Non-spatial functions of spatial forms in Northern Akhvakh Denis Creissels

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1. Introduction

Akhvakh (*aš^waīi mič'i*, Russian *ахвахский язык*) belongs to the Andic (sub-)branch of the Northeast Caucasian (or Nakh-Daghestanian) family. Four dialects are traditionally recognized. One of them is designated as Northern Akhvakh, whereas the other three are grouped under the label of Southern Akhvakh.

Northern Akhvakh is spoken in four villages of the Axvaxskij Rajon in the western part of Daghestan (Tadmagitl', Lologonitl', Kudijab-Roso, and Izani), in recent settlements in the lowlands of Daghestan (Kamyškutan, Sovetskoe), and in Axaxdərə near Zaqatala (Azerbaijan). The Southern Akhvakh dialects are spoken in one village each (Cegob, Tljanub and Ratlub), all situated in the Šamil'skij Rajon of Daghestan.

This paper is based on three sources:

- the Akhvakh-Russian dictionary (Magomedova & Abdulaeva 2007);
- a collection of texts from Tadmagitl' and other Akhvakh villages of Daghestan, collected and transcribed by the author and checked with the help of Indira Abdulaeva;¹
- elicitation with Indira Abdulaeva.

2. The spatial forms of nouns in Northern Akhvakh

2.1. The case inflection of nouns in Northern Akhvakh: general remarks

In Northern Akhvakh, the nominative (absolute form of nouns used in the extrasyntactic function of quotation or designation, in predicate function, and in S or P roles) has no overt mark.

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 the ending of which can be segmented into an *orientation marker* followed by the *spatial case marker* proper. But in addition to that, Northern Akhvakh has a comitative case, and several other suffixes are more or less serious candidates to the status of case markers. One of

¹ In order to ensure the homogeneity of the corpus, I do not use data from Axaxdərə in this paper, but the use of spatial forms in the corpus I collected in Axaxdərə shows no obvious contrast with the corpus on which this paper is based.

them (the *mediative*) will be discussed in this paper, because of its connection with the ablative.

As a rule, case markers attach to the *oblique stem* of nouns (which however may coincide with the nominative – see below). Among the noun endings traditionally identified as case markers, the only true exception to this rule concerns the grammatical cases of 1st and 2nd person pronouns. 1st and 2nd person pronouns do have an oblique stem distinct from the nominative (and coinciding with the genitive form), but:

- the ergative suffix attaches to the nominative of all 1st and 2nd pers. pronouns;
- the dative suffix attaches to the nominative of the 1st person plural, 2nd person plural, and inclusive pronouns.

	1SG <i>dene</i> obl. <i>di</i> -	2SG <i>mene</i> obl. <i>du</i> -	1PL <i>iši</i> obl. <i>eše-</i>	INCL <i>iīi</i> obl. <i>eīe-</i>	2PL <i>ušti</i> obl. <i>ošte-</i>
ERG	de-de	me-de	isī-de	iī-de	ušti-de
DAT	di-La	du-1a	isi-la	iīi-la	ušti-La
GEN	di	du	ese	еīе	ošte
LOC	di-OR-e/i	du-OR-e/i	ese-OR-e/i	eīe-OR-e/i	ošte-OR-e/i
ALL	di-OR-a	du-OR-a	ese-OR-a	eīe-OR-a	ošte-OR-a
ABL	di-OR-u	du-OR-u	ese-OR-u	еīe-OR-и	ošte-OR-u
COM	di-k'ena	du-k'ena	esē-k'ena	eīe-k'ena	ošte-k'ena

2.2. Oblique stem formation

2.2.1. In the singular, the stem to which case suffixes are attached may be identical to the nominative, or different from it. If different, it may result from the adjunction of 'standard' oblique stem formatives which also have a function of class markers, and systematically occur in the case inflection of nominalized noun dependents (adjectives and determiners): $-\bar{s}u$ in class M and $-\bar{t}i$ in classes F and N. The oblique stem may also differ from the nominative in a variety of ways that have more or less obvious historical explanations, but synchronically must be considered as a lexical property of nouns.

In the presentation of the examples, oblique stems of the last type, which are mere allomorphs of the noun stems, are signaled by adding \dots_{o} to the gloss of the noun, whereas the 'standard' oblique stem markers, which also have a function of class markers, are segmented and glossed according to their function of class markers: M_{o} , F_{o} , and N_{o} .

There is considerable free variation between the three types of oblique stem formation for singular nouns (for example, the oblique stem of *waša* 'boy' may be *waša-s̄u-* or *wašo-*, the oblique stem of *šī* 'bear' may be *šī-* or *šī-t̄i-*, etc.), and there is no correlation between oblique stem formation and plural formation.

The formation of the oblique stem in the plural is much more regular than in the singular. The general rule is that the oblique stem formative *-lo-* (glossed H_{o}) is

added to the nominative plural of human plural nouns, whereas the oblique stem formative *-le-* \sim *-li-* (glossed N_o) is added to the nominative plural of non-human plural nouns, irrespective of the type of plural formation involved. Apparent exceptions to this rule have straightforward phonological explanations.

2.3. Syntactic cases

2.3.1. The ergative

The suffix of the ergative case is *-de*. When it immediately follows a close vowel, the following contraction process may occur:

 $\begin{array}{rcl} Ci-de & \rightarrow & C-e \\ Cu-de & \rightarrow & C^{w}-e \end{array}$

This process is particularly common (although not obligatory) with oblique stems including the oblique stem markers $-s\bar{u}$ - or $-\bar{4}i$ -:

ek' ^w a	'man'	obl. stem e	k' ^w a-s̄u- erg.	$ek''a-\bar{s}u-de \sim ek''a-\bar{s}''-e$
jaše	'girl'	obl. stem ja	<i>aše-</i> łi- erg.	jaše- $ar{ extsf{i}}$ -de \sim jaše- $ar{ extsf{t}}$ -e

2.3.2. The dative

The suffix of the dative case is *-La(je)*. *-La* and *-Laje* are in free variation, but the short allomorph *-La* is much more frequent in texts. When the dative suffix is immediately preceded by a close vowel the following contraction process may occur:

Ci-ła	\rightarrow	C-a
Си-га	\rightarrow	C^w -a

This process is particularly common (although not obligatory) with oblique stems including the oblique stem markers $-\bar{s}u$ or $-\bar{t}i$:

 $ek'^{w}a$ 'man' obl. stem $ek'^{w}a-\bar{s}u$ - dat. $ek'^{w}a-\bar{s}u-\iota a \sim ek'^{w}a-s'^{w}-a$ jaše 'girl' obl. stem jaše- \bar{i} - dat. jaše- \bar{i} - $\iota a \sim ja$ še- \bar{i} -a

This results in a complex analytical problem: in some conditions (see below), Northern Akhvakh also has spatial forms in which no overt orientation marker precedes the allative ending -a(je), and it is sometimes difficult to decide whether a noun form in which -a(je) immediately follows the oblique stem must be considered as a 'short dative' or as an allative devoid of overt orientation marker.

2.3.3. The genitive

There are two variants of the genitive case: a variant including no specific marker of the genitive case, and a variant marked by the suffix -ii, homonymous with the

locative of the 5th series of spatial forms. This situation is a general characteristic of Andic languages. The most probable explanation (see Alekseev 2003:100-110) is that the variant including no specific genitive marker is ancient in Andic languages, and $-\bar{L}i$ as a genitive marker developed from locative $-\bar{L}-i$.

The use of the two variants involves no semantic distinction in the relation between the genitive and its head. Their distribution is conditioned by the class of the noun in genitive function, with however some amount of free variation.

