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A sketch of Northern Akhvakh

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1. Introduction

1.1. Northern Akhvakh: area and speakers.

Akhvakh (*aš^{w}aɬːi micːi*, Russian *ахвахский язык*) belongs to the Andic group of languages included in the Avar-Andic branch of the Northeast Caucasian (or Nakh-Daghestanian) family. The number of Akhvakh speakers is estimated at 20,000 by Magomedova & Abdulaeva (2007), but this evaluation is probably somewhat optimistic. Four varieties are recognized, whose status as dialects of a single language or distinct (although closely related) languages is unclear. The one referred to in this sketch (by far the most important as regards the number of speakers) is designated as Northern Akhvakh, whereas the other three are grouped under the label of Southern Akhvakh. Northern Akhvakh is spoken in six villages of the Axvaxskij Rajon in the western part of Daghestan (Tadmagitl', Lologonitl', Kudijab-Roso, Kvankero, Cvakilkolo, and Izano, whose total population is 7,200 according to the 2010 census), in recent settlements in the Xasavjurtskij Rajon of Daghestan (Kamyškutan and Sovetskoe, whose combined population is ca. 3,500), and in Axaxdərə near Zaqatala (Azerbaijan).[1] The Southern Akhvakh varieties are traditionally spoken in one village each (Cegob, Tljanub and Ratlub), all situated in the Šamil'skij Rajon of Daghestan.

1.2. Dialects

As already observed by Magomedbekova (1967: 8), Northern Akhvakh is rather homegeneous. In the texts I collected in Tadmagitl', Lologonitl', Sovetskoe, and Kamyškutan, I have found no variation that could be interpreted as a contrast between distinct dialects. Axaxdərə Akhvakh is characterized by considerable idiolectal variation, but apart from changes in the subsystem of perfective tenses resulting in the emergence of an egophoric system (cf. Creissels 2018), nothing in my data suggests the existence of features that would consistently distinguish Axaxdərə Akhvakh from Northern Akhvakh as spoken in Daghestan. Axaxdərə Akhvakh is better not viewed as a distinct dialect, but rather as a variety of Northern Akhvakh whose extremely high degree of variability has to do with sociolinguistic

[1] Kamyškutan and Sovetskoe are monoethnic settlements. Axaxdərə is not really a village, but rather a group of hamlets forming part of the Car municipality (predominantly Avar, with a total population of ca. 4,600).

factors (the individual history of the Akhvakh-speaking families leaving in Axaxdərə, variable exposure of individual speakers to Azerbaijani, Avar, and/or Russian, and above all, a situation of incipient language attrition in which children still learn the language, but parents do not care about whether children reproduce the linguistic norm as established in adult speech, or develop more or less idiosyncratic deviations from the norm).

1.3. Sociolinguistic situation

Akhvakh has no official status, but in the Akhvakh-speaking villages of Daghestan, there is for the moment no evidence of an incipient language shift. However, the situation might change rapidly, due in particular to the growing proportion of Akhvakh people that commute between their native village and Makhachkala or other Daghestanian towns, and are often more fluent in Russian than in their ethnic language.

Traditionally, Akhvakh speakers are bilingual in Avar, and use Avar as a lingua franca to communicate with their neighbors, but this situation is changing in favor of Russian. However, in Akhvakh-speaking villages, Avar is still taught at school as ‘mother tongue’, and as a rule, Akhvakh speakers are literate in Avar.

1.4. State of research

The most important references on Northern Akhvakh are Magomedbekova’s (1967) monograph (which also includes some data on Southern Akhvakh) and Magomedova & Abdulaeva’s (2007) Akhvakh-Russian dictionary.

1.5. Language history

Akhvakh is quite obviously a member of the Avar-Andic branch of the Nakh-Daghestanian family, but no consensus emerges from the literature about its precise genetic relationship with the other Andic languages.

2. Phonology

2.1. Vowels and Consonants

2.1.1. Vowels

Northern Akhvakh has five distinctive vowel qualities:

i	*u*
e	*o*
a	

For each or these vowel qualities, there is a four-way distinction *short oral* / *short nasal* / *long oral* / *long nasal*.

Length is phonemic in the sense that it cannot be analyzed as conditioned by phonological factors (such as syllable structure, or stress). However, vowel length can often (although not always) be analyzed as resulting from the fusion of two underlying vowels at morpheme juncture.

Comparison of Northern Akhvakh forms with cognate forms in Southern Akhvakh or other Avar-Andic languages provides evidence that, in the history of Northern Akhvakh, vowel nasality developed from nasal consonants in final position. Cf. *sːãhu* 'soap', Southern Akhvakh *sːapun*(*i*), or *t'ãʕa* 'taste', Southern Akhvakh *t'aʕam*(*i*), etc.[2] There is ample evidence that, at some stage in the history of Northern Akhvakh, consonants in coda position were deleted, but in the particular case of nasal consonants, the nasal feature of word-final nasals was transferred to the first vowel of the word.

2.1.2. Consonants

The consonant inventory of Northern Akhvakh is presented in the following chart, where 'postalv.', 'phar.', and 'lab^{ed}', are abbreviations for 'postalveolar', 'pharyngeal', and 'labialized':

[2] Southern Akhvakh forms are quoted from Magomedova & Abdulaeva (2007).

	labial	alveolar	postalv.	lateral	palatal	velar	uvular	phar.	glottal
plosive	*p*	*t*				*k*	*q*		
plosive, lab^{ed}		*t*^{w}				*k*^{w}	*q*^{w}		
plosive, fortis							*q*ː		
plosive, fortis, lab^{ed}							*q*ː^{w}		
plosive, ejective	*p’*	*t’*				*k’*	*q’*		ʔ
plosive, ejective, lab^{ed}		*t’*^{w}				*k’*^{w}	*q’*^{w}		ʔ^{w}
plosive, ejective, fortis						*k’*ː	*q’*ː		
plosive, ejective, fortis, lab^{ed}						*k’*ː^{w}	*q’*ː^{w}		
plosive, voiced	*b*	*d*				*g*			
plosive, voiced, lab^{ed}		*d*^{w}				*g*^{w}			
affricate		*c*	*č*	*ƛ̌*					
affricate, lab^{ed}		*c*^{w}	*č*^{w}	*ƛ̌*^{w}					
affricate, fortis		*c*ː	*č*ː	*ƛ̌*ː					
affricate, fortis, lab^{ed}		*c*ː^{w}	*č*ː^{w}	*ƛ̌*ː^{w}					
affricate, ejective		*c’*	*č’*	*ƛ̌’*					
affricate, ejective, lab^{ed}		*c’*^{w}	*č’*^{w}	*ƛ̌’*^{w}					
affricate, ejective, fortis		*c’*ː	*č’*ː	*ƛ̌’*ː					
affricate, ejective, fortis, lab^{ed}		*c’*ː^{w}	*č’*ː^{w}	*ƛ̌’*ː^{w}					
affricate, voiced			*ǯ*						
affricate, voiced, lab^{ed}			*ǯ*^{w}						
fricative		*s*	*š*	*ɬ*			*χ*	*ħ*	*h*
fricative, lab^{ed}		*s*^{w}	*š*^{w}	*ɬ*^{w}			*χ*^{w}	*ħ*^{w}	*h*^{w}
fricative, fortis		*s*ː	*š*ː	*ɬ*ː		*x*ː	*χ*ː		
fricative, fortis, lab^{ed}		*s*ː^{w}	*š*ː^{w}	*ɬ*ː^{w}		*x*ː^{w}	*χ*ː^{w}		
fricative, voiced		*z*	*ž*				*ʁ*	*ʕ*	
fricative, voiced, lab^{ed}		*z*^{w}	*ž*^{w}				*ʁ*^{w}	*ʕ*^{w}	
nasal	(*m*)	*n*							
non-nasal sonorant	*w*	*r*		*l*	*j*				

In this chart, *m* is given between brackets because [m] can be analyzed as an allophone of /b/ followed by a nasal vowel. No nasality contrast is possible in the vowels of syllables whose onset is either [b] or [m]. Consequently, syllables perceived (and transcribed in the remainder of this article) as [mV] can be analyzed as underlyingly /bṼ/, and this interpretation greatly simplifies the description of morphophonological processes. For example, in verbal inflection, the non-human singular prefix *b-* surfaces as *m-* in combination with roots including a nasal vowel. In a diachronic perspective, words such as *meti* ‘wedding’ (Southern Akhvakh *berten*) or *mešu* (Southern Akhvakh *bešun*) confirm the validity of this analysis, since as explained above, the general rule is that the deletion of nasal consonants in final position was compensated by nasalization of the first vowel of the word.

By contrast, the other nasal consonant (*n*) cannot be analyzed as an allophone of any other consonant, although neutralization of the /*r*/ vs. /*n*/ distinction occurs in suffixes attached to roots including a nasal vowel (for example, the infinitive suffix *-uruƛa* surfaces as *-unuƛa* in combination with roots including a nasal vowel).

2.2. Script and transcription

There is no official written standard, but the Akhvakh-Russian dictionary, as well as the texts published in Northern Akhvakh during the last two decades (in particular in the trilingual Akhvakh-Avar-Russian journal *Ашвадо*) consistently use the Avar version of cyrillic script with the addition of trigraphs for the consonants of Northern Akhvakh that have no equivalent in Avar (*къI* for weak /q'/, *кьI* for weak /q̡'/, *лъI* for weak /q̡/, *хъI* for weak /q/). In the dictionary, the macron is used to distinguish strong /k':/, /ɬ:/, /s:/, /χ:/, /c:/, /c':/, /č:/, and /č':/ from the corresponding weak consonants, but doubling is more commonly found in the published texts (for example *кIкI* for /k':/, etc.). In the dictionary, the macron is also used for long vowels, but in the published texts, vowel length is regularly ignored. As regards nasal vowels, the dictionary consistently uses superscript *и* (for example $a^{и}$ for /ã/), but in the published texts, the indication of vowel nasality is often simply omitted.

2.3. Phonotactics

As has been alluded to above, comparison with Southern Akhvakh varieties and with the other Andic languages shows that, at some point in the history of Northern Akhvakh (but in any case, after separation not only from the other Andic languages, but also from Southern Akhvakh), either consonants in coda position were deleted (with the development of compensatory vowel nasalization if the deleted consonant was a nasal), or vowels were added in order to avoid having consonants in coda position. Cf. for example *miʕa* 'nose' (Karata *miʕar*), *kʷani* 'light' (Southern Akhvakh *kʷan*), etc. In present-day Northern Akhvakh, consonants in coda position are attested to a very limited extent in word-internal position, but never in word final position.

Another important constraint in Northern Akhvakh phonotactics is the total ban on consonant clusters in onset position.

2.4. Prosody

Contrary to Kodzasov's (1999) claim, Northern Akhvakh is NOT a tone language. Northern Akhvakh is a typical word accent language in that, with the exception of morphologically complex words whose prosodic pattern may include secondary accents, the number of possible prosodic patterns for words with a given number of syllables never exceeds the number of syllables: there are two possible patterns for two-syllable word forms, three for three-syllable word forms, etc. What is however atypical is the realization of one of the possible patterns: in isolation, Northern Akhvakh word forms may show, either an accent on a non-final syllable, or no perceptible accentual contrast at all (which can therefore be analyzed as the realization of a word-final accent).

