abaza?’

4. Multiple relativization in simple and complex clauses
Reflexivization of verbs with indirect objects is expressed by doubling the relevant pronominal prefix (31a); in relative and interrogative forms targeting the subject of such verbs the relative prefix is also doubled (31b):

(31) a. \[hara \quad ʃə\-c\-ra \quad ʃ'arda \quad h-ha\-r\-dar\-d.\]
\[\text{we new-MSD many [3SG.N.ABS]1PL.IO-1PL.ERG-CAUS-know-DCL}\]
‘We learned (lit. caused ourse lves to know) a lot of new things.’

b. \[awəj \quad z\-zə\-r\-dar\-wa\-z\-da?\]
\[\text{that REL.IO-REL.ERG-CAUS-know-IPF-PST.NFIN-QH}\]
‘Who learned that?’

This is a manifestation of a more general rule requiring that all pronominal indexes coreferential to the argument relativized or questioned be substituted by the relative prefixes — the so-called multiple relativization (O’Herin 2002: 264–265; see also Lander 2009 on a similar phenomenon in Circassian). Cf. (32) with the coreference of the subject with the clausemate possessor and (33a) with interclausal coreference. Note that the use of a regular personal index on the embedded verb renders coreference impossible (33b).

(32) a. \[j\-pájš' \quad də,\-f\-\ˈna\-č\-a-b\]
\[\text{3SG.M.IO-room 3SG.H.ABS-LOC-sit-NPST.DCL}\]
‘He stays in his room.’

b. \[z\-pájš' \quad jə,\-f\-\ˈna\-č\-wణ\-do?\]
\[\text{REL.IO-room REL.ABS-LOC-sit-PRS.NFIN-QH}\]
‘Who stays in his/her own room?’

(33) a. \[j\-sō-c\-na\-ja\-rnas \quad jə\-z\-taq\-wō\-da?\]
\[\text{REL.ABS-1SG.IO-COM-DIR-go-PURP 3SG.N.ABS-REL.IO-need-PRS.NFIN-QH}\]
‘Who wants to go with me?’

b. \[#d\-sō-c\-na\-ja\-rnas \quad jə\-z\-taq\-wō\-da?\]
\[\text{3SG.H.ABS-1SG.IO-COM-DIR-go-PURP (3SG.N.ABS)-REL.IO-need-PRS.NFIN-QH}\]
‘Who/*i wants him/her to go with me?’

5. Discussion
The expression of content questions by means of productive affixal morphology found in Abaza and, \textit{mutatis mutandis}, in Abkhaz, is clearly typologically uncommon. Other languages reported in the literature where \textit{some} content interrogatives are expressed by only verbal morphology is Baure (Arawakan, Danielsen 2007: 368–370) and Marind (Anim, Olsson 2017: 556–557).
Nevertheless, the peculiar interrogative verbal forms in Abaza and Abkhaz seem to naturally fall out from an interaction of several more general strategies common for all Northwest Caucasian languages:

(i) formation of content questions by means of clefts;
(ii) morphological marking of relativization, coupled with
(iii) the highly elaborated expression of grammatical and semantic roles of arguments in the polysynthetic verbal complex.

Given that the interrogative suffixes themselves appear to contain the regular third person singular absolutive prefixes of the human (d-) resp. non-human (j-) class (cf. Genko 1955: 107), one might hypothesize that the argument interrogative verbal forms stem from the univerbation of the original pseudocleft constructions with a generic question word in the predicate position. Indeed, for Abkhaz, the human interrogative suffix -da is claimed to go back to the independent question word d-árban ‘who’ (cf. Aristava et al. 1968: 119, Šakryl 1961: 84).

**ABKHAZ** (Hewitt 1979a: 10–11, transcription and glossing adapted)

(34) \(j\-aa-z\quad d\-árban \quad > \quad j\-aa(-z)\-da\)

\(\text{REL.ABS-come-PST.NFIN}\quad \text{3SG.H.ABS-Q}\quad \text{REL.ABS-come(-PST.NFIN)-QH}\)

‘Who came?’

The problem with the scenario just outlined lies in the fact that it is not fully supported by comparative evidence. In Abkhaz, the non-human interrogative suffix looks like -j (Hewitt 1979a: 12–15) (35a), and can appear not only in argument questions but in adjunct questions as well (35b):

**ABKHAZ** (Hewitt 1979a: 12, 14, transcription and glossing adapted)

(35) a. \(j\-aa\-\chi\-é\-j?\)
   \(\text{REL.ABS-come-PRF-QN}\)

   ‘What has already come?’

b. \(d\-\text{an-bá}-\text{ce-j}?\)
   \(\text{3SG.H.ABS-REL.TEMP-QADV-go-QN}\)

   ‘When did he go?'

Moreover, the admittedly cognate suffix -j is used to mark all types of content questions in Ubykh (Fenwick 2011: 133–134), which does not employ relativization and has ordinary question words in argument positions:

**UBYKH** (Fenwick 2011: 133, transcription and glossing adapted)

(36) \(j\-\text{a}é\,-\text{ñ}é\-\text{ñe-j}?\)

\(\text{3SG.H.ABS-REL.TEMP-QADV-go-QN}\)

‘From whom did you take this?’

This suggests that interrogative forms with -j(a) and -da may have different origins, and that their symmetry observed in Abaza is an innovation.

Besides that, the origins of the adverbial interrogative prefix -ba are obscure (Genko 1955: 109; Idiatov 2007: 272, fn. 31), but it is clear that the adverbial interrogative forms have a different source than the argument interrogatives.

Regardless of the putative diachronic scenarios, the Abaza and Abkhaz interrogative verbal forms make a valuable and unique contribution to our 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.
Abbreviations
ARPC – Abaza-Russian parallel corpus constructed by Anna Sorokina (ca. 8 500 tokens),
http://linghub.ru/abaza_rus_corpus/search
ABS — absolutive; ADD — additive; ADV — adverbial; AOR — aorist; BEN — benefactive;
CAUS — causative; COM — comitative; COP — copula; DAT — dative; DCL — declarative;
DEF — definite; DIR — directional preverb; DIST — distal demonstrative; DYN — dynamicity;
ERG — ergative; F — feminine; FUT — future; H — human; INDF — indefinite; INS — instrumental;
IO — indirect object; IPF — imperfective; LOC — locative; M — masculine; MAL — malefactive;
MNR — manner; MSD — masdar; N — non-human; NEG — negation; NFIN — non-finite;
NPST — nonpast; OBL — oblique; PL — plural; PRF — perfect; PROX — proximal demonstrative;
PRS — present; PST — past; PURP — purposive; Q — interrogative; RE — reflexive;
REL — relativizer; RSN — reason; SG — singular; TEMP — temporal.

References