The variant of the genitive case including no specific marker corresponds to the formation of the genitive described in other Andic languages as a formation of the genitive in which the function of genitive marker is fulfilled by a class suffix expressing class agreement with the head of the genitive. However, such a characterization would be questionable for Northern Akhvakh, due to a general tendency to eliminate class agreement between the noun and its dependents. In Northern Akhvakh, the genitive of nouns that do not take the genitive marker $-\bar{L}i$ most commonly coincides with the oblique stem, and the presence of class suffixes is optional, as illustrated below with *ima* 'father', oblique stem *imo*-:

imowacīi~ imo-wewacīi'the father's brother'father_o(GEN)brotherfather_o(GEN)-Mbrotherimojacīi~ imo-jejacīi'the father's sister'imo \bar{x}^wani ~ imo-be \bar{x}^wani 'the father's horse'

As already mentioned, the distribution of the two variants of the genitive is not very strict. The only strict rules are that 1st and 2nd person pronouns never take the genitive ending $-\bar{L}i$, and non-human nouns never occur in the unmarked genitive form. With human nouns, the unmarked genitive is common, but there is a tendency to extend the use of $-\bar{L}i$, and this tendency is particularly strong with F nouns.

2.4. Spatial forms

In Northern Akhvakh, as in other Daghestanian languages, the general rule is that the spatial forms of nouns are obtained by attaching to the oblique stem a sequence of two formatives, the *orientation marker* and the *spatial case marker* proper ('localization' and 'direction' in the terminology used by Russian Caucasologists). The orientation marker immediately follows the oblique stem, and encodes a particular type of spatial configuration involving the figure and the orienter. The spatial case marker occurs in final position and expresses the distinction between static location and various types of movement.

Five orientation markers are productive in Northern Akhvakh: -g- (OR₁), - χar -- $\bar{L}ir$ - (OR₂), - \bar{q} - (OR₃), - \bar{L} '- (OR₄), and - \bar{L} - (OR₅). A very limited number of nouns (less than five) show vestiges of a sixth orientation marker -*r*- (OR₆), and there are also spatial forms including no overt orientation marker.

As for 'direction' (or spatial cases proper), Northern Akhvakh has a tripartite opposition *locative* (-e or -i) vs. *allative* (-a(je)) vs. *ablative* (-u(ne)).

According to Magomedbekova, originally, -u and -une constituted two distinct case markers, ablative and perlative respectively, but they are now used in free variation.

The following chart summarizes the combinations of the five productive orientation markers with the three locative cases. Note that OR_2 has two allomorphs depending on the choice of the spatial case marker.

	OR_1	OR ₂	OR ₃	OR ₄	OR ₅
LOC	-g-e	-xar-i	- <i>q</i> ̄-e	- <i>ī</i> .'-i	- <i>ī</i> -i
ALL	-g-a(je)	-īir-a(je)	-ą̄-a(je)	-īː-a(je)	-ī-a(je)
ABL	-g-u(ne)	-xar-u(ne)	-ą̄-u(ne)	-īː'-u(ne)	-ī-u(ne)

Spatial case inflection is common to nouns and spatial adverbs (for example: *hag-e* 'here, LOC' / *hag-a(je)* 'here, ALL' / *hag-u(ne)* 'here, ABL'). Spatial adverbs differ from the spatial forms of nouns in that:

- contrary to nouns, spatial adverbs cannot be inflected for syntactic cases;
- contrary to the spatial forms of nouns, spatial adverbs are not inflected for orientation; the stem of spatial adverbs may include frozen orientation markers, which however cannot be identified as such within the frame of a strictly synchronic morphological analysis.

2.5. Other case forms of nouns

In Northern Akhvakh, depending on the criteria used for the identification of case suffixes, several cases can be identified in addition to those traditionally recognized in descriptions of Daghestanian languages, in particular comitative -k'ena, essive $-\frac{1}{2}e(he)$ and mediative $-\frac{1}{2}u^{4}e$.

The essive case marks NPs in the function of predicative arguments or adjuncts. It is functionally similar to the so-called 'adverbial' case of Georgian.

(1)	di-1a	hu-be	e čaka	<i></i> zirada	Sadati-łe	harig ^w -ari.	
	1sg _o -dat	DIST-N	very	dear	custom-ES	s see-PF ₁	
	'I consi	dered	this (lit. I	saw this	as) a vei	ry good custom	ı.'
(2)	waša	če	mačada	ek' ^w a- s u	ı- <i>ī</i> ir-a i	iš™ada-ł-o	w-ošaą̄-u
	boy	one	rich	man-M _o -0	OR ₂ -ALL	shepherd-ESS-м	M-work-INF
	w-ō̃-he	g-1	ı-di.				
	M-go.M-C	VB CO	P-M-POS				
	'The boy went to a rich man's to work as a shepherd.'						

Two particularities distinguish the essive suffix from the case suffixes enumerated in sections 2.3 and 2.4. First, it attaches to a stem identical to the nominative form

of the noun (not to the oblique stem). Second, it optionally expresses agreement with the nominative argument of the verb, resulting in the variants $-\ell - o(he)$ (M) – as in ex. (2) above, $-\ell - i(hi)$ (H^{*}), and $-\ell - ere(he)$ (N^{*}).

The question of the emergence of a *mediative* case marked by a complex suffix (1st series ablative + essive) will be dealt with in section 5 below.

3. Spatial uses of spatial forms.

3.1. Spatial forms devoid of orientation markers.

In Northern Akhvakh, two types of spatial forms devoid of orientation markers must be distinguished.

3.1.1. A limited number of neuter nouns that do not take the standard oblique stem marker $-\bar{4}i$ have the possibility to attach the locative and ablative markers (but NOT the allative marker) directly to the oblique stem. Most of these nouns, but not all, can be characterized as denoting containers (*šagi* 'pot', *q'ẽLe* 'bag', etc.), and with them, the absence of any overt orientation marker expresses localization within an empty space (which with other nouns is expressed by spatial forms of the 1st series, alone or in combination with the spatial adverb $ge\bar{z}i$ 'inside'). In the allative, the expression of the same meaning with this set of nouns requires the presence of the 1st orientation marker:

č'ili, obl. stem č'ila- 'room', 'house'

 $\begin{array}{l} \text{IN} + \text{LOC} & \check{c}'il\text{-}e \\ \text{IN} + \text{ALL} & \check{c}'ila\text{-}g\text{-}a \\ \text{IN} + \text{ABL} & \check{c}'il\text{-}o \end{array}$

3.1.2. Neuter nouns taking the standard oblique stem marker $-\bar{t}i$ - may have spatial forms devoid of overt orientation marker in the three spatial cases:

miša, obl. stem miša-łi- 'place'

LOC miša- $\overline{4}$ -i ALL miša- $\overline{4}$ -a ABL miša- $\overline{4}$ -u

Functionally, such spatial forms are simply more or less optional variants of forms including the 1st orientation marker *-g*. With some nouns they are particularly common, perhaps even obligatory, but in most cases they are in free variation with forms including the 1st orientation marker. The nouns with which they are found have meanings that predispose them to be used as orienters, but cannot be characterized as implying a particular type of spatial configuration.

3.2. OR₁ (-*g*-)

Semantically, this is the default series of spatial forms, which by itself does not encode more that the mere existence of a spatial relationship. Its frequency in texts by far surpasses that of all the other series taken together, in both spatial and nonspatial uses.

Historically, the commonly accepted hypothesis is that this orientation marker originally expressed localization of the figure on the orienter. However, nothing sure can be said about the history of this orientation marker, which has no obvious cognates in the other Andic languages (Alekseev 2003:145-148).

By themselves, spatial forms with this orientation marker may encode any spatial configuration that can be considered as inferable from the semantic nature of the orienter and possibly other elements of the context. Note that, with human nouns, reference to the usual residence of a person is the commonest interpretation of OR_1 .

- (3) *šagi č'a-g-a b-ił-a!* pan fire-OR₁-ALL N-put-IMP 'Put the pan on the fire!'
- (4) $\hbar ema na$ $be\bar{L}'o-g-a$ $r-i\check{s}^w-aj-a!$ cow-PL $cowshed-OR_1-ALL$ N^- gather-CAUS-IMP 'Gather the cows in the cowshed!'
- (5) *eīo m-a?-oji di-g-a!* HORT H^{*}-go-POT.H^{*} 1SG-OR₁-ALL 'Let's go to my place!'