I agree with Kibrik & Kodzasov (1990) and Kodzasov (1999) on the recognition of word forms with a flat prosody (or as they put it, with a low tone pattern), but I do not recognize the existence of syllabic melodies, and the number of possible prosodic patterns I identify is much lower, with in particular two possible patterns for disyllabic words (realized in isolation as accented on the first syllable and accentless) instead of the seven different patterns (HH, LL, HL, HF, RH, RF, RR) put forward in Kibrik & Kodzasov (1990: 323) and Kodzasov (1999: 999). This discrepancy cannot be a matter of dialectal variation, since our analyses are

based on the speech of informants from the same village (Tadmagitl'). In fact, close examination of the data provided by Kodzasov leads to the conclusion that they include no evidence supporting the recognition of more than *n* phonologically distinct prosodic patterns for *n*-syllable words.

2.5. Morphophonemics

Generally speaking, Northern Akhvakh morphology is agglutinative, with very limited phonological interaction between adjacent morphemes. The main departures from strictly agglutinative morphology are the vowel alternations in the formation of the oblique stem and/or the plural of some nouns (see section 3.2.2), and a phenomenon observed with a class of verb stems that can be analyzed as having an unstable final consonant whose deletion triggers the fusion of the preceding vowel with the initial vowel of the inflectional ending. With the stems in question, some suffixes (for example, the imperative suffix *-a*) trigger the maintenance of the unstable stem-final consonants, whereas some other suffixes (for example, the prohibitive suffix *-uba*) trigger its deletion, as illustrated by examples (1) and (2).

(1a) *ča(b)-* 'wash' + *-a* IMP → *čab-a* 'Wash!'

(1b) *ča(b)-* 'wash' + *-uba* PROH → *čoːba* 'Don't wash!'
< *ča-uba*

(2a) *eqːeda(j)-* 'look for' + *-a* IMP → *eqːedaj-a* 'Look for it!'

(2b) *eqːeda(j)-* 'look for' + *-uba* PROH → *eqːedoːba* 'Don't look for it!'
< *eqːeda-uba*

2.6. Word sandhi

One of the most striking particularities of Northern Akhvakh is the pervasiveness of a phonological process of word sandhi which blurs word boundaries by fusing the last syllable of a word with the first syllable of the following word, possibly resulting in various lexicalization and grammaticalization phenomena – see Creissels (2016a).

3. Morphology: word classes and inflection

3.1. Overview

Noun inflection expresses number and case. Verb inflection expresses TAM, evidentiality, polarity, and agreement with the nominative argument.

3.2. Nouns

3.2.1. Noun classes / gender

Three semantically transparent agreement classes of nouns are distinguished in the singular: human masculine (M), human feminine (F), and non-human (N). In the plural, the distinction *masculine* vs. *feminine* is neutralized, resulting in a binary opposition *human plural* (HPL) vs. *non-human plural* (NPL). The only exceptions to the semantic rule of gender assignment are *ãde* 'person' and *mik'e* 'child', which in the singular trigger N agreement, whereas the corresponding plural forms *ãdo* and *mik'eli* regularly trigger HPL agreement. For more details about agreement markers and agreement rules, cf. 3.3.2, 3.4.3, 3.6.2, 3.6.3, and 3.6.5.

3.2.2. Oblique stem and number marking

The basic distinctions in noun morphology are *nominative* (alias *absolutive*) vs. *oblique stem* and *singular* vs. *plural*. The nominative singular has no overt mark, and the plural oblique stem is formed from the nominative plural.

The nominative plural is formed by either an alternation in the final vowel, or the addition of a plural suffix. The plural suffix *-di* has the particularity that, with some nouns, the stem to which it attaches can be described as a truncated form of the nominative singular, as in *quri* 'field, pl. *qu-di*, or *ĩgwara* 'bread', pl. *ĩgwa-di*.

In the singular, the formation of the oblique stem is very irregular and involves a considerable amount of free variation. The singular oblique stem may be identical to the nominative, or differ from it, either by an alternation in the final vowel, or by the addition of an oblique stem marker. The oblique stem markers expressing gender (M *-sːu-*, F/N *-ɬːi-*), are systematically used with headless noun modifiers that occupy the final position within a noun phrase, and consequently act as the host of the case suffix. They are also used with some nouns, but with nouns, they are most of the time either optional, or in free variation with other types of oblique stem formation. For example, the oblique stem of *waša* 'boy' may be *wašo* or *waša-sːu*, and the oblique stem of *jaše* 'girl' may be *jašo* or *jaše-ɬːi*,

There is no straightforward correlation between the formation of the singular oblique stem and that of the nominative plural. (3) illustrates the lack of obvious regularities in oblique stem and plural formation (although comparison with Southern Akhvakh and other Andic languages may suggest historical explanations for at least some of the irregularities observed in the present state of Northern Akhvakh).

(3)

	nom. sg.	obl.stem sg.	nom. pl.
'flower'	*cːicːi*	*cːicːi*	*cːicːa*
'house'	*č'ili*	*č'ila*	*č'ila*
'pocket'	*taxa*	*taxi*	*taxi*
'snake'	*beka*	*beko*	*beki*
'woman'	*ak'ːa*	*ak'ːa*	*ak'ːo*
'father'	*ima*	*imo*	*ima-ma*
'bee'	*hera*	*hero*	*hera-di*
'place'	*miša*	*miša*	*miša-di*
'child'	*mik'e*	*mik'i*	*mik'e-li*

‘cow’	*ħema*	*ħema*	*ħema-na*
‘tree’	*ruša*	*rušo*	*ruša-la*
‘mirror’	*mat’u*	*mat’u-na*	*mat’u-ba*
‘bag’	*q’ẽɬe*	*q’ẽɬe-no*	*q’ẽɬe-ma*

By contrast, the plural oblique stem is almost always formed regularly by simply adding oblique stem markers expressing gender (HPL *-lo-* and NPL *-li-* or *-le-*) to the nominative plural. The only exception to this rule is that, in the formation of the plural oblique stem, the plural markers *-la* and *-li* are deleted. For example, the nominative plural of *mik’e* ‘child’ is *mik’e-li*, and the plural oblique stem is *mik’e-lo* (instead of expected **mik’e-li-lo*).

3.2.3. Case

3.2.3.1. The inventory of cases

In addition to the nominative (alias absolutive), morphologically unmarked and used in particular as the quotation form of nouns, the case inflection of Northern Akhvakh nouns includes the so-called ‘syntactic cases’ traditionally recognized in other Daghestanian languages: ergative, dative, and genitive, and several series of spatial forms whose ending can be segmented into a *configuration marker* (alias *localization marker*) followed by the *spatial case marker* proper. The following cases can also be recognized in Northern Akhvakh: comitative, functive-transformative, mediative, similative, and causal.

3.2.3.2. The ergative

The suffix of the ergative case is *-de*. When it immediately follows a close vowel, in particular with oblique stems including the oblique stem markers *-sːu-* or *-ɬːi-*, a contraction process may occur, as in (4):

(4) *ek’ʷa* ‘man’ > obl. stem *ek’ʷa-sːu-* > erg. *ek’ʷa-sːu-de ~ ek’ʷa-sːʷ-e*
jaše ‘girl’ > obl. stem *jaše-ɬːi-* > erg. *jaše-ɬːi-de ~ jaše-ɬː-e*

3.2.3.3. The dative

The suffix of the dative case is *-ƛa*, with a free variant *-ƛaje*. When it immediately follows a close vowel, in particular with oblique stems including the oblique stem markers *-sːu-* or *-ɬːi-*, a contraction process may occur, as in (5):[3]

(5) *ek’ʷa* ‘man’ > obl. stem *ek’ʷa-sːu-* > dat. *ek’ʷa-sːu-ƛa ~ ek’ʷa-sːʷ-a*
jaše ‘girl’ > obl. stem *jaše-ɬːi-* > dat. *jaše-ɬːi-ƛa ~ jaše-ɬː-a*

[3] Note that this process results in possible ambiguities with spatial forms in which no overt configuration marker precedes the allative marker *-a* (see 3.2.4)

3.2.3.4. The genitive

Northern Akhvakh has two variants of the genitive case: a variant in which no specific marker of the genitive case is added to the oblique stem of the noun, and a variant marked by the suffix *-ƛ̓ːi*, homonymous with the locative of the 5th series of spatial forms. The variant including no specific genitive marker is used in principle with M and HPL nouns, and the *-ƛ̓ːi* variant with F, N and NPL nouns, but there is a tendency to generalize the use of the *-ƛ̓ːi* variant. The first variant may include a gender-number suffix, but this suffix is obligatory only if the head noun is not expressed. When the head noun is overtly expressed, the genitive of M and HPL nouns tends to be reduced to the bare oblique stem, as shown in (6).

(6a) *ima* 'father' oblique stem *imo-*

(6b) *imo(-we)* *wacːi* 'the father's brother (M)'
imo(-je) *jacːi* 'the father's sister (F)'
imo(-be) *xːʷani* 'the father's horse (N)'

3.2.3.5. Spatial cases

Northern Akhvakh has three spatial cases that, as a rule, attach to the oblique stem enlarged by a *spatial configuration marker* (see 3.2.4): locative *-e* or *-i*, allative *-a* (with a free variant *-aje*), and ablative *-u* (with a free variant *-une*).[4] The allative suffix can be followed by the postpositional clitic *-sːa* 'towards'.

3.2.3.6. Other cases (or case-like forms)

The comitative is marked by a suffix *-k'ena* attached to the oblique stem, as in *di-k'ena* 'with me' (*di-* is the oblique stem of *dene* 'I').

The causal case is marked by a suffix *-aʁana* attached to the oblique stem, as in *dʷ-aʁana* 'because of you' (*du-* is the oblique stem of *mene* 'you').

The mediative case ('by means of') is marked by a suffix expressing agreement with the nominative argument of the verb: *-guło:(he)* (M) / *-gułeː(he)* (F, N) / *-guɬiː(hi)* (HPL) / *-gułereː(he)* (NPL). This suffix attaches to the oblique stem, as in *hudo komoki-ɬːi-guło:* '(he did that) with their help'. Etymologically, the mediative case marker is a complex marker with a first formative *-gu-* cognate with the ablative of the 1st series of spatial forms, and a second formative cognate with the functive-transformative marker.

The functive-transformative and similative markers attach to the nominative form of the noun.[5] The functive-transformative marker expresses agreement with the nominative argument of the verb: *-ło:(he)* (M) / *-łeː(he)* (F, N) / *-łiː(hi)* (HPL) / *-łereː(he)* (NPL), for example *aqiqːa-ło:* '(he works there) as a gardener'. It can be decomposed into a first formative *-ɬ-*, and a second formative identical to the ending of the general converb (see 3.6.5). The similative marker is *-uqːe*, as in *imiχ-uqːe* 'like a donkey'.

[4] According to Magomedbekova (1967), originally, *-u* and *-une* constituted two distinct case markers, ablative and perlative respectively, but they are now used in free variation.
[5] On the functive-transformative case of Akhvakh, see Creissels (2014).

3.2.4. Spatial forms of nouns

Five spatial configuration markers (one of them with two formally unrelated allomorphs) are productive in Northern Akhvakh: *-g-*, *-χar-* ~ *-ƛ:ir-*, *-q:-*, *-ƛ':i-*, and *-ƛ:i-*.