 OR_1 is also the default spatial form used for spatial relations in which the choice of a particular type of spatial configuration is not relevant, in particular:

- with orienters the functional characteristics of which are more salient and/or more relevant in a given context than their spatial characteristics;
- (6) $u\check{s}ku-\bar{t}i$ -**g**-**e** mik'e-li kocel- $\bar{e}d$ -i. school- N_0 -OR₁-LOC child-PL educate-IPF₂-H⁺ 'Children are being educated at school.'

- when the spatial relationship follows from the use of the orienter as the instrument of an action undergone by the figure;

- (7) $a\bar{s}ila$ -g-e m-il-ada $\bar{\chi}\tilde{i}k'\tilde{i}$ steam_o-OR₁-LOC N-cook-PF₂ dumpling 'steamed dumpling'
 - when the spatial relationship follows from the use of the orienter as a means of transport;

b-окоše ãd-o atobuši-ŧi-g-e b-eq'-īri.
 н⁻-most person-PL bus-N_o-OR₁-LOC н⁻-come-PF₁.н⁻
 'Most people came by bus.'

- when the figure and the orienter are parts of a same whole, or the figure results from a process affecting the orienter;

- (9) mina-**g**-e $koso mic^{\circ}ol$ -e-he g-o-di. head-OR₁-LOC hair get.sparce-N-CVB COP-N-POS 'On the head the hair got sparce.'
- (10) disino-g-e $L'aq^{w}a$ $b-o\bar{L}-e-he$ g-o-di.sore_o-OR₁-LOC pus N-form-N-CVB COP-N-POS 'There is pus in the sore.'

The semantic unmarkedness of OR_1 is confirmed by the fact that the forms of this series can combine with locative adverbs or spatial forms of locational nouns specifying every possible type of spatial configuration, whereas with the other orientation markers, the possible combinations are limited by the meaning of the orientation marker.

- $-OR_1 + a\bar{L}'e(ge)$ 'in the middle' \rightarrow among elements of the orienter;
- $-OR_1 + baL'i\bar{q}e$ 'beside' \rightarrow in the vicinity of the orienter;
- $-OR_1 + ge\bar{\iota}i$ 'inside' \rightarrow within the orienter;
- $-OR_1 + ge\bar{L}i$ 'underneath' \rightarrow under the orienter;
- $-OR_1 + L'ado$ 'above' \rightarrow on or above the orienter;
- $-OR_1 + rosoqe$ 'behind' \rightarrow behind the orienter;
- $-OR_1 + \bar{sigi}$ 'in front' \rightarrow in front of the orienter;
- (11) $ri\bar{L}'i \ \check{c}il-i-li-g-e$ $a\bar{L}'e$ $\bar{k}'at'-eri.$ meat tooth-PL-N^{*}_o-OR₁-LOC in.the.middle(LOC) get.stuck-PF₁ 'Some meat got stuck between the teeth.'
- (12) $mašta-\bar{t}i$ -**g**-**e ba**L'i- \bar{q} -**e b**-ik'-ida širi. mosque-N₀-OR₁-LOC side₀-OR₃-LOC N-be-IPF₂ godekan 'The godekan (meeting-place for men) is usually near the mosque.'
- (13) $\tilde{u}k'i$ -**g**-**a ge** \bar{l} -**a** $\check{z}a\check{z}a$ sor-*e*-he g-o-di. finger_o-OR₁-ALL inside-ALL thorn penetrate-N-CVB COP-N-POS 'I got a thorn in my finger.'
- (14) \check{c} 'ila-**g**-e **g**e \bar{i} '-i be \bar{i} 'o g-o-di. house_o-OR₁-LOC underneath-LOC cowshed COP-N-POS 'There is a cowshed under the house.'

- (15) *mina-g-u L'one k'ãzi zor-ere g-o-di*. head-OR₁-ABL above.ABL headscarf slip-PROG COP-N-POS 'The headscarf is slipping from the head'
- (16) $\tilde{\iota}c$ 'o-**g**-e **roso**- \bar{q} -e *b*-*ik*'''-*a*-wudi tuhi q'in-aj-e-he. door-OR₁-LOC back_o-OR₃-LOC N-be-N-PF₃ gun stand-CAUS-N-CVB 'A gun had been left standing behind the door.'
- (17) $e\bar{s}e$ -g-e $\bar{s}ig$ -i m- $\bar{a}ne$ b-ik'''-ari $\tilde{i}k'a$ $ma\check{s}ina$. 1PL₀-OR₁-LOC in.front-LOC M-g0.PROG N-be-PF₁ large car 'A truck was going in front of us.'

In this *split localization construction*, the NP representing the orienter and the spatial adverb (or spatial form of a locational noun) encoding the orientation agree in case. In some cases, this construction is in competition with the synthetic expression of the same meanings by means of semantically specialized orientation markers, but in others (for example, 'behind'), it constitutes the only way to make explicit a given type of orientation.

The allative of this series expresses a terminative meaning in combination with *beq'alaq'o* (terminative converb of *beq'uruLa* 'come').

(18) bač'ida rała-łi-g-a b-eq'-alaq'o łaloda m-ida ba-k'-i g-oli.black sea-N₀-OR₁-ALL H⁻-come-TERM by.foot H⁻-go.IPF₂ H⁻-be-H⁻(CVB) COP-H⁻.POS 'They went by foot up to the Black Sea.'

3.3. OR_2 (- χar - ~ -*L*ir-)

This series of spatial forms encodes the spatial configuration 'in the vicinity of'.

(19)	jaše	ŧ̄o- χar-i	j-eł̄-u-s̄a	b-eq'-ere	g-0-La.	
	girl	who _o -OR ₂ -LOC	F-leave-INF-COMP	N-know-prog	COP-N-NEG	
	'They did not know with whom they could leave the girl.'					

- (20) $\bar{q}''war\tilde{a}S$ -ada-be kamil- $\bar{a}da$ -be m-ič-ala, di- $\bar{L}ir$ -a w-oq'-a! be.necessary-PF₂-N be.missing-PF₂-N N-be.found-COND 1SG₀-OR₂-ALL M-come-IMP 'In case you need anything, come to me!'
- (21) hu-do- χar -u \bar{k} ^{'w}et-o gožo w-oč'il- \bar{o} -wa $\bar{s}eba$ -g-a ge \bar{L} -a. DIST-H^{*}_o-OR_2-ABL run-M(CVB) Gožo M-shelter-M-PF₄ tower-OR₁-ALL inside-ALL 'Running away from them, Gožo sheltered in a tower.'

This series of spatial forms occurs more frequently with human nouns than with non-human ones. With non-human nouns, the commonest way to express 'in the vicinity of' is OR_1 combined with *baL'iqe* 'beside'. Note that, with human nouns, the use of OR_2 implies that the person him/herself constitutes the orienter. Reference to

the usual residence of a person (which in many languages is encoded by this semantic type of spatial forms) is encoded in Northern Akhvakh by the default orientation marker OR₁, either alone or combined with the adverb $\bar{q}'e\bar{\iota}i$ 'at home': $di\chi ar-i$ 'near me' vs. di-g-e ($\bar{q}'e\bar{\iota}-i$) 'at my place'.

3.4. $OR_3(-\bar{q}-)$

Comparative data shows that the original meaning of this orientation marker was 'in the vicinity of', 'behind'. In Northern Akhvakh, OR_3 occurs in constructions in which this original meaning is still discernible, as in the following example, but this use of OR_3 is relatively marginal.

(22) $tuhi-la \ b-e\chi-o$ gere $\bar{x}^w a \bar{x}^w a r-u-wi \ hu-do-\bar{q}-e.$ gun-ADD N-take-M(CVB) Gere $run-M-PF_3$ DIST-H^{*}_o-OR₃-LOC 'Gere took a gun and chased after them.'

In Northern Akhvakh, the productive ways to express 'in the vicinity of' are OR_2 (with human orienters) and $OR_1 + bat'i\bar{q}e$ 'behind' (with non-human orienters), and the productive way to express 'behind' is $OR_1 + ro\bar{s}o\bar{q}e$ 'behind' ($ro\bar{s}o\bar{q}e$ is a spatial form of $ro\bar{s}i$ 'lower part of the back, bottom').

Spatial forms of the 3rd series are relatively frequent in texts (much less that the forms of the 1st series, but much more that those of any of the other three series), but this productivity is mainly due to the fact that OR_3 is usual with a few nouns that occur as orienters in spatial relationships with a particularly high frequency. Consequently, it is not easy to distinguish between lexicalized uses of OR_3 and uses still lending themselves to semantic generalizations.

Surprisingly, the only spatial uses of OR_3 that can be analyzed as relatively productive involve two types of spatial configurations which depart from the prototypes commonly used in the description of the uses of spatial forms, and which cannot be reduced to a common denominator:

- OR_3 is used productively to encode spatial relationships involving an orienter conceptualized as a relatively narrow space (corner, hole, canyon, cave); in particular, the use of OR_3 is fully productive with spatial relationships in which the orienter is an opening (door, window, nostril, mouth, etc.).
- (23) $e\bar{s}e$ hani $\bar{k}'a-\bar{q}-e$ g^we-d-e . 1PL_o(GEN) village canyon-OR₃-LOC COP.N-INT-N 'Our village is situated in a canyon.'
- (24) $\check{c}u \imath i r a \bar{i} m a \bar{q} a i \bar{q} e \bar{q} i n a r i.$ fish_o-GEN bone throat_o-OR₃-LOC get.stuck-INF 'A fishbone got stuck in the throat.'

- (25) $miSa-\bar{q}$ -une hini b-eq'-ere g-o-di. nose-OR₃-ABL blood N-come-PROG COP-N-POS 'The nose is bleeding.' (lit. Blood is coming from the nose)
 - OR_3 is used productively to encode distributed or diffuse localization; this is in particular the case with orienters that are not objects with a clear spatial anchoring, such as 'wind' or 'light'.
- (26) $\bar{c}ibera$ $l\tilde{a}g-a$ $laraSi-\bar{q}-a$ $go\check{c}il-\bar{e}da.$ in.winter sheep-PL lowlands-OR₃-ALL move-IPF₂ 'In winter the sheep move to the lowlands.'
- (27) mašina-g-u L'one r-isis-ere Sĩk'-a duna-łi-q̄-a r-āni.
 car-OR₁-ABL on.ABL N^{*}-fly²-N^{*}(CVB) hen-PL world-N₀-OR₃-ALL N^{*}-gO.PF₁
 'From the top of the car the hens flew away in all directions.' (lit. ...to the world)
- (28) $k^{w}\tilde{a}dala-\bar{q}-a$ $\bar{k}'u\check{z}a-di$ r-eq'-ere g-e-di.light_o-OR₃-ALL butterfly-PL N⁺-come-PROG COP-N⁺-POS 'Light attracts butterflies.' (lit. Butterflies come to the light)

3.5. OR₄ (-*ī*.'-)

This series of spatial forms straightforwardly encodes the *under* configuration.

- (29) dene \bar{c} 'ada- \bar{L} '-i w-u \bar{c} -ari. 1sg rain_o-OR₄-LOC M-get.wet-PF₁ 'I got wet under the rain.'
- (30) \bar{c} 'ari $\bar{s}i\bar{s}i\bar{b}$ -uruLa \bar{b} -o \bar{L} - $\bar{e}\bar{\bar{t}}i$, $\tilde{a}L$ 'od-i L'a \bar{q} 'o- \bar{L} '-a m-a?-ini. rain drizzle-INF N-start-PF.CVB all-PL shelter-OR₄-ALL H⁻-gO-PF₁.H⁻ 'When it started drizzling, everybody went under the shelter.'

3.6. OR₅ (-ī-)

This series of spatial forms encodes two distinct types of spatial configurations which have no obvious semantic connection, and which are commonly encoded by distinct orientation markers in Daghestanian languages: in a filled, dense space, and on a non-horizontal surface.

The first meaning of this orientation marker accounts for its use with nouns referring to substances (*leni* 'water', *ũsi* 'soil') or sets (*hani* 'village', *ruša* 'forest').

- (32) $\overline{4}ebe-\overline{L}-i$ k'ar-a $r-o\overline{L}-ere$ g-e-di. porridge-OR₅-LOC lump-PL N⁺-form-N⁺(CVB) COP-N⁺-POS 'Lumps have formed in the porridge.'
- (33) $h\tilde{a}$ - \bar{L} -i $\check{z}eLa$ $d\tilde{a}de$ b-ik'''-ari. village_o-OR₅-LOC today meeting N-be-PF₁ 'There was a meeting in the village today.'

The second meaning accounts for its use with nouns such as \bar{q} ' $\tilde{e}da$ 'wall', \bar{L} 'edo 'cliff', $k'a\bar{L}'u$ 'cheek'.

- (34) \bar{q} ' \tilde{e} da- \bar{L} -i kasa b- $i\bar{x}$ -uruLawall-OR₅-LOC paper N-fix-INF 'to put wallpaper on the wall'
- (35) $k'a\bar{i}'uda-\bar{i}-\bar{i}$ $\bar{c}'-\bar{o}nuLa$ cheek_o-OR₅-LOC kiss-INF 'to kiss on the cheek'

3.7. Summary

In this section, it has been proposed to analyze the productive spatial meanings of the orientation markers of Akhvakh as follows:

-g- (OR ₁)	•	default
- χar - ~ - $\bar{L}ir$ - (OR ₂)	:	in the vicinity of
- <i>q</i> ̄- (OR ₃)	:	(a) in a relatively narrow space (openings, etc.)(b) distributed / diffuse localization
- <i>ī</i> .'- (OR ₄)	:	under
- <i>ī</i> - (OR ₅)	:	(a) in a filled, dense space (b) on a non-horizontal surface

4. Non-spatial uses of spatial forms

4.1. Non-spatial uses of OR₁

4.1.1. In addition to their spatial uses, forms including the orientation marker -gare used to encode relationships in which

- the term of the relationship represented by an NP including the orientation marker -*g*- is not a concrete orienter, but a state or an activity;

- (36) *hu-du-we čãka koša ħa-ŧi-g-e g-u-di.* DIST-SL-M very bad state-N₀-OR₁-LOC COP-M-POS 'He is in very bad condition.'
- (37) $hu-\bar{s}^{w}-e$ komoki $g^{w}-\bar{e}ri$ $ku\bar{q}'a-g-a$ $w-o\bar{L}-uruLa$. DIST-M₀-ERG help do.N-PF₁ work₀-OR₁-ALL M-step-INF 'He helped [me] to find a position.' (lit. ...to enter work)
 - the other term of the relationship is not a concrete figure, but rather a process, the term represented by an NP including the orientation marker -g- being then characterizable as the place where a given process occurs, or as an experiencer;
- (38) $L'\tilde{u}si$ -**g**-**e** \check{c} 'ari k'on-ari. hay-OR₁-LOC fire start.burning-PF₁ 'The hay caught fire.'
- (39) *mik'i-g-e č'ari g-o-di.* child_o-OR₁-LOC fire COP-N-POS 'The child has a temperature.'
- (40) di-**g**-e \bar{L} 'ižali-de \check{c} 'in-ari. $1SG_0$ -OR₁-LOC wasp_0-ERG sting-PF₁ 'I was stung by a wasp.'
 - the term of the relationship represented by an NP including the orientation marker -g- is semantically a manner adjunct ex. (...);
- (41) $lazati-\bar{\mathfrak{k}}i$ -g-e rahat-a r- $e\chi$ -er-ohe g^wi-d-o dene.pleasure- N_o - OR_1 -LOC rest-PL N^{-} -take-PROG-M COP.M-INT-M 1sG 'I am taking a rest with pleasure.'