(7)

	CFG_1	CFG_2	CFG_3	CFG_4	CFG_5
LOC	*-g-e*	*-χar-i*	*-q:-e*	*-ƛ':-i*	*-ƛ:-i*
ALL	*-g-a(je)*	*-ƛ:ir-a(je)*	*-q:-a(je)*	*-ƛ':-a(je)*	*-ƛ:-a(je)*
ABL	*-g-u(ne)*	*-χar-u(ne)*	*-q:-u(ne)*	*-ƛ':-u(ne)*	*-ƛ:-u(ne)*

CFG_1 is semantically the default series of spatial forms, which by itself does not encode more that the mere existence of a spatial relationship. CFG_2 encodes the spatial configuration ‘in the vicinity of’. Comparative data show that the original meaning of CFG_3 was ‘in the vicinity of’, ‘behind’, but its use in Northern Akhvakh is strongly lexicalized, and its productivity is mainly due to the fact that it is usual with a few nouns that fulfill the function of ground in spatial relationships with a particularly high frequency. CFG_4 straightforwardly encodes the *under* configuration. CFG_5 encodes two distinct types of spatial configurations which have no obvious semantic connection, and which are commonly encoded by distinct configuration markers in other languages: in a filled, dense space, and on a non-horizontal surface.

A very limited number of nouns (less than five) show vestiges of a sixth configuration marker *-r-*. The meaning of interiority carried by this vestigial configuration marker is productively expressed by the adverb *geƛ:i* (see 3.7.2).

There are also spatial forms including no overt configuration marker. Two cases must be distinguished.

On the one hand, a limited number of non-human nouns among those that do not take the oblique stem marker *-ɬ:i* have the ability to attach the locative and ablative markers directly to the oblique stem (or to a truncated form thereof), whereas with the same nouns, the presence of an overt configuration marker is required in the allative. For example, *č'ili* ‘room, house’ (oblique stem *č'ila-)* has the spatial forms *č'il-e* (LOC), *č'ila-g-a* (ALL) and *č'il-o* (ABL). Most of these nouns, but not all, can be characterized as denoting containers (*šagi* ‘pot’, *q'ẽƛe* ‘bag’, etc.), and with them, the absence of any overt configuration marker expresses localization within an empty space.

On the other hand, non-human nouns taking the oblique stem marker *-ɬ:i-* may have spatial forms devoid of overt configuration marker in the three spatial cases. For example, *miša* ‘place’ (oblique stem *miša-ɬ:i-*) has the spatial forms *miša-ɬ:-i* (LOC), *miša-ɬ:-a* (ALL) and *miša-ɬ:-u* (ABL). Functionally, such spatial forms are simply more or less optional variants of forms including the 1st (default) configuration marker *-g-*.

3.2.5. Definiteness

Definiteness is not grammaticalized in Northern Akhvakh: bare nouns are equally possible in contexts triggering a definite reading, and in contexts triggering an indefinite or generic reading.

3.2.6. The formation of nouns[6]

3.2.6.1. Nominal compounds

The only pattern dedicated to the formation of nominal compounds is the juxtaposition of nouns forming copulative compounds (*dvandvas*) such as *ĩk'ːu-reƛ'a* 'limbs' (*ĩk'ːu* 'leg', *reƛ'a* 'arm'). This pattern is very productive. Northern Akhvakh also has many nouns that look like copulative compounds of this type, but in which the second element is attested only in combination with a particular noun with which it forms a pseudo-compound whose meaning is somehow an extension of the meaning the noun in question. For example, the second element *χaχu* of the pseudo-copulative compound *ĩk'ːot'i-χaχu* 'rodents' (*ĩk'ːot'i* 'mouse') exists only in combination with *ĩk'ːot'i*, and similarly, the second element *k'ači* of *miʕa-k'ači* 'face' (*miʕa* 'nose'), is attested only in combination with *miʕa*.

3.2.6.2. Nominal derivation

Two suffixes are used with a relative productivity to form nouns from nouns: *-łe* (used to form abstract nouns such as *axːi-łe* 'testimony' < *axːi* 'witness'), and *-qːa*, probably borrowed from Avar (used to form nouns of persons characterized by their occupation, such as *gʷami-qːa* 'drummer' < *gʷama* 'drum').[7] The suffix *-łe* also derives nouns from adjectives, for example *baχːa-łe* 'length' < *baχːa-da* 'long' (where *-da* is a thematic suffix, cf. 3.3.1).

There is also a relatively important inventory of genitive forms that have lexicalized and are now used as nouns with a meaning related to that of the noun from which they originate, although not entirely predictable, for example *χːẽt'e-ƛːi* 'cold in the head' < *χːẽt'e* 'nasal mucus'.

The only productive suffix used to form deverbal nouns is the masdar suffix *-e*, as in *baqaroł-e* 'being old' < *baqaroł-uruƛa* 'to grow old').

Northern Akhvakh has a productive suffix *-ča* used to derive nouns from numerals. Depending on the context, the nouns formed by means of this suffix can denote any entity that can be characterized by the number in question: number, size, mark, playing-card, busline, etc., for example *k'e-ča* 'number two, size two, etc.' < *k'e-da* 'two'.

3.2.6.3. Nominal reduplication

Northern Akhvakh has a productive pattern of noun reduplication expressing intensification, in which the reduplicant follows the reduplicated stem and differs from it by its initial consonant, as in *χːaba-č'aba* 'long conversation' < *χːaba* 'conversation'. The consonant change affecting the reduplicant is not predictable.

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[6] For a description of word formation processes in Akhvakh more detailed that that provided in this sketch, cf. Creissels (2016b).

[7] In Northern Akhvakh, professions are more usually designated by means of constructions in which a participial clause modifies a noun, for example *ĩgʷara bižida ek'ʷa* 'baker', lit. 'bread-baking man'.

3.3. Adjectives

3.3.1. The thematic suffix -da

Many adjectival roots occur in bare form as the input of word formation operations only (compounding, reduplication, derivation via affixation); when used as adjectival stems, whatever the syntactic role of the adjective, the roots in question are enlarged by an obligatory thematic suffix *-da* to which no particular function can be attributed.

3.3.2. Adjectival inflection

Adjectival lexemes divide into two classes: those that include an obligatory gender-number prefix, such as *-išada* 'big' – cf. (8), and those that have no prefixal slot, such as *ĩk'a* 'large'. This distinction is orthogonal to that between the adjectives that take the thematic suffix *-da* and those that don't.

(8)

	-išada 'big'
M	*w-ušada*
F	*j-išada*
N	*b-išada*
HPL	*ba-šada*
NPL	*r-išada*

All adjectives have the same suffixal inflection. In combination with a noun they modify, like the other noun modifiers, they optionally take suffixes expressing gender-number agreement with their head, but in practice, as already observed by Magomedbekova (1967), agreement suffixes are very rarely used in *modifier – noun* constructions, and the examples in the Akhvakh-Russian dictionary are quite misleading in this respect.

When the noun referring to the notion they modify is not expressed, adjectives occupy the last position in the noun phrase and are inflected for gender-number and case. In the nominative, they take a suffix *-we* (M), *-je* (F), *-be* (N), *-ji* (HPL), or *-re* (NPL), whereas in the other cases, they take an oblique stem formative *-sːu-* (M), *-łːi-* (F/N), *-lo-* (HPL), or *-li-* (NPL), followed by the case marker. When followed by a plural oblique stem marker, the thematic suffix *-da* becomes *-di*. For example, with *šoda* 'good':

(9)

	šoda-we (M)	*šoda-je* (F) / *šoda-be* (N)	*šoda-ji* (HPL)	*šoda-re* (NPL)
NOM				
ERG	*šoda-sːu-de*	*šoda-łːi-de*	*šodi-lo-de*	*šodi-li-de*
	~ šoda-sːʷ-e	*~ šoda-łː-e*	*~ šodi-lʷ-e*	*~ šodi-l-e*
DAT	*šoda-sːu-λa*	*šoda-łːi-λa*	*šodi-lo-λa*	*šodi-li-λa*
	~ šoda-sːʷ-a	*~ šoda-łː-a*	*~ šodi-lʷ-a*	*~ šodi-l-a*
GEN	*šoda-sːu*	*šoda-łːi-λːi*	*šodi-lo*	*šodi-li-λːi*
COM	*šoda-sːu-k'ena*	*šoda-łːi-k'ena*	*šodi-lo-k'ena*	*šodi-li-k'ena*
etc.				

The suffix *-sːe* can be added to adjectives to express a meaning that can be characterized as 'selective' or 'contrastive'. For example, *šoda-sːe* (< šoda 'good') is the equivalent of either

'the good one' (if in the situation referred to, the noun modified by 'good' has two or more potential referents, but one of them only can be considered 'good'), or 'the better one', 'the best one' (if in the situation referred to, the noun modified by 'good' has more than one potential referent that can be considered 'good'):

(10) *hu-du-sːʷ-e* *šoda-sːe* *ʕeče=la* *ĩ-sːʷ-a-da* *b-eɬː-e,*
DIST-SL-OBL.M-ERG good-CONTR apple=ADD self-M-DAT-INT N-leave-CVB.N
'He chose the good apple for himself,
koša-sːe *di-ƛa* *o-xː-ari.*
bad-CONTR 1SG-DAT N-give-PFV
and gave me the bad one.'

3.3.3. The formation of adjectives

3.3.3.1. Adjectival compounds

Adjectives can combine into compounds such as *hiri-bašida* 'red and white' (*hirida* 'red', *bašida* 'white'), or *ĩkʼːʷeːkʼa* 'not very important' (*ĩkʼːʷa* 'small', *ĩkʼa* 'large'). Comparative compounds such as *ãžiku-bašida* 'snow-white' (*ãži* 'snow', *bašida* 'white') are typically formed from color adjectives.

3.3.3.2. Adjectival derivation

Denominal adjectives can be formed by means of the suffixes *-qʼːeda* (privative, as in *tʼãʕa-qʼːeda* 'uncomfortable' < *tʼãʕa* 'comfort'), *-χːada ~ -χːʷada* (proprietive, as in *ʁizi-χːada* 'dirty' < *ʁizi* 'dirt'), *-gula* (similative, as in *ĩčʼa-gula* 'as hard as stone' < *ĩčʼa* 'stone').

Northern Akhvakh makes productive use of the genitive form of nouns in the function fulfilled in other languages by relational adjectives, for example *daru-ƛːi* 'medicinal' < *daru* 'medicine', or *žomo-ƛːi* 'green' < *žomi* 'grass'.

Several suffixes can be used to modify the meaning of color adjectives without changing their grammatical properties, for example *-xːoda ~ -xːʷada* in *baši-xːoda* 'whitish' < *bašida* 'white').

The participles of some verbs, also used with a purely stative meaning, are described as adjectives derived from verbs in the Akhvakh-Russian dictionary. For example, *baqaroɬ-ada* < *baqaroɬ-uruƛa* 'to grow old' as a participle expresses the resultative meaning 'grown old', but this form is also the only possible equivalent of English 'old'.

Adjectives derived from numerals by means of a suffix *-liƛːi* (for example *ištu-liƛːi* < *ištu-da* 'five') are used to express meanings such as '*x* years old', 'of size *x*', etc.

Adjectives equivalent to English 'such' can be derived from demonstratives by adding the suffix *-šta(da)*: *hu-šta(da), ha-šta(da), hu-du-šta(da),* etc.