The locative of this series is also the usual way to encode localization in time.

- (42) rašiłero-g-e heč'-ari ila. dawn_o-OR₁-LOC get.up-PF₁ grandmother 'Grandmother got up at dawn.'
- (43) $\bar{c}oro$ -**g**-**e** $l\tilde{a}g$ -a $\bar{q}utano$ -**g**-a $go\check{c}il$ - $\bar{e}d$ -e. autumn-OR₁-LOC sheep-PL kutan_o-OR₁-ALL move-IPF₂-N 'In autumn the sheep move to the kutan (pasture land in the plains)'
- (44) $\bar{sig} \cdot i$ $zama \cdot \bar{ti} \cdot g \cdot e$ $\check{c}' il \cdot a$ $ge\bar{L}' \cdot a$ L'adabefore-LOC time-N₀-OR₁-LOC house-PL underneath-ALL above.ALL $g \cdot \bar{l} da$ $r \cdot ik''' \cdot ari \cdot wudi$. make.N^{*}-IPF₂ N^{*}-be-N^{*}-PF₃ 'Formerly houses were built upon one another.'

4.1.2. In addition to uses that are not bound to the choice of a particular verb, the locative of this series is used to encode one of the two arguments of some bivalent verbs or predicative expressions, the other argument being invariably in the nominative: $barači \bar{\chi}uruLa$ 'pity', $ba \chi i l \bar{l} \bar{r} uLa$ 'admire', $\check{c'} u\hbar i g \bar{u} ruLa$ 'scorn', $\hbar era l \bar{l} \bar{r} ruLa$ 'be amazed', $muk'u l \bar{l} \bar{r} ruLa$ 'acknowledge', $rak'' a \bar{q'} e l uruLa$ 'be sorry for', $ra \bar{q'} uruLa$ 'suit', $raz i l \bar{l} \bar{r} ruLa \sim razi bik' uruLa$ 'agree, be satisfied with', $\bar{s}imi beq' uruLa$ 'get angry', $\check{so} l uruLa$ 'be good, fit', $tama \check{s} a l \bar{l} \bar{l} \bar{r} ruLa$ 'be surprised', $was was i l \bar{r} ruLa$ 'have doubts'.

- (45) mik'e-lo-g-e $barači\bar{\chi}-e-he$ $g < o>\check{c}'-\bar{e}L-i$ de-de hu-du-ji.child- $H_{o}^{*}-OR_{1}-LOC$ pity-F-CVB $(H^{*})awake-CAUS.NEG-PF.H^{*}$ 1sg-ERG DIST-SL- H^{*} 'I felt pity for the children and did not awake them.'
- (46) hu- $\bar{s}u$ -be sabuilaro-g-e w- $a\chi i$ il- $\bar{e}d$ -o dene. DIST-M_o(GEN)-M patience_o-OR₁-LOC M-admire-IPF₂-M 1SG 'I admire his patience.'
- (47) $\check{c}'u\hbar g^{w}-\bar{e}ri hu-du-\bar{4}-e di$ $\bar{s}ewate-le-g-e.$ scorn make.N-PF₁ DIST-SL-F₀-ERG 1SG₀(GEN) gift-N^{*}₀-OR₁-LOC 'She scorned my gifts.'
- (48) *jaše-lo* rešetero-**g-e** \hbar eratil- \bar{a} ri *hu-du-we*. girl-H[•]_o(GEN) beauty-OR₁-ALL be.amazed-PF₁ DIST-SL-M 'He was amazed by the beauty of the girls.'
- (49) hu-du-je χ is a j-ik'-ero-g-e muk'u{il- $\bar{a}ri$. DIST-SL-F wrong F-be-MSD_o-OR_1-LOC admit-PF_1 'She admitted that she was wrong.'
- (50) $rak^{w}a \ \bar{q}'el-ad-o de-de-da \ g^{w}-\bar{e}da \ i\check{s}i-\bar{l}i-g-e.$ heart be.sorry-PF₂-M 1SG-ERG-INT do.N-PF₂ matter-N₀-OR₂-LOC 'I was sorry for the things I had done.'
- (51) Solo $\bar{q}ad$ -*i*-lo-**g**-*e* $ra\bar{q}$ '-*ik*-*e* $\hbar \tilde{e} \bar{c}$ '*e*⁴*e*. young-PL-H^{*}_o-OR₁-LOC suit-IPF₂.NEG-N slowness 'Slowness does not suit young people.'
- (52) *mene w-uk'-a* $a\bar{l}a-\bar{s}^{w}-e$ $o-\bar{x}-\bar{a}-\bar{t}i-g-e$ *razi!* 2sg M-be-IMP God-M_o-ERG N-give-PF₂-N_o-OR₁-LOC satisfied Be satisfied with the things God has given you!
- (53) $na\bar{c}'a$ -**g**-e $\bar{s}imi$ *b*-eq'-e-*he* $\bar{q}a\check{c}a\check{c}'$ - $\bar{o}ruLa$ $\check{s}o\bar{t}$ -ik-e. $lice_{o}$ -OR₁-LOC anger N-COME-N-CVB coat burn-CAUS.INF be.good-IPF₂.NEG-N 'One must not burn the coat out of anger at the lice.'

- (52) ha $\bar{\chi}\tilde{u}k'a\check{c}e$ -la di-**g**-e šoł-iL-a. PROX shoe-PL $1SG_0$ -OR₁-LOC be.good-NEG-PF 'These shoes do not fit me.'
- (55) dene tamašail-āre g^{wi} -d-o du sābu-šuku-il-g-e. 1sg get.surprised-PROG COP.M-INT-M 2sG₀(GEN) patience-ECHO-N₀-OR₁-LOC 'I am surprised at your patience.'
- (56) ošte $\bar{\chi}a$ -di-le-**g-e** dene waswasil-āre g-u-di. 2PL news-PL-N^{*}_o-OR₁-LOC 1SG have.doubts-PROG COP-M-POS 'I have doubts about the authenticity of your account.'

4.1.3. The locative of the -g- series is also used to encode the causee with verbs meaning 'make eat' or 'make drink/suck'. Note that these verbs are exceptional in that they include a causative suffix which normally is not used to derive the causative form of transitive verbs.

(57) mik'i-**g**-e kaka b-aq- $\bar{o}ruLa$ child_o-OR₁-LOC breast N-suck-CAUS.INF 'to suckle a baby'

4.1.4. Diachronically, the masdar inflected for the locative of the -g- series constitutes the probable origin of the progressive converb: in the texts I have collected, the suffix of this converb invariably occurs as *-ere*, but a variant *-erege* is found in the texts collected some sixty years ago by Magomedbekova.

4.1.5. The allative of the -g- series has non-spatial uses with movement verbs used metaphorically, for example, with *beq'uruLa* 'come'.

- (58) di-**g**-**a** $\bar{\chi}\tilde{e}t'e\bar{L}i$ *b*-*eq'*-*ari*. 1SG₀-OR₁-ALL cold N-come-PF₁ 'I have caught a cold.' (lit. A cold has come to me)
- (59) *č'ila-g-a bakaq̄'ele b-eq'-e-he g-o-di.* house_o-OR₁-ALL misfortune N-come-N-CVB COP-N-POS 'The house was struck by misfortune.' (lit. Misfortune came to the house)

4.1.6. The allative of the -g- series encodes the result of a transformation not only with *sororuLa* 'turn' used metaphorically, but also with verbs describing a process or an action implying a transformation of their nominative argument.

(60) $\frac{4}{2}uda \ tereti-g-a \ \bar{s}or-e-he \ g-o-di.$ wood $ash-OR_1-ALL \ turn-N-CVB \ COP$ 'The wood changed into ash.' (61) *žari b-iq'uq'-ari kesek-a-li-g-a.* glass N-break²-PF₁ piece-PL-N^{*}-OR₁-ALL 'The glass broke into small pieces.'