Finally, adverbs can be converted into adjectives by the addition of a morpheme *sːe* homonymous with the selective/contrastive suffix mentioned in section 3.3.2. However, this *sːe* is not really a derivational affix, but rather a clitic with a more general function of attributivizer, since it can operate not only on lexemes, but also on case-marked noun phrases, converting them into phrases having the ability to modify nouns. For example, *qːala* 'early' is used exclusively as an adverb, and the corresponding adjective is *qːala=sːe*. Similarly, *du-ƛa*

'to/for you', dative of *mene* 'you', cannot be used as a noun modifier, but *du-ƛ̓a=sːe* 'designed for you' has this ability.

3.3.2.3. Adjectival reduplication

Adjectives have a reduplication pattern identical to that of nouns (i.e., involving a change in the initial consonant), expressing a meaning of approximation, as in *ɬːema-χːemada* 'more or less liquid' < *ɬːemada* 'liquid'.

3.4. Pronouns

3.4.1. Personal pronouns

Northern Akhvakh has no 3rd person pronoun proper. The anaphoric / deictic function fulfilled in other languages by specialized 3rd person pronouns is fulfilled in Northern Akhvakh by demonstratives.

1st and 2nd person singular pronouns do not exhibit gender distinction in their form, but their behavior as agreement controllers varies according to the nature of their referent. They have the following morphological particularities:

– the ergative ending does not attach to the oblique stem selected by the other case endings (1SG *di-*, 2SG *du-*), but to a truncated form of the nominative *de~~ne~~*, *me~~ne~~*;[8]
– the genitive has a zero ending irrespective of gender (whereas in noun inflection, F nouns select the genitive ending *-ƛ̓ːi*).

(11)

	1SG	2SG
NOM	*dene*	*mene*
ERG	*de-de*	*me-de*
DAT	*di-ƛ̓a*	*du-ƛ̓a*
GEN	*di*	*du*
COM	*di-k'ena*	*du-k'ena*
etc.		

In the inflection of 1st and 2nd person plural pronouns, the ergative and dative endings select a stem identical to the nominative form, whereas the other case markers attach to a stem identical to the genitive. Reduced forms *-e* and *-a* of the ergative and dative endings *-de* and *-ƛ̓a* are common in the inflection of 1st and 2nd person plural pronouns.

[8] Alternatively, the second syllable of *dene* and *mene* could be analyzed as a nominative marker. In a synchronic description, there is no strong argument for choosing one of the two possible analyses, but historically, as rightly observed by Magomedbekova (1967: 120), comparative data unambiguously support the reconstruction of the truncation scenario, cf. for example the forms *dena*, *mena* (nom.) and *den-de*, *men-de* (erg.) she gives for the Ratlub variety of Southern Akhvakh.

(12)

	1PL.EXCL	1PL.INCL	2PL
NOM	*isːi*	*iƛːi*	*ušti*
ERG	*isːi-de ~ isː-e*	*iƛːi-de ~ iƛː-e*	*ušti-de ~ ušt-e*
DAT	*isːi-ƛa ~ isː-a*	*iƛːi-ƛa ~ iƛː-a*	*ušti-ƛa ~ ušt-a*
GEN	*esːe*	*eƛːe*	*ošte*
COM	*esːe-k'ena*	*eƛːe-k'ena*	*ošte-k'ena*
etc.			

3.4.2. Possessive pronouns

Northern Akhvakh does not have possessive pronouns distinct from the regular genitive form of personal pronouns. If no head noun is present, genitive forms show the same case inflection as other noun modifiers in the same conditions, as illustrated in (13) with *di* 'my, mine' (genitive of *dene* 'I'):

(13)

NOM	*di-we* (M)	*di-je* (F) / *di-be* (N)	*di-ji* (HPL)	*di-re* (NPL)
ERG	*di-sːu-de*	*di-łːi-de*	*di-lo-de*	*di-li-de*
	~ di-sːʷ-e	*~ di-łː-e*	*~ di-lʷ-e*	*~ di-l-e*
DAT	*di-sːu-ƛa*	*di-łːi-ƛa*	*di-lo-ƛa*	*di-li-ƛa*
	~ di-sːʷ-a	*~ di-łː-a*	*~ di-lʷ-a*	*~ di-l-a*
GEN	*di-sːu*	*di-łːi-ƛːi*	*di-lo*	*di-li-ƛːi*
COM	*di-sːu-k'ena*	*di-łːi-k'ena*	*di-lo-k'ena*	*di-li-k'ena*
etc.				

3.4.3. Demonstrative pronouns

Northern Akhvakh demonstratives are based on the roots *ha* (proximal) and *hu* (distal), alone or enlarged by one of the following three formatives expressing vertical deixis: *-de/-du*, *-ƛe/-ƛu*, and *-ge/-gu*. In exophoric function, the semantic distinctions carried by the choice of a particular demonstrative can be described as follows:

(14)

	PROX	DIST
no indication of vertical deixis	*ha*	*hu*
same level as the deictic center	*ha-de*	*hu-du*
higher than the deictic center	*ha-ƛe*	*hu-ƛu*
lower than the deictic center	*ha-ge*	*hu-gu*

Demonstratives as noun modifiers optionally take suffixes expressing gender-number agreement with their head, but in practice, agreement suffixes are very rarely used with demonstratives in modifier function.

In pronominal function, demonstratives are inflected for gender-number and case. In the nominative, they take a suffix *-we* (M), *-je* (F), *-be* (N), *-ji* (HPL), or *-re* (NPL), whereas in the other cases, they take an oblique stem formative *-sːu-* (M), *-łːi-* (F/N), *-do-* (HPL), or *-di-* (NPL), followed by the case marker. For example, for the distal demonstrative with no indication of vertical deixis:

(15)	NOM	*hu-we* (M)	*hu-je* (F) / *hu-be* (N)	*hu-ji* (HPL)	*hu-re* (NPL)
	ERG	*hu-sːu-de*	*hu-ɬːi-de*	*hu-do-de*	*hu-di-de*
		~ hu-sːʷ-e	*~ hu-ɬː-e*	*~ hu-dʷ-e*	*~ hu-d-e*
	DAT	*hu-sːu-ƛa*	*hu-ɬːi-ƛa*	*hu-do-ƛa*	*hu-di-ƛa*
		~ hu-sːʷ-a	*~ hu-ɬː-a*	*~ hu-dʷ-a*	*~ hu-d-a*
	GEN	*hu-sːu*	*hu-ɬːi-ƛːi*	*hu-do*	*hu-di-ƛːi*
	COM	*hu-sːu-k'ena*	*hu-ɬːi-k'ena*	*hu-do-k'ena*	*hu-di-k'ena*
	etc.				

The intensifying particle *-da* can attach to demonstratives used as determiners (but not to demonstratives used as pronouns). The meaning expressed is 'same'.

3.4.4. Intensive and reflexive pronouns

1st and 2nd person intensive pronouns (i.e., pronouns used to emphasize the identity of a participant), used in particular (but not only) in reflexive function, derive from the forms described in section 3.4.1-2 via the addition of the intensifying particle *-da* after the gender-number marker or the case marker.

(16) *če-sːe* *ãɬi* *di-da* *dada-sːʷ-a* *o-t-ari,*
one-CONTR ram 1SG(GEN)-INT father-OBL.M-DAT N-send-PFV
'I sent one of the rams to my father,
če-sːe-be *de-de-da* *b-iqːʷ-ari.*
one-CONTR-N 1SG-ERG-INT N-slauhter-PFV
and I slaughtered the other myself.'

For the 3rd person, Northern Akhvakh has a pronoun *ži* inflected like demonstrative pronouns, with the following two irregularities: the HPL suffix is *-ba* instead of the regular HPL suffix *-ji*, and the oblique stem formatives are added to a stem *ĩ-* completely different from the stem *ži-* to which gender-number suffixes attach in the nominative.

(17)	NOM	*ži-we* (M)	*ži-je* (F) / *ži-be* (N)	*ži-ba* (HPL)	*ži-re* (NPL)
	ERG	*ĩ-sːu-de*	*ĩ-ɬːi-de*	*ĩ-do-de*	*ĩ-di-de*
		~ ĩ-sːʷ-e	*~ ĩ-ɬː-e*	*~ ĩ-dʷ-e*	*~ ĩ-d-e*
	DAT	*ĩ-sːu-ƛa*	*ĩ-ɬːi-ƛa*	*ĩ-do-ƛa*	*ĩ-di-ƛa*
		~ ĩ-sːʷ-a	*~ ĩ-ɬː-a*	*~ ĩ-dʷ-a*	*~ ĩ-d-a*
	GEN	*ĩ-sːu*	*ĩ-ɬːi-ƛːi*	*ĩ-do*	*ĩ-di-ƛːi*
	COM	*ĩ-sːu-k'ena*	*ĩ-ɬːi-k'ena*	*ĩ-do-k'ena*	*ĩ-di-k'ena*
	etc.				

All these forms are compatible with the intensifying particle *-da*, which invariably follows the case marker.

ži in its bare form is used as a long-distance reflexive, both in logophoric and non-logophoric contexts.

(18) *wacːo-g-a* *eƛ’ː-awi,* *“ĩ-sːu-ƛa* *komoki-łː-a* *w-oq’-a!”*
brother-CFG$_1$-ALL say-PFV.N REFL-OBL.M-DAT help-OBL.N-DAT M-come-IMP
‘He said to his brother “Come to my aid!”’

The addition of the intensifying particle *-da* to *ži* gives intensive pronouns that can be used to emphasize the identity of discursively salient referents other that speech act participants. Like the *da*-form of 1st and 2nd person pronouns, the *da*-form of *ži* also has reflexive uses. In strictly local configurations (i.e., when both *ži* and its antecedent are terms in the construction of the same verb), the particle *-da* is required.

(19) *χã-sːu-de* *žoːwudi* *ĩ-sːu-ƛːir-a-da* *ĩkːwa-sːe* *waša.*
king-M-ERG call.PFV.M REFL-OBL.M-CFG$_2$-ALL-INT small-CONTR boy
‘The king called his younger son to himself.’

The particle *-da* is also required in reflexive configurations involving a term in the construction of a verb and a genitive modifying another term in the construction of the same verb.

3.4.5. Reciprocal pronoun

The reciprocal pronoun is formed by combining a form of *če* ‘one’ inflected for a case other than the nominative followed by the nominative form *če*. The nominative argument is obligatorily involved in the reciprocal relationship. If the other term involved in the reciprocal relationship is an ergative NP, the reciprocal pronoun is *če-sːʷ-e če* (M) / *če-łː-e če* (F), if it is a dative NP the reciprocal pronoun is *če-sːʷ-a če* (M) / *če-łː-a če* (F), etc.

3.4.6. Interrogative pronouns[9]

The interrogative pronoun ‘who? / what?’ has two different stems for the nominative (*ču-*) and the other cases (human *łːo-* / non-human *sːũ-*):

(20)

NOM	*ču-wi* (M) / *ču-ji* (F)	*ču-bi* (N)
ERG	*łːo-de*	*sːũ-de*
DAT	*łːo-ƛa*	*sːũ-ƛa*
GEN	*łːo-*	*sːũ-ƛːi*
COM	*łːo-k’ena*	*sːũ-k’ena*
etc.		

In the pronunciation, *čuwi* (M) and *čubi* (N) may have the same realization *čʷi*.

The interrogative pronoun *čugada* ‘which one?’, also used as a determiner, has the same inflection as adjectives.

[9] On interrogative adverbs, see 3.7.1.

3.4.7. Indefinite pronouns

The numeral *če* ‘one’ is also used as an indefinite determiner and pronoun.

če-sːe ‘one out of two’ is formed by adding the contrastive/selective marker *-sːe* to the numeral *če* ‘one. The bare stem *če-sːe* is used in determiner function, and the corresponding pronoun is inflected like headless adjectives.

ču-wi-la / ču-ji-la / ču-bi-la ‘everyone, everything’ is formed by adding *-la* to the interrogative pronoun. The corresponding determiner is *čugada-la*.

Free-choice indefinites (‘anyone, anything’) are formed by adding the conditional converb of *bik’uruƛa* ‘be’ to the interrogative pronoun: *ču-wi wuk’ala / ču-ji jik’ʷala / ču-bi bik’ʷala*. The corresponding determiner is *čugada bik’ʷala*.

ču-wi-sːa / ču-ji-sːa / ču-bi-sːa ‘someone, something’’ is formed by adding *-sːa* to the interrogative pronoun.

žiži ‘every’ is used in its bare form as a determiner; as a pronoun, it is inflected like headless adjectives.

3.4.8. Negative pronouns

In clauses whose nucleus is a negative verb form, the determiners and pronouns formed by adding *-la* to interrogative determiners or pronouns (mentioned in 3.4.7 as indefinite pronouns) function as negative pronouns.

3.5. Numerals and other quantity words

The forms of numerals and other quantity words given in this section are those used in combination with a head noun. When headless, they are inflected like the other types of noun modifiers, with gender-number markers in the nominative and oblique stem markers followed by a case suffix in the other cases.

3.5.1. Cardinal numerals

The numerals from 1 to 20 are shown in (21). With the exception of *če* ‘one’, the numerals from 1 to 10 include the thematic suffix *-da* also found with many adjectives. This suffix disappears when the numeral lexeme constitutes the input of word formation operations, otherwise it is obligatory, and no particular function can be attributed to it. The numerals from 11 to 19 consist of ‘10 + 1, 2, 3, etc.’, with an additional formative *-l-* in 14, 15, 16, 17, and 19, and elision of the initial consonant of the final formative in 14.

(21)

1	*če*	11	*ač'a-če*
2	*k'eda*	12	*ač'a-k'eda*
3	*ƛʷada*	13	*ač'a-ƛʷada*
4	*boq'oda*	14	*ač'a-l-oq'oda*
5	*ištuda*	15	*ač'a-l-ištuda*
6	*ĩƛːida*	16	*ač'a-l-ĩƛːida*
7	*aƛ'ːuda*	17	*ač'a-l-aƛ'ːuda*
8	*biƛ'ːida*	18	*ač'a-biƛ'ːida*
9	*ap'ada*	19	*ač'a-l-ap'ada*
10	*ač'ada*	20	*q'ːẽdoda*

The cardinals from 20 to 100 are based on a partially vigesimal system, with 30 derived from 3 but 40, 60 and 80 expressed as multiples of 20.

(22)

20	*q'ːẽdoda*
30	*ƛamoloda*
40	*k'eq'ːẽdoda*
60	*ƛaq'ːẽdoda*
80	*boq'ːẽdoda*

The cardinals between 21 and 39 are formed by compounding 20 or 30 with a numeral between 1 and 9 (for example *q'ːẽdo-ƛʷada* 23, *ƛamolo-če 31)* and the numerals between 41 and 99 are formed by compounding 40, 60 or 80 with a numeral between 1 and 19 (for example *k'eq'ːẽdo-ač'a-k'eda* 52).

The terms for 100 and its multiples, and 1000, are given in (18).

(23)

100	*bešanoda*
200	*k'ešanoda*
300	*ƛašanoda*
400	*boq'ošanoda*
500	*ištʷešanoda*
600	*ĩƛːešanoda*
700	*aƛ'ːʷešanoda*
800	*biƛ'ːešanoda*
900	*ap'ašanoda*
1000	*azaroda*

The suffixation of *-la* to cardinal numerals expresses exhaustivity, for example *ƛʷada-la* 'the three of them'.

The addition of *-midi* or *-eːdi* to cardinal numerals expresses a collective meaning, for example *k'e-midi* (Russian *двое*), *ištʷ-eːdi* (Russian *пятеро*).

3.5.2. Ordinal numerals

Apart from *ĩč'isːigi* 'first' (*ĩč'i* 'most', *sːigi* 'before'), ordinals are formed by means of a suffix *-(bi)liƛ'ːida* (Magomedbekova: *-leƛ'ːida*), probably cognate with *eƛ'ːida*, imperfective participle of the verb *eƛ'ːuruƛa* 'say':

(24) 1st *ĩč'isːigi*
2nd *k'e-biliƛ'ːida*
3rd *ƛa-biliƛ'ːida*
4th *boq'i-liƛ'ːida*
5th *ištu-liƛ'ːida*
6th *ĩƛːi-liƛ'ːida*

Similar forms with an ending *ƛ'ːu* instead of *ƛ'ːida* are adverbs expressing 'for the 1st, 2nd, etc. time', for example *ƛa-biliƛ'ːu* 'for the 3rd time'.

3.5.3. Multiplicative numerals

Multiplicative numerals are formed by means of the suffix *-č'e*, for example *k'e-č'e* 'twice' < *k'eda* 'two'.

3.5.4. Splitting numerals

The addition of the suffix *-łi* to numerals expresses division, for example *ƛa-łi* 'into three parts' < *ƛʷada* 'three'.

3.5.5. Other quantity words

Other quantity words include:

b-oʁoda (NPL *r-oʁoda*) 'much, many'
ãčada 'few'
čamisːe 'a certain amount of'
ãƛ'oda 'all'
čami 'how much, how many?'

The suffixation of *-študa* to demonstrative stems (*ha-študa*, *hu-študa*, etc.) yields determiners/pronouns expressing 'as much'.

3.6. Verbs

3.6.1. Types of verb stems

Verb stems may be morphologically simple, or formed via suffixation or compounding. Verbal stems cannot constitute words by themselves; they obligatorily combine with suffixes,

and no verbal suffix has a zero allomorph. Without any exception, the suffixes that can attach to verbal stems begin with a vowel, and verbal stems end with a consonant. However, the final consonant of some stems is systematically deleted in contact with some suffixes, in which case the last vowel of the stem merges with the initial vowel of the suffix. A detailed description of this phenomenon can be found in Creissels (2009a).

Note in particular that the infinitive suffix *-uruƛa* is among those that trigger deletion of stem-final unstable consonants. Consequently, the infinitive of the verbs affected by this phenomenon shows a long vowel resulting from the fusion of the initial *u* of the infinitive suffix with the preceding vowel. For example, the infinitive of *ča(b)* 'wash' is *čoːruƛa* (< *ča-uruƛa*), and the infinitive of *ƛi(b)* 'fear' is *ƛuːruƛa* (< *ƛi-uruƛa*).

The verb stems of Northern Akhvakh divide into two phonologically and semantically arbitrary morphological classes, those having an initial slot for gender-number agreement, and those devoid of it.

Northern Akhvakh also has a very limited number of verbs (less than ten) synchronically analyzable as having discontinuous roots with an infixal slot for gender-number agreement, for example *g‹o›cʼːuruƛa* (root *g...cʼː*-) 'hit', *a‹b›ašuruƛa* (root *a...aš*^{w}-) 'shake'. Diachronically, the first segment of such discontinuous roots may be a frozen preverb, but synchronically, Northern Akhvakh does not have a productive category of preverbs.

The apparently irregular flexion of *guːruƛa* 'do, make' can be accounted for by positing a discontinuous root with an unstable consonant as its second element: *g...(j)*-.

3.6.2. Agreement and cross-reference

3.6.2.1. Prefixal/infixal agreement

In Northern Akhvakh, prefixal/infixal gender-number agreement is not limited to verb stems beginning with a vowel, and each gender-number prefix has two phonologically conditioned allomorphs, as schematized in (25):[10]

(25)

	/–C	/–V	
M	*u-*	*w-*	
F	*i-*	*j-*	
N	*o-*	*b-*	~ *m-* if the root includes a nasal vowel
HPL	*o-*	*b(a)-*	~ *m(a)-* if the root includes a nasal vowel
NPL	*e-*	*r-*	

The *ba-* ~ *ma-* variant of the HPL prefix occurs with stems beginning with *i*, and triggers deletion of the initial *i*. The *b-* ~ *m-* variant is used before vowels other than *i*.

[10] Only two verbs behave consistently as having a consonant-initial stem preceded by an agreement prefix: *oturuƛa* 'let, send' (root *-t-*) and *oxːuruƛa* 'give' (root *-xː-*). *ũkunuƛa* 'eat (intr.)' has an F form *ĩkunuƛa* and an NPL form *ẽkunuƛa*, but they are not used consistently. The variants of the agreement prefixes given in the 1st column are also selected by discontinuous C...C roots.

3.6.2.2. Suffixal agreement

As will be apparent in section 3.6.3.2, some of the inflectional endings of verbs (but not all) include gender-number agreement markers that may precede the TAM marker, follow it, or fuse with it.

3.6.3. TAM, evidentiality, and polarity

3.6.3.1. The paradigm of independent synthetic verb forms

The synthetic verb forms that can be the nucleus of independent clauses are characterized by the paradigm of suffixes (or combinations of suffixes) listed in (26). In this chart, the first column gives the labels used in this paper for each of these forms, and the second column (in which AGR is the abbreviation for 'gender-number agreement')[11] gives a brief description of their characteristic endings, without going into the details of morphophonological variation (in case of variation, the chart gives only the form of the ending that can be viewed as directly reflecting its underlying form).

(26)

-ari perfective	HPL *-iri*, F/N/HPL/NPL *-ari*[12]
-wudi perfective	*-AGR-w(ud)i*[13]
-wa perfective	HPL *-aji*, F/N/HPL/NPL *-AGR-wa*
-ada perfective	HPL *-idi*, F/N/HPL/NPL *-ada*
-ade perfective	HPL *-idi*, F/N/HPL/NPL *-ad-AGR*
-iƛa perfective negative[14]	*-iƛa*
-iƛe perfective negative	*-iƛ-AGR*
-iƛawudi perfective negative	*-iƛ-AGR-w(ud)i*
-ušawa perfective negative	*-uš-AGR-wa*
-iri imperfective	*-iri*

[11] In the *-ada* optative, the agreement marker is the same as that found in nominalized participles. In the other forms including an agreement marker in final position, the agreement marker has the three forms *-o* (M), *-i* (HPL) and *-e* (F, N, NPL). In the *-wudi* perfective, the agreement marker inserted before the tense marker *-wudi* has the four forms *-u-* (M), *-i-* (F), *-e-* (N) and *-ere-* (NPL). There is no form of this tense expressing HML agreement (cf. footnote 13). In the *-wa* perfective, the agreement marker inserted before the tense marker *-wa* has the four forms *-u-* (M), *-i-* (F), *-a-* (N) and *-ari-* (NPL). In the potential, the agreement marker inserted before the tense marker *-wa* has the three forms *-u-* (M, N), *-i-* (F) and *-uri-* (NPL). In forms that otherwise would be ambiguous, stress ensures the distinction between *-wa* perfective and potential. For example, the verb 'come' with M agreement has the form *w-óq'-u-wa* in the *-wa* perfective, contrasting with *w-oq'-ú-wa* in the potential.

[12] Magomedbekova (1967) observed a division of verbs in two classes according to the form taken by the marker of this tense (*-ari* or *-eri*), but in present-day Northern Akhvakh, the variant *-ari* has generalized, and the variant *-eri* occurs only sporadically as a free variant.