4.1.7. The allative of the -g- series is used to encode the addressee of verbs of saying, and also of verbs implying a verbal interaction, such as *helilorula* 'beg', *małunula* 'advise', *nałurula* 'scold'.

- (62) hu-gu-we di-g-a w-a?-ida w-ou-ari. DIST-LL-M 1SG-OR₁-ALL M-speak-IPF₂ M-stop-PF₁ 'He stopped speaking with me.'
- (63) dene w-oq'-alaq'o w-oß-a $e\bar{L}$ '-a hu-du- $\bar{s}u$ -g-a. 1SG M-come-TERM M-remain-IMP tell-IMP DIST-SL-M_o-OR₁-ALL 'Tell him to wait for me.'
- (64) *če čula m-ač-u k^wĩł-e g^we-da du-g-a di-La.* one thing N-tell-INF want-N(CVB) COP.N-INT $2sG_0-OR_1-ALL 1sG_0-DAT$ 'I want to tell you something.'
- (65) hu iši \bar{q} 'ada- $\bar{4}$ -e b-eq'- $\bar{a}ri$ Saga $_{\bar{4}i}$ - $\bar{4}i$ -g-a. DIST matter moment-N₀-ERG N-know-CAUS.PF₁ relatives-N₀-OR₁-ALL 'This was immediatly reported to relatives.'
- (66) $\tilde{a}d$ -o-lo-**g-a** $\hbar elil-\bar{o}ruLa$ person-PL-H^{*}_o-OR₁-ALL beg-INF 'to beg the people'
- (67) $\tilde{a}\check{c}ada ma\bar{k}-ii-e de-de hu-du-\bar{s}u-g-a.$ few advise-NEG-PF.N 1SG-ERG DIST-SL-M₀-OR₁-ALL 'I gave him many pieces of advice.'
- (68) mik'e-lo-g-a $na\bar{4}$ -urula child- $H_{0}^{+}-OR_{1}$ -All scold-INF 'to scold children'

4.1.8. The use of the allative of the -g- series in connection with \bar{c} 'eri 'name' can be viewed as a semantic extension of its use with verbs of saying.

- (69) \bar{sig} -*i*-da $e\bar{s}e$ $h\tilde{a}$ - $\bar{t}i$ -**g**-**a** \bar{c} 'eri b-ik'''-a-wi šulahani. before-LOC-INT 1PL₀(GEN) village-N₀-OR₁-ALL name N-be-N-PF₃ Šulahani 'Formerly our village was called Šulahani.'
- (70) hu-Lu šakiba- $\frac{1}{4}i$ -g-a di-La \bar{c} 'eri b-eq'-ik-e. DIST-UL bird-N₀-OR₁-ALL 1SG₀-DAT name N-know-IPF₂.NEG-N 'I don't know the name of this bird.'

4.1.9. The allative of the -g- series also marks an argument of the following verbs or predicative expressions: belorula 'depend on', bužurula 'believe, \tilde{e} -lunula 'resemble', $e\bar{q}urula$ 'watch', hādaxurula 'listen', hadulilorula 'get ready', iga bik'urula 'take turns', mic'alurula 'long for', k'wari oxurula 'attach importance', rasilorula 'cope with', rehēlurula 'get accustomed', šaklilorula 'suspect', χija bik'urula 'desire'.

- (71) *quri bel-āda-be* $g^{w}e-da$ $\bar{c}'ada-g-a-la$ *miłi-g-a-la.* field depend-PF₂-N COP.N-INT rain_o-OR₁-ALL-ADD sun-OR₁-ALL-ADD 'The harvest (lit. the field) depends on rain and sun.'
- (72) $ha-\bar{4}-u$ $e\bar{\chi}a$ dene du-g-a $bu\check{z}-ik-o$. PROX-N₀-ABL away 1sg $2sG_0-OR_1-ALL$ believe-IPF₂.NEG-M 'From now on I don't believe you.'
- (73) waša imo-g-a $\tilde{e}\bar{t}$ -ene g-u-di. son father_o-OR₁-ALL look.like-PROG COP-M-POS 'The son looks like his father.'
- (74) televizori- $\bar{\mathfrak{t}}$ i-**g**-**a** $e\bar{q}$ -uruLa TV.set-N₀-OR₁-ALL watch-INF 'to watch TV'
- (75) $nik^{w}a$ -**g-a** $h\tilde{a}da\bar{x}$ -uruLa song-OR₁-ALL listen-INF 'to listen to a song'
- (76) dac-a-li-g-a $\hbar adu$ til- \bar{o} ruLa lesson-PL-N⁻-OR₁-ALL get.ready-INF 'to get ready for the lessons'
- (77) *mic̄'at'^wã-i***-***g-a mik'e-li ħaħam-i-hi g-oli* sweets-N_o-OR₁-ALL child-PL long-H⁻-CVB COP-H.POS 'The children longed for sweets.'
- (78) $h\tilde{a}\check{z}e iga du-g-a \qquad g^we-da.$ now turn $2SG_0-OR_1-ALL$ COP.N-INT 'It is your turn now.'
- (79) *Saraą̃'i-g-a mic̃'ał-uruLa* alcohol-OR₁-ALL become.addicted-INF 'become addicted to alcohol'
- (80) hu-du- $\bar{d}i$ -g-a k^wari o- \bar{x} -iL-e. DIST-SL-N₀-OR₁-ALL importance N-give-NEG-PF.N 'I did not attach importance to that.'

- (81) dene $\bar{s}\tilde{u}$ -g-a-la ra \hat{s} il-are g-u-La. 1SG what_o-OR₁-ALL-any cope-PROG COP-M-NEG 'I cannot cope with anything.'
- (82) \check{c} \check{i} $da\bar{i}i$ $mi\check{s}a-\bar{i}i$ -g-a $reh\tilde{e}i$ -ere g-u-La dene.new place-N₀-OR₁-ALL get-accustomed-PROG COP-M-NEG 1SG 'I cannot get accustomed to my new place.'
- (83) hu miša- $\overline{4}$ -i gere $\overline{5}$ ak $\overline{4}$ il- $\overline{0}$ -wa $a\overline{k}$ '0-g-a. DIST place-N₀-LOC Gere suspect-M-PF₄ wife₀OR₁-ALL 'At this point Gere suspected his wife.'
- (84) $\bar{q}'\bar{\delta}hula-\bar{t}i$ -**g**-**a** χija **g**-**o**-L**a**. food-N_o-OR₁-ALL wish COP-N-NEG 'I don't feel like eating.'

4.1.10. The allative of the -g- series is also found in idioms involving the adjectives *hok'orada* 'heavy' and h^wah^wada 'light'.

- (85) $h\tilde{a}delo$ -**g**-**a** hok'orada hear_o-OR₁-ALL heavy 'hard of hearing'
- (86) *mina-g-a* hok'orada head-OR₁-ALL heavy 'narrow-minded'
- (87) *mina-g-a h*^w*ah*^w*ada* head-OR₁-ALL light 'shallow (person)'

4.1.11. The ablative of the -g- series constitutes the usual expression of non-spatial meanings that, cross-linguistically, tend to be treated as metaphorical extensions of spatial markers with ablative or perlative meanings. It is used with verbs or predicative expressions such as *bač'orula* 'deprive', *heč'e beχurula* 'take revenge', χe *beχurula* 'make use of', *č'inurula* 'protect', *hamariqe beq'urula* 'distinguish', *qorula* 'ask', *rãc'unula* 'ask', *šinurula* 'hide', $\chi^w a \bar{s} a \bar{t} \bar{l} \bar{l} \bar{r} u \bar{a}$ 'save, escape'.