[13] The *-wudi* perfective (or unwitnessed past) has no form expressing HPL agreement. In contexts in which the *-wudi* perfective is expected (typically, in the narration of events not witnessed by the speaker), the presence of a HPL nominative argument triggers the use of the perfect (an analytic tense consisting of the general converb of the auxiliated verb, and the copula in auxiliary function).

[14] The *-iƛe* perfective negative is the negative counterpart of both the *-ari* and *-ade* perfectives, the *-iƛa* perfective negative is the negative counterpart of the *-ada* perfective, the *-iƛawudi* perfective negative is the negative counterpart of the *-wudi* perfective, and the *-ušawa* perfective negative is the negative counterpart of the *-wa* perfective.

-ida imperfective	*-ida*
-ide imperfective	*-id-AGR*
-iki imperfective negative[15]	*-iki*
-ika imperfective negative	*-ika*
-ike imperfective negative	*-ik-AGR*
potential[16]	HPL *-oji*, F/N/HPL/NPL *-AGR-wa*
imperative	*-a*[17]
prohibitive	*-uba*
general optative	*-a-ƛ':a* [18]
-ada optative	*-ada-AGR*
optative negative	*-uba-ƛ':a* [19]
apprehensive	*-ala-gole* [20]
apprehensive negative	*-iƛ-ala-gole*

The semantic distinction between the five perfective tenses can be summarized as follows (for more details, cf. Creissels 2018):

- the *-ari* perfective constitutes the unmarked way to describe past events witnessed by the speaker,
- the *-wudi* perfective constitutes the unmarked way to describe past events not witnessed by the speaker,
- the *-ade* perfective is used in assertive clauses to emphasize the fact that the speaker not only witnessed the event, but also played an active role in it.
- the *-ada* perfective constitutes the unmarked way to question about past events,
- the *-wa* perfective is used in interrogative clauses to mark the reaction of the speaker about the unexpectedness of the event referred to (and is, consequently, particularly frequent in *why* questions), and in assertive clauses to emphasize the epistemic authority of the speaker.

[15] The *-iki* imperfective is the negative counterpart of the *-iri* imperfective, the *-ika* imperfective is the negative counterpart of the *-ida* imperfective, and the *-ike* imperfective is the negative counterpart of the *-ide* imperfective.
[16] The potential has no negative counterpart.
[17] The *-e* variant of the imperative mentioned by Magobedbekova (1967) for intransitive verbs is not attested in the data I have collected.
[18] The first element of the optative ending *a-ƛ':a* can be analyzed as the imperative ending *-a*. The second one is probably cognate with *eƛ':uruƛa* 'say'.
[19] The first element of the optative negative ending *uba-ƛ':a* can be analyzed as the prohibitive ending *-uba*.
[20] The first element of the apprehensive ending can be analyzed as the conditional converb ending *-ala*. The conditional converb is a dependent verb form, but the apprehensive derived from it via the addition of *-gole* may be the nucleus of independent as well as subordinate clauses.

In the data I have been able to collect and in the sentences provided as illustrations in the Akhvakh-Russian dictionary, the three imperfective tenses seem to be used interchangeably, and further investigation would be necessary to detect possible nuances or contextual conditioning.

The *-ada* optative is restricted to wishes that specifically involve the addressee, and the gender-number suffix included in its ending expresses agreement with the addressee irrespective of the syntactic role of the 2nd person pronoun in the clause.

3.6.3.2. Analytic verb forms

In addition to the synthetic tenses listed in section 3.6.3.1, Northern Akhvakh also has analytic verb forms with the copula *godi* or the verb *bik'uruƛa* 'be' in auxiliary function.

Progressive tenses are formed by means of the progressive converb, and perfect tenses are formed by means of the general converb. In both cases, the use of the copula in auxiliary function implies present time reference, whereas the use of the perfective forms of *bik'uruƛa* 'be' in auxiliary function implies past time reference, plus the epistemic nuances expressed by the choice between the different perfective forms.

The synthetic imperfective tenses can be found in contexts implying future time reference, but a dedicated future form can be obtained by combining the *-ida* imperfective with the copula in auxiliary function (see example (34), section 4.4.3).

The verb *mičunuƛa* 'be found' can also be used in auxiliary function to express a modal meaning of probability, as in (27).

(27) *ʁeː-g-a* *w-õːhe* *w-ũč-id-o* *hu-du-we.*
neighborhood-CFG1-ALL M-go.CVB.M M-be.found-IPFV-M DIST-SL-M
'He probably went to visit the neighbors.'

3.6.4. Valency-changing derivation

In Northern Akhvakh, the causative derivation is the only valency-changing mechanism involving verb morphology. Northern Akhvakh has two causative suffixes in complementary distribution, whose underlying forms can be analyzed as *-a(j)-* and *-ut'-*. The suffix *-ut'-* has an optional variant *-ut'a(j)-*.

The choice between *-a(j)-* and *-ut'-* is automatically triggered by the phonological structure of the stem to which the causative suffix attaches: *-a(j)-* attaches to stems that do not end with *...a(j)-*, whereas stems ending with *...a(j)-* select the causative suffix *-ut'-*. The underlying sequence *...a(j)-ut'-* surfaces as *...oːt-*.

The causative suffix *-a(j)-* has cognates in the other Andic languages, but its lexical origin is unclear.[21] It can be isolated as *-aj-* in the inflected verb forms in which it is followed by a suffix triggering the maintenance of unstable consonants, but depending on the inflectional suffix, *j* may be deleted, and *a* fuses with the initial vowel of the inflectional suffix. For

[21] Causative *-a(j)* as well as *...a(j)* as the final part of some verb roots might well be reflexes of an ancient verb 'do', since it seems reasonable to think that the Akhvakh verbs whose root ends with *...a(j)* result from the univerbation of *do*-compounds. This hypothetical ancient verb 'do' may be cognate with Avar *ha-b-ize* 'do' (where the root is *ha-*, and *-b-* is a gender-number marker), but a link with the verb 'do' found in present-day Akhvakh (*guːruƛa*, whose root can be analyzed as being underlyingly *g...(j)*) does not seem plausible.

example, the underlying sequence *-a(j)-uruƛa* 'CAUS-INF' is realized *-oːruƛa* – cf. for example *bečʼuruƛa* 'be full' / *bečʼoːruƛa* (< *bečʼ-a(j)-uruƛa*) 'fill'.

The causative suffix *-utʼ-* is a 'young' suffix, still in free variation with the analytic construction from which it developed. For example, the synthetic causative *bočʼiloːtʼuruƛa* 'bring to an end' (segmentable morphologically as *bočila(j)-utʼ-uruƛa*, where *-uruƛa* is the infinitive suffix) coexists with the analytic form *bočʼiloː bitʼuruƛa*, where *bočʼiloː* is the short form of the infinitive *bočʼiloː*(*ruƛa*) 'come to an end',[22] and *bitʼuruƛa* (root *-itʼ-*) is the verb 'straighten, direct' used in causative operator function.

3.6.5. Dependent verb forms

Northern Akhvakh has no form fully specialized in participial function, but four of the independent verb forms listed above are also used as participles, i.e. as nuclei of noun-modifying clauses: *-ada* perfective, *-iƛa* perfective negative, *-ida* imperfective, and *-ika* imperfective negative.[23]

Strictly dependent verb forms include the verbal noun or masdar (*-e*), the infinitive (*-uruƛa*), the spatial form or verbal locative (*-iłː-i/a/u(ne)* 'at/to/from the place where ...'), the general converb, the progressive converb (*-ere*), and several specialized converbs expressing various semantic types of adverbial subordination.[24]

The general converb (used in particular in clause chains whose function is similar to that fulfilled by *and*-coordination in English) has no dedicated marker. It is formed by adding to the verb stem a suffix *-oːʻhe)* (M), *-eːʻhe)* (F, N), *-iːhi* (HPL), or *-ereːhe* (NPL), but the same suffix is also found in the functive-transformative form of nouns (see section 3.2.3.6), and in many adverbial forms which may have a historical link with converbs but cannot be analyzed synchronically as including a verbal lexeme.

The following list of specialized converbs, with illustrations of their use and a discussion of their etymologies, is provided by Creissels (2010): progressive converb (M *-ero*, HPL *-eri*, F/N/NPL *-ere*), similative converb (*-eroqːe*), conditional converb (*-ala* or *-ãčala*), posterior converb (HPL *-idiłːi*, M/F/N/NPL *-ełːi*), inceptive converb (*-ariłːoχːa*), simultaneous converb (*-idełːi*), immediate converb (*-ikʼena* or *-ula*), imminent converb (*-idałːa* or *-idałːoqːe*), anterior converb (*-alaqʼo*), non-posterior converb (*-iƛeda*), concessive converb (*-alala*, *-eroʁana*, or *-aloʁola*), gradual converb (*-ũda(łe)*), explicative converb (*-erogu*), purposive converb (*-uʁana*). Note that this list must not be considered as definitive, since the pervasiveness of word sandhi in Northern Akhvakh makes it very difficult to distinguish well-established grammatical forms from emerging grammatical forms, and I cannot exclude that perhaps speakers other than the consultants with whose help this list was established do not use some of the converbs listed above, or have additional specialized converbs in their repertoire.

[22] The infinitive suffix *-uruƛa* has a short variant *-u*. There is no strict syntactic distribution of the two variants, but the short variant is particularly usual in some contexts.
[23] On the participles of Northern Akhvakh, see Creissels (2009b).
[24] On the converbs of Northern Akhvakh, see Creissels (2010 and 2012).

3.6.6. The formation of verbs

3.6.6.1. Verbal derivation (other than valency-changing)

The only suffix used to derive verbs from nouns with some degree of productivity is *-χː-* (probably cognate with the root *-iχːʷ-* 'remain') as in *tati-χː-uruƛa* 'to get dusty' < *tata* 'dust'.

The suffix *-ɬ-* derives intransitive verbs from adjectives, for example *šo-ɬ-uruƛa* 'to become good' < *šoda* 'good'). This suffix, historically the reflex of an Avar-Andic-Tsezic verb not attested in most of the modern languages but reconstructable as **ɬ-* 'to become', is fully productive.

The suffix *-ra(j)-* derives transitive verbs from adjectives, for example *bača-r-oːruɿa* 'to shorten' (underlyingly *bača-ra(j)-uruƛa* < *bača-da* 'short'). *-ra(j)-* can be decomposed as *-r-* allomorph of the suffix *-ɬ-* deriving intransitive verbs from adjectives, followed by the causative suffix *-a(j)-*.

Northern Akhvakh has a very productive suffix *-la(j)-* exclusively found in verbs borrowed from Avar. The only function of this suffix is the integration of Avar verbs into the Northern Akhvakh lexicon. The stem to which this suffix is added is the Avar masdar. For example, in *ħerẽɬi-loːruƛa* 'to become tender', underlyingly *ħerẽɬi-la(j)-uruƛa*, this suffix is added to *ħerenɬi* 'tenderness', masdar of the Avar verb *ħerenɬize* 'to become tender'.[25]

3.6.6.2. Verbal compounds

In light verb compounds, syntactically, the light verb forms a compound with a non-verbal word (most of the time, a noun coded as if it were the P term in transitive predication), but the light verb and the non-verbal element of the compound constitute two distinct words. However, the pervasiveness of word sandhi processes in Northern Akhvakh tends to blur the distinction between syntactic compounding and morphological compounding, and favors the reanalysis of light verbs as derivational suffixes (Creissels 2016a).

The compounding pattern "Verb + Verb > Verb" produces copulative compounds such as *oxː-e-beχ-uruƛa* 'to trade' < *oxː-uruƛa* 'to sell', *beχ-uruƛa* 'to buy'). The second element of such compounds bears verb inflection, whereas the first one is invariably marked by a suffix *-e*. This suffix is identified by Magomedova and Abdulaeva (2007) as the masdar suffix, but this analysis relies on no evidence other than the mere formal coincidence, and it is contradicted by comparative evidence, since this type of compound is attested in other Andic languages and in Avar, and the coincidence with the masdar suffix is observed only in Northern Akhvakh.[26]

Exactly as in the case of nominal compounds of the copulative type (section 3.2.6.1), Northern Akhvakh has many verbs which look like verbal compounds of this type, but in which the second element (i.e., the element bearing verb inflection) has no independent existence. For example, the second element *χːoːruƛa* of *sːor-e-χːoːruƛa* 'to stroll' < *sːor-uruƛa* 'to turn' exists only in combination with *sːor-uruƛa*.

[25] This suffix probably includes a reflex of the ancient verb 'do' which was also the source of the causative suffix *-a(j)* (cf. footnote 21), but the etymology of the *l* that constitutes its initial element is unclear.

[26] In Avar, the first element of such compounds occurs in a form different from all the other forms of the verb, which suggests a very ancient formation involving a marker whose original nature has ceased to be apparent.

3.6.6.3. Verbal reduplication

The pattern of reduplication with initial consonant change is found not only with nouns, but also with verbs, with a meaning of intensification and/or iteration. It is however almost exclusively found with verbs borrowed from Avar, in which the reduplicant is followed by the 'naturalizing' suffix *-la(j)-*, as in *c'eχːe<reχːe>loːruƛa* 'to ask with insistence' < *c'eχːeloːruƛa* 'to ask', cf. Avar *c'eχːareχːeze* < *c'eχːeze* 'ask'.

Full reduplication of VC verb stems and partial reduplication of CVC verb stems is productive with a meaning of intensification and/or iteration, as illustrated by *b-oƛː-oƛː-uruƛa* (*b-oƛː-uruƛa* 'to walk') and *da-dan-uruƛa* (*dan-uruƛa* 'to pull').

3.7. Adverbs

In this sketch of Northern Akhvakh, the discussion of adverbs is limited to the adverbial forms that can be grouped into morphologically coherent sets. Morphologically isolated adverbial forms, or adverbial forms cognate with forms belonging to other categories without however being analyzable as resulting from some productive derivation pattern, are not considered here. Note in particular that the derivation of manner adverbs from adjectives does not exist in Northern Akhvakh.[27]

3.7.1. Deictic, interrogative and indefinite adverbs

Deictic spatial adverbs are quite obviously cognate with demonstratives, with just an irregularity in the allative forms of the distal series (*i* instead of *u* in the stem, and *l* instead of *ƛ* in the form encoding 'higher than the deictic center'):

(28)

		PROX	DIST
same level as the deictic center	LOC	*ha-d-e*	*hu-d-e*
	ALL	*ha-d-a*	*hi-d-a*
	ABL	*ha-d-u*	*hu-d-u*
higher than the deictic center	LOC	*ha-ƛ-e*	*hu-ƛ-e*
	ALL	*ha-ƛ-a*	*hi-l-a*
	ABL	*ha-ƛ-u*	*hu-ƛ-u*
lower than the deictic center	LOC	*ha-g-e*	*hu-g-e*
	ALL	*ha-g-a*	*hi-g-a*
	ABL	*ha-g-u*	*hu-g-u*

The interrogative spatial adverb and the indefinite spatial adverbs deriving from it are inflected as follows:[28]

[27] The converbs of deadjectival verbs constitute the Akhvakh equivalent of the manner deadjectival adverbs found in other languages. For example, *koša-ł-eːhe*, converb of *koša-ł-uruƛa* 'to become bad' (< *koša* 'bad') is the usual equivalent of English *badly*.

[28] *hágе* 'here (LOC) and *hagé* 'where (ALL') are distinguished by accentuation.

(29)		‘where?’	‘everywhere’, ‘nowhere’	‘anywhere’
	LOC	*hagiɬːi*	*hagiɬːi-la*	*hagiɬːi bikʼʷala*
	ALL	*hage*	*hage-la*	*hage bikʼʷala*
	ABL	*hagiɬːune*	*hagiɬːune-la*	*hagiɬːune bikʼʷala*

Deictic manner adverbs (equivalent to English ‘thus’) are formed from demonstrative stems by adding the suffix *-šte*: *hu-šte*, *ha-šte*, *hu-du-šte*, etc. They can combine with the intensifying particle *-da* (*hu-šte-da*, etc.).

The interrogative and indefinite manner adverbs are *čʷige* ‘how?’ *čʷige bikʼʷala* ‘anyhow’, and *čʷigela* ‘in no way’.

The interrogative and indefinite temporal adverbs are *čũda* ‘when?’, *čũdalaqʼo* ‘until when?’ (cf. *beqʼalaqʼo* ‘until), *čũdałːʷeχːa* ‘from when?’ (cf. *eχːa* ‘out’), *čũda bikʼʷala* ‘at any time’, *čũdala* ‘always / never’.

The interrogative adverb ‘why?’ is *čugu*, and the corresponding indefinite adverb is *čugu-sːa* ‘for some reason’.

3.7.2. Case-inflected non-deictic spatial adverbs

The spatial adverbs listed in (30) have the same case inflection (LOC / ALL / ABL) as spatial forms of nouns, with however some irregularities. Their identification as adverbs follows from the fact that they cannot be analyzed (at least synchronically) as formed from a stem combinable with non-spatial cases.

(30)	LOC	ALL	ABL
‘on the head’	*aχʷari*	*aχʷariga*	*aχʷaru*
‘inside’	*geɬːi*	*geɬːa*	*geɬːu*
‘underneath’	*geɬʼːi*	*geɬʼːa*	*geɬʼːu*
‘on the face’	*hãdiri*	*hãdiriga*	*hãdiru*
‘in the mouth’	*heɬʼari*	*heɬʼariga*	*heɬʼaru*
‘in one’s bosom’	*iɬari*	*iɬariga*	*iɬaru*
‘in the hands’	*kʷadi*	*kʷadiga*	*kʷadu*
‘above’	*ɬʼa(do)*	*ɬʼada*	*ɬʼone*
‘near’	*qinałːi*	*qinałːa*	*qinałːu*
‘on the ground’	*ʁade*	*ʁadiga*	*ʁadu*
‘in front’	*sːigi*	*sːiga*	*sːigu*

3.8. Postpositions

Northern Akhvakh has no word exclusively used in postposition function. All the words occurring in constructions in which they could be analyzed as the nucleus of a postpositional phrase are morphologically nouns in some spatial case, or verbs in converbial form, or are also used as adverbs, and there are no obvious criteria to decide whether such words should be analyzed as postpositions in some of their uses.

In this respect, an interesting particularity of Northern Akhvakh is that, when case-inflected spatial adverbs and NPs combine into constructions semantically similar to the postpositional phrases found in other languages, the spatial adverb and the NP are in the same spatial case, as in (25).

(31) *ũk'i-g-a* *geƛ:-a* *žaža* *sore:he* *godi.*
finger-CFG$_1$-ALL inside-ALL thorn penetrate.CVB.N COP.N
'I got a thorn in my finger.'

The combination of 'finger' and 'inside' in this example looks like the mere juxtaposition of two spatial expressions, with no evidence of a syntactic dependency that might justify analyzing 'inside' as the nucleus of a postposition phrase.

4. Syntax

4.1. Noun phrase and postpositional phrase

In canonical NPs, the head noun in final position is inflected for number and case, and suffixal agreement of noun dependents is optional (and very rarely found in spontaneous texts). In the absence of a head noun, the last word of the NP, whatever its nature, is marked for gender, number, and case.

On the problematic status of postpositional phrases in Northern Akhvakh, see section 3.8.

4.2. Clause structure

4.2.1. Constituent order

Northern Akhvakh clause structure is characterized by extreme flexibility of constituent order, which plays no role in the expression of argument structure. The verb tends to occur in clause-final position, but this is just a tendency. In particular, in Northern Akhvakh, interrogative words and focalized phrases are not forbidden to occur in post-verbal position, whereas in typical word-final languages, post-verbal phrases can only be in afterthought function. There is no dedicated position for focalized constituents.

4.2.2. Basic transitive coding and intransitive alignment

Case marking of core NPs and verb agreement are consistently ergative: in transitive coding, A in the ergative case is not indexed on the verb, whereas P in the nominative case (alias absolutive, characterized by a zero ending) controls verb agreement in gender-number, and there are very few exceptions to the rule according to which the sole argument of semantically monovalent verbs (S) has the same coding characteristics as P (Creissels 2017). The verb agrees in gender and number with the nominative argument, but does not express person agreement, although epistemic marking in the perfective interferes to some extent with person distinctions (which led Magomedbekova (1967) to describe Northern Akhvakh as having verb agreement with a 1st person vs. 2nd or 3rd person contrast).

Like most Nakh-Daghestanian languages, Northern Akhvakh has a class of bivalent verbs with the coding frame <DAT, NOM>. This class typically includes verbs whose dative and nominative arguments can be characterized as experiencer and stimulus respectively, but also verbs of finding or involuntary acquisition, and verbs carrying meanings like ‘suit’, ‘be good for’.

4.2.3. Unexpressed arguments

Arguments whose identity is recoverable from the context are not obligatorily expressed, and unexpressed arguments receiving an arbitrary interpretation are common too. However, Northern Akhvakh is not a typical pro-drop language, since anaphoric zeros are avoided whenever the antecedent is not recoverable from the immediate context. In dialog, 1st and 2nd person arguments usually remain unexpressed, but in narrative texts, anaphoric zeros are much less common than in typical pro-drop languages.

4.2.4. The ‘binominative’ construction

Like the other Nakh-Daghestanian languages, Northern Akhvakh has a construction in which the two core arguments of a transitive verb are in the nominative case and are both indexed. However, this phenomenon occurs only with analytic forms consisting of *bik’uruƛa* ‘be’ (or the copula *godi*) in auxiliary function, and the progressive converb of the auxiliated verb. In this construction, A is indexed on the auxiliary, whereas P is indexed on the auxiliated verb. In (32), *mačunuɬa* agrees with ‘thing’, but the auxiliary expresses agreement with ‘mother’, and both ‘my mother’ and ‘one thing’ appear as nominative NPs.

(32) *di-g-a* *če* *čula* *m-ač-ene* *j-ik’^{w}-ari* *di* *ila*.
1SG-CFG$_1$-ALL one thing N-tell-PROG F-be-PF 1SG(GEN) mother
‘My mother used to tell me something.’

The binominative construction is not possible with synthetic verb forms, which leaves open the possibility of analyzing it as a raising construction in which the unexpressed agent of the embedded transitive verb is coded as the S argument of an intransitive auxiliary that acts syntactically as the main predicate of the construction.

Additional evidence comes from the observation of word order: in sentences in which the agreement of the auxiliary is unambiguously governed by P, the auxiliated verb is always found immediately before the auxiliary, whereas in sentences in which the auxiliary agrees with A, there is no adjacency constraint between the auxiliated verb and the auxiliary.