- (88) *isi-\frac{1}{4}i-g-une <i>w-ač'-āri dene.* inheritance-N₀-OR₁-ABL M-deprive-PF₁ 1SG 'I was deprived of inheritance.'
- (89) $to\check{s}^w \tilde{a} \bar{s}u g u$ heč'e $b e\chi$ -uruLa ennemy-M_o-OR₁-ABL revenge N-take-INF 'to take revenge on the ennemy'

- (90) $daru-\bar{L}i$ žomi-le-**g-une** χe b-e χ -uruLa medecine-GEN plant-N[•]_o-OR₁-ABL use N-take-INF 'to make use of medicinal plants'
- (91) *balahe-le-g-une č'in-uruLa* misfortune-N⁺_o-OR₁-ABL protect-INF 'to protect from misfortune'
- (92) \check{c}^{wi} *b-ik'^w-ala Salamate b-ił-a* \check{c} *elada-di-g-une hamari-\bar{q}-<i>e b-eq'-uruLa*! what N-be-COND mark N-put-IMP other-PL-OR₁-ABL face-OR₃-LOC N-know-INF 'Put some mark in order to distinguish it from the others!'
- (93) *alā-s̄u-g-une q-ōruLa* God-M_o-OR₁-ABL ask-INF 'to ask God [to do a favor]'
- (94) w-oq'-a-či? $e\overline{L}$ '-e $r\widetilde{a}\overline{c}$ '-a-wi gere-de jašo-g-u. M-come-PF₁-Q say-N(CVB) ask-N-PF₃ Gere-ERG girl_o-OR₁-ABL 'Did he come?' Gere asked the girl.
- (95) mik'e-lo-g-u ispička-di šin-ōruLa $r-u\bar{x}$ -ida. child-H^{*}_o-OR₁-ABL match-PL hide-CAUS.INF N^{*}-must-IPF₂ 'Matches must be hidden from children.'
- (96) $tami\hbar g-une \quad \bar{\chi}^w a \bar{s} a \bar{t} \bar{l} \bar{o} r u L a$ punishment-OR₁-ABL escape-INF 'to avoid punishment'

4.1.12. The ablative of the -g- series constitutes in Akhvakh the usual way to encode the standard of comparison.

- (97) imaχa-La qãL'ano-g-u rešada čula g-o-L-e. donkey_o-DAT donkey.foal_o-OR₁-ABL beautiful thing COP-N-NEG-N
 'For the donkey there's nothing more beautiful than its foal.'
- (98) g^w-idaleL-e-he b-ik'^w-e-\overline b-a\overline 'aq'-e-he guj-e s\overline da.
 do.N-PF.NEG.INT-N-CVB N-be-MSD-N₀-ABL N-be.late-N-CVB do.N-MSD good
 'Better late than never.' (lit. Doing with delay is better than not doing at all)

4.1.13. The ablative of the *-g-* series also occurs in a construction in which an ablative NP indicates the precise location of a process or situation concerning an entity represented by a nominative NP.

- (99) $h^{w}ado \ a\overline{L}'e-\overline{t}i-g-une \quad tuta\overline{q}-e-he \ g-o-di.$ scarf middle-N_o-OR₁-ABL tear-N-CVB COP-N-POS 'The scarf tore in the middle.'
- (100) $k'eh-\bar{e}Sa-\bar{t}i$ -**g-une** imo-g-a $\tilde{e}\bar{t}$ -ada g-u-di waša. eye-nose-N₀-OR₁-ABL father₀-OR₁-ALL resemble-PF₂ COP-M-POS son 'In the upper part of his face, the son resembles his father.'

4.1.14. The ablative of the -g- series is very productive in constructions that can be described as involving a participant that plays a crucial role in a process affecting another participant (represented by a nominative NP) without however being viewed as an agent. It encodes the stimulus of affective verbs that assign the nominative case to their experiencer, natural forces responsible for a process undergone by a patient, and involuntary agents.

- (101) dene $\chi^{w}e$ -**g-une** *L*- \bar{o} -he $g^{w}i$ -da. 1SG dog-OR₁-ABL be.afraid-M-CVB COP.M-INT 'I am afraid of the dog.'
- (102) di-be rak^wa gu \hbar ilaj-e-he g-o-di du-g-une. $1_{SG_o(GEN)-N}$ heart pity-N-CVB COP-N-POS 2_{SG_o} -OR₁-ABL 'I pity you.'
- (103) mašina-**g-une** w-uL'-ari hu-du-we. car-OR₁-ABL M-die-PF₁ DIST-SL-M 'He was killed by a car.' (lit. He died from a car)²
- (104) dene tati-**g-u**-la $\hbar e\check{c}$ -id-o. 1SG dust_o-OR₁-ABL-ADD sneeze-IPF₂-M 'Dust makes me sneeze.' (lit. I sneeze from dust)
- (105) hu-s̄u-g-une istaka b-iq^w-e g-o-di.
 DIST-M_o-OR₁-ABL glass N-break-N(CVB) COP-N-POS
 'He broke the glass unintentionally.' (lit. The glass broke from him)

Note that in Akhvakh, strictly speaking, it would not be correct, either to recognize an 'involuntary agent construction', or to analyze (105) in terms of an alternative marking of the agent in the transitive construction. All these examples are instances of the same *non-agentive initiator construction*. (105) is an intransitive construction resulting from the adjunction of an ablative NP to the minimal intransitive predication *istaka biq*^{*wari*} 'The glass broke', in the same way as *mašinagune wuL'ari huduwe* and *dene* $\chi^{wegune Lohe g^{wida}}$ result from the adjunction of

² In this example, the Akhvakh sentence is unambiguously an intransitive predication: in Akhvakh, *bit'oruta* 'kill' is morphologically the causative of *bit'uruta* 'kill', and 'killed' would be *wut'āri*, with a long *a* resulting from the fusion of the causative marker -a(j)- with the initial vowel of the TAM marker -*ari*.

ablative NPs encoding the initiator of the process to the minimal intransitive predications *huduwe wul'ari* 'He died' and *dene L\bar{o}he g^{w}ida* 'I am afraid'.

The meaning of involuntary agent in (106) does not follow from the construction itself, but from the possibility to contrast it with a transitive construction headed by the causative form of the same verb.

(106) $hu - \bar{s}u - de$ istaka $b - iq^{w} - aj - e$ g-o-di. DIST-M₀-ERG glass N-break-CAUS-N(CVB) COP-N-POS 'He broke the glass.'

Note that the overt marking of causativization in Akhvakh excludes analyses that could be considered in languages using labile verbs to encode meanings such as 'break' or 'die/kill'.

4.1.15. The 'de-agentive' meaning of the ablative of the -g- series may also explain its use with *bažariloruta* 'be doable by'.

- (107) $\tilde{\iota}$ - $\bar{s}u$ -da mina $\bar{q}e$ g- $\bar{u}ru$ La bažaril- $\bar{a}re$ g-o-La hu-du- $\bar{s}u$ -g-u. ANA-M_o(GEN)-INT household do-INF be.doable-prog COP-N-NEG DIST-SL-M_o-OR₁-ABL 'He cannot afford to keep himself.'
- (108) \tilde{u} da \tilde{u} dada bažaril- \bar{e} da g^we-da-či du-**g-une** hu iši? really be.doable-IPF₂ COP.N-INT-Q 1SG-OR₁-ABL DIST business 'Will you really be able to do that?'

4.1.16. The allative and the ablative of the *-g-* series occur jointly in temporal expressions such as *reše-g-u reše-g-a* 'from year to year.

4.1.17. As a rule, combinations of spatial forms of nouns with spatial adverbs or locational nouns only have non-spatial uses straightforwardly following from metaphorical extensions of their spatial meaning. For example:

- The combination *locative of the* -g- *series* + $ge\bar{i}$ *(inside'* has the temporal use illustrated by ex. (110).
- (109) $\check{c}\tilde{a}\check{c}'e$ ha daru $\bar{c}'ar$ -uruLa b-u \bar{x} -ida $\check{z}odo-g-e$ ge \bar{L} -i? how.many.times PROX medicine drink-INF N-must-IPF₂ day_o-OR₁-LOC inside-LOC 'How many times a day must this medicine be taken?'
 - The combination *locative of the* -g- *series* + $ge\bar{L}$ 'i *'underneath'* has the same possibility of interpretation 'in an unpleasant situation' as the locative of the $-\bar{L}$ '- series, with which this combination is more generally synonymous.
- (110) hu-šta Saza- $\bar{t}i$ -g-e $ge\bar{t}$ '-i ba-k'- $\bar{t}ri$ $a\bar{k}$ '-o $\bar{s}ig$ -i. DIST-such torment- N_0 -OR₁-LOC underneath-LOC H⁺-be-PF₁.H⁺ woman-PL before-LOC 'Women had to undergo such torments formerly.'