4.3. Major sentence types

Yes/no questions are marked by intonation only, or by an interrogative particle. The interrogative clitic *-či* simply marks a word specifically concerned by the question, or attaches by default to the verb (to the auxiliary, if the nucleus of the clause is an analytic verb form). The interrogative particle *-nu* implies an alternative, whereas *-łunu* expresses doubt.

Content questions are marked by the presence of interrogative pronouns, determiners, or adverbs.

In interrogative clauses, the *-ada* perfective (whose ending may be reduced to *-a* when the interrogative particle *-či* attaches to the verb) replaces the perfective tenses found in assertive clauses (see section 3.6.3.1).

Imperative and optative clauses are marked by the use of dedicated verb forms (see section 3.6.3.1).

4.4. Complex sentences

4.4.1. Relative clauses

Northern Akhvakh has participial relative clauses. The participles of Northern Akhvakh are not oriented, in the sense that the head noun can be linked to any empty position within the relative clause. For example, the same imperfective participle *bič'ːileːda* (from *bič'ːiloːruƛa* 'understand') is interpreted as 'understandable' in *bič'ːileːda suʔa* 'understandable question', and as 'intelligent' in *bič'ːileːda mik'e* 'intelligent child'.

Moreover, noun-modifying participial clauses can also be found with an interpretation that does not rely on the possibility of a relationship between the head noun and an empty position in the participial clause, as in (33).

(33a) *nido* *harigʷ-ika* *buhura*
forehead see-IPFV.NEG hair_lock
lit. 'a hair lock that one does not see the forehead'
> 'a hair lock that hides the forehead'

(33b) *qːoto* *b-iqʼʷ-ida* *zʷaʁe*
plate N-break-IPFV noise
lit. 'the noise that a plate is breaking'
> 'the noise of a plate being broken'

4.4.2. Complementation

Independent assertive or interrogative clauses can be converted into complement clauses by means of *-sːa* or *eƛ'ːe ~ =ƛ'ːe*. In the complement clause, the verb must be in final position, immediately followed by the complementizer.

The complementizer *-sːa* is used with *beq'uruƛa* 'know' and other verbs of cognition/perception (for example *eqːuruƛa* 'look at' > 'check').

The complementizer *eƛ'ːe* is morphologically the general converb of *eƛ'ːuruƛa* 'say'. In addition to its use as a marker of reported speech, it is used for the complementation of verbs of speech and of verbs such as *bužuruƛa* 'know'.

In conformity with its etymological meaning, *eƛ'ːe ~ =ƛ'ːe* is used not only as a complementizer in the strictest sense of this term, but also in adverbial subordination, with meanings such as 'saying that', 'under the idea that', etc.

4.4.3. Adverbial clauses

In Northern Akhvakh, adverbial subordination is typically expressed by means of specialized converbs (cf. Creissels 2010). (34) illustrates the use of the conditional converb.

(34) *jaše j-eq'-ala, me-de čʷi gʷiːda gʷeda?*
girl F-come-COND 2SG-ERG what do.IPFV COP.N
'If the girl comes, what will you do?'

4.4.4. Clause chaining

In Northern Akhvakh, clause chains with an independent form of the verb in the last clause, and the general converb as the nucleus of non-final clauses, constitute the usual equivalent of and-coordination of clauses in English.

(35) *akʼːo-de riɬʼːi b-iž-eːhe qʼːam-eː-wi.*
wife-ERG meat N-cook-CVB.N eat-N-PFV
'The wife cooked the meat and ate it.'

Creissels (2011) analyzes the syntactic properties of this construction, in particular the phenomenon of 'external agreement' illustrated in (36), where the prefix of 'die' in converbial form expresses agreement with the nominative argument of 'die', whereas the agreement mark included in the suffix of the same form refers to the nominative agreement of the main verb 'go'.

(36) *molːa rasadi w-uɬʼ-iː*
Molla Rasadi M-die-CVB.HPL
'Molla Rasadi (< Nasreddin) having died,
šʷela-ɬː-a m-aːne ba-kʼ-iː goli.
graveyard-CFG$_5$-ALL HPL-go.PROG HPL-be-CVB.HPL COP.HPL
they were going to the graveyard.'

4.5. Negation

In Northern Akhvakh, clausal negation is expressed via verb inflection (see section 3.6.3.1). In clauses whose nucleus is a negative verb form, the determiners, pronouns and adverbs expressing free choice in positive clauses function as negative determiners, pronouns, or adverbs (see sections 3.4.8 and 3.7.1). 'Without' is rendered as *goɬeːhe*, lit. 'there not being' (negative converb of the copula).

4.6. Comparative constructions

The ablative of the *-g-* series of spatial forms is in NorthernAkhvakh the usual way to encode the standard of comparison, as in (37). No comparative marker attaches to the adjective.

(37) *imaχa-ƛa qãƛ':ano-g-u reš:ada čula goƛe.*
donkey-DAT donkey_foal-CFG$_1$-ABL beautiful thing COP.NEG.N
'For the donkey there's nothing more beautiful than its foal.'

The superlative is formed by anteposing *ĩč'i* 'most' to adjectives.

4.7. Coordination and chaining

As illustrated in (38), the standard way to express NP coordination is the repetition of the additive particle *=la* (also used to express 'also' or 'even') after each of the coordinands.

(38a) *dene=la w-oq'-u-wa ošte-k'ena.*
1SG=ADD M-come-M-POT 2PL-COM
'I also can go with you.'

(38b) *wašo-de=la χ^{w}e-de=la ł:ẽ c':ar-ari.*
boy-ERG=ADD dog-ERG=ADD water drink-PFV
'The boy and the dog drank water.'

NP coordination can also be expressed by mere juxtaposition, if there is a natural semantic link between the two coordinands, as in (39). This type of coordination tends to lexicalize as dvandva compounding (see section 3.2.6.1).

(39) *hagiƛ:i eƛ:e-be ĩχ^{w}a hirizi bogi gu:ruƛa?*
where.LOC 1PL.INCL-N butter rice pilaf make.INF
'Where do we have butter and rice to prepare pilaf?'

On clause coordination, see section 4.4.4.

4.8. Non-verbal predication

Non-verbal predication involves either the copula *godi*, or the morphologically regular verb *bik'uruƛa* (whose stem is *-ik^w-*). The choice of the copula implies the TAM value expressed by the present in verb inflection.

The copula expresses gender-number agreement and polarity. It has three series of positive forms, and two series of negative forms. Morphologically, the second series of positive forms can be described as resulting from the addition of *-da* to a reduced variant of the forms of the first series, and the third series can be described as resulting from the further addition of a gender-number suffix. As regards negative forms, the forms of the second series can be described as including an additional gender-number suffix. There are probably semantic or contextual features involved in the choice between the three series of positive forms, or between the two series of negative forms, but I have not been able to detect them:

(33)

	POS_1	POS_2	POS_3	NEG_1	NEG_2
M	*gudi*	*g^{w}i-da*	*g^{w}i-d-o*	*guƛa*	*guƛ-o*
F	*gidi*	*gi-da*	*gi-d-e*	*giƛa*	*giƛ-e*
N	*godi*	*g^{w}e-da*	*g^{w}e-d-e*	*goƛa*	*goƛ-e*
HPL	*goli*	–	*goli-d-i*	–	*goƛ-i*
NPL	*gedi*	–	*ge-d-e*	–	*geƛ-e*

4.9. Information structure

In Northern Akhvakh, intonation is essential for the expression of information structure: constituent order is extremely flexible, but there is no dedicated position for focalized constituents; focalized constituents are not marked morphologically either, and cleft constructions are not usual.

5. Lexicon

The lexicon of Northern Akhvakh shows no salient characteristic in comparison with the other Andic languages. In addition to lexemes inherited from Proto-Andic, or whose origin cannot be established, it includes a sizeable proportion of borrowings from Avar, and also the borrowings from Arabic, Persian, and Turkic languages commonly found in Caucasian languages (lists of examples can be found in Magomedova & Abdulaeva 2007: 719-722). Unsurprisingly, Russian is now the main source of lexical borrowing.

The verbs borrowed from Avar are recognizable by their special suffix *-la(j)-* added to the Avar masdar, whereas in the case of verbs borrowed from Russian, the Russian infinitive combines with *guːruƛa* ‘do’ into a light verb construction.

6. Sample text

This text was recorded in Tadmagitl’ in May 2009. The narrator was a middle-aged woman who was born in Tadmagitl’ and had spent all her life there.

če žo-łːi če ak’ːa-łːi-ƛa harig^{w}-e-wi rušo-ƛː-une b-eq’-ere če šĩ.
one day-N(LOC) one woman-OBL.F-DAT see-N-PFV forest-CFG_5-ABL N-come-PROG one bear
One day, a woman saw a bear going out from the forest.

šĩ-de k^{w}aši-łːi-g-a geƛː-a sor-ida žaža harig^{w}-aj-e-wi ak’ːa-łːi-ƛa.
bear-ERG paw-OBL.N-CFG_1-ALL inside-ALL enter-IPFV thorn see-CAUS-N-PFV woman-OBL.F-DAT
The bear showed the woman a thorn that had entered into its paw.

ak'ːa-łːi-de *šĩ-ƛːi* *kwaši-łːi-g-u* *žaža* *b-eqː-e-wi.*
woman-OBL.F-ERG bear-GEN paw-OBL.N-CFG$_1$-ABL thorn N-take_off-N-PFV
The woman took off the thorn from the paw.

k'e-biliƛ'ːa *žo-łːi* *hu-gu* *šĩ* *b-eq'-e-wi* *če* *lãgi=la* *b-eƛ-eː.*
two-ORD day-N(LOC) DIST-LL bear N-come-N-PFV one sheep=ADD N-lead-CVB.N
The next day, the bear brought a sheep. (lit. came having led a sheep)

hu-gu *ak'ːa-łːi-ƛːir-a* *lãgi=la* *o-t-eː,* *rušo-ƛː-a* *eša* *m-aʔ-e-wi.*
DIST-LL woman-OBL.F-CFG$_2$-ALL sheep=ADD N-leave-CVB.N forest-CFG$_5$-ALL away N-go-N-PFV
It left the sheep to the woman and went away into the forest.

hu-šte *bakala* *o-xː-e-wi* *ak'ːa-łːi-ƛa* *šĩ-de.*
DIST-ADVZ thanking N-give-N-PFV woman-OBL.F-DAT bear-ERG
In this way the bear thanked the woman.

Abbreviations

A: argument coded in the same way as the agent of prototypical transitive verbs, ABL: ablative, ADD: additive, ADVZ: adverbializer, AGR: gender-number agreement, ALL: allative, C: consonant, CAUS: causative, CFG: spatial configuration marker, COM: comitative, COND: conditional, CONTR: contrastive, COP: copula, CVB: converb, DAT: dative, DIST: distal, ERG: ergative, EXCL: exclusive, F: human feminine, GEN: genitive, HPL: human plural, IMP: imperative, INCL: inclusive, INF: infinitive, INT: intensive, IPFV: imperfective, LL: lower level (vertical deixis), LOC: locative, M: human masculine, N: non-human, NEG: negative, NOM: nominative, NP: noun phrase, NPL: non-human plural, OBL: oblique stem, ORD: ordinal, P: argument coded in the same way as the patient of prototypical transitive verbs, PFV: perfective, PL: plural, POT: potential, PROG: progressive, PROH: prohibitive, PROX: proximal, REFL: reflexive, S: sole argument of semantically monovalent verbs, SELECT: selective, SG: singular, SL: same level (vertical deixis), TAM: tense-aspect-modality, V: vowel.

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