- The combination *locative of the* -g- *series* + L'a(do) *'above'* is found in the construction of *badaLuruLa* 'laugh (at)' and *usilōruLa* 'think'.
- (111) $\tilde{a}d$ -o *L'ado b*-*adaL*-*ere g*-oli *du*-*g*-*e*. person-PL above.LOC H^{*}-laugh-PROG COP-H^{*}.POS $2SG_0$ -OR₁-LOC 'The people are laughing at you.'
- (112) $hu-\bar{i}-g-e$ *L'ado usilaj-a mene!* DIST-N₀-OR₁-LOC above.LOC think-IMP 2SG 'Think about it!'
 - The combination *ablative of the* -g- *series* $+ L'\tilde{o} \sim L'$ one *'from above'* is found in the idiom *L'one boīuruLa* 'forgive', lit. 'step from above', and also with *mačunuLa* 'speak (about)'.
- (113) di-g-une $L'\tilde{o}$ b- $o\bar{L}$ -a! $1SG_{o}$ -OR₁-ABL above.ABL N-step-IMP 'Forgive me!'
- (114) $\hbar ali \bar{x} a tila \bar{t}i g-une L'\tilde{0}$ b-o \bar{L} -iki. treachery-N₀-OR₁-ABL above.ABL N-step-IPF₁ 'Treachery cannot be forgiven.'
- (115) du-*g***-u** $L'\tilde{o}$ $\check{c}ula$ *m*-a \check{c} -ene *g*-o-d*i* $h\tilde{a}$ - \bar{L} -*i*. $2sG_{o}$ -OR₁-ABL above.ABL thing N-...-PROG COP-N-POS village-OR₅-LOC 'There are rumors about you in the village.'
 - The combination *ablative of the* -g- *series* $+\bar{s}igu$ *'from the front'* expresses replacement.
- (116) du-**g**-**u** \bar{sig} -une $\check{c}u$ -wi w- $\bar{\tilde{t}}da$? $2SG_0$ -OR₁-LOC in.front-LOC who-M M-go.IPF₂ 'Who will go in your place?'

4.2. Non-spatial uses of OR₂

The non-spatial uses of OR_2 can be viewed as immediate semantic extensions of the basic meaning of this series of spatial forms:

 – OR₂-LOC occurs in constructions expressing 'to have an object at one's disposal without necessarily possessing it'. N Note that, in the predicative construction encoding possession proper, the possessor is in the genitive, not in a spatial form.

(117)	ĩk̄'ʷa	mešu	b-ik' ^w -a-wi	gere- xar-i ,	hu-be-la	ī™ar-o
	small	knife	N-be-N-PF ₃	Gere-OR ₂ -LOC	DIST-N-ADD	stab-м(сvв)

 $\tilde{\iota}$ -su-da waciq'a L' war -u-wi. ANA-M_o(GEN)-INT cousin kill-M-PF₃ Gere had a small knife on him, and he killed his cousin with it.'

– In constructions expressing the transfer of objects that can be possessed (in particular with $o\bar{x}uruLa$ 'give'), OR_2 -ALL is used to encode recipients that are not viewed as future possessors, contrasting with the dative used when the transfer results in a possessive relationship.

(118)di-**īir-a** hu-du de-de e-x-a č'ĩȳ-a, t'-ōni-wa N[⁺]-give-IMP DIST-SL pebble-pl 1sg-erg throw-N⁺-POT 1SG_o-OR₂-ALL hu-du-re ĩhori-La $DIST-SL-N^{+}$ lake_o-OR₅-ALL 'Give me those pebbles, I will throw them into the lake.'

– OR₂-ABL is used in constructions expressing loss of property.

(119) ha $\tilde{u}si$ $g^{w}e$ -d-e hu-do-de zumi- $\bar{4}$ -e $e\bar{s}e$ - χar -une b- $e\bar{q}$ -ada. PROX land COP.N-INT-N DIST-H^{*}_o-ERG force-N_o-ERG 1PL_o-OR₂-ABL N-take.away-PF₂ 'This land has been taken by force from us by them.'

4.3. Non-spatial uses of OR₃

4.3.1. Although 'behind' and 'beside' are not productively expressed by OR_3 in present-day Akhvakh, OR_3 is frequently found in non-spatial uses that can be explained as semantic extensions of such spatial meanings. In copulative constructions, OR_3 may express 'be in favor of'.

(120) b-okoše-ji hu-du-šu- \bar{q} -e ba-k'- \bar{i} ri. H^{*}-most-H^{*} DIST-SL-M₀-OR₃-LOC H^{*}-be-PF₂.H^{*} 'Most people supported him.'

 OR_3 also occurs in the construction of verbs or predicative expressions such as *roī'i bux̄uruta* 'fall in love', *x̄ūdarilōruta* 'fall in love' *ħaā'elōruta* 'miss', *mišaraquruta* 'miss', *ãā'ežuruta* 'be thirsty' > 'be eager to have', *Sōruta* 'weep (for someone)'.

- (121) $hu \bar{s}u be$ $ro\bar{L}'i \ b u\bar{x} e$ b ik''' a wi $aficer \bar{s}u$ $ja\check{s}e \bar{t}i \bar{q} e$. DIST-M_o(GEN)-N love N-fall-N(CVB) N-be-N-PF₃ officer-M_o(GEN) daughter-F₀-OR₃-LOC 'He fell in love with the daughter of an officer.'
- (122) $mik'e-lo-\bar{q}-e$ $\hbar a\bar{q}'elaj-e-he$ g-i-di dene. child-H^{*}_o-OR₃-LOC miss-N-CVB COP-F-POS 1SG 'I miss [my] children.'

- (123) *\[\vec{t}e\)-\vec{q}-\vec{o}qe & \(\vec{a}q\)'e\(\vec{z}\)-uruLa water-OR3-LOC-SIMIL be.thirsty-INF 'be eager to get' lit. 'feel thirsty [for something] in the same way as for water'*
- (124) di-da waša- $\bar{s}u$ - \bar{q} -e mišaraq-e-he g-i-di dene. $1SG_{o}(GEN)$ -INT son- M_{o} -OR₃-LOC miss-F-CVB COP-F-POS 1SG 'I miss my son.'
- (125) $mištinek'''a mačada ek'''a-\bar{s}u jaše-\bar{i}-\bar{q}-e \bar{x}\tilde{u}daril-\bar{a}ri.$ poorman rich man-M_o(GEN) daughter-F_o-OR₃-LOC fall.in.love-PF₁ 'The poorman fell in love with the daughter of a richman.'
- (126) $\check{s}akiba-g-a\ \bar{s}or-alala,\ hu-gu-je\ wa\bar{c}i-lo-\bar{q}-e$ $\S-\bar{a}re\ j-ik'-i-wi.$ bird-OR₁-ALL turn-CONC DIST-LL-F brother-H^{*}_o-OR₃-LOC weep-PROG F-be-F-PF₃ 'Although she was changed into a bird, she kept weeping for his brothers.'

4.3.2. The locative of the $-\bar{q}$ - series of spatial forms can express manner. In particular, 'adjective/participle + $\hbar a$ - $\bar{t}i$ - $\bar{q}e$ ' (< $\hbar a$ 'state') is a possible equivalent of the manner adverbs derived from adjectives of English or Russian.

(127) $be\check{c}a-\bar{\iota}i$ $mi\check{c}'i-\bar{\mathfrak{q}}i-\mathfrak{q}-e$ $e\bar{s}e$ $h\tilde{a}-\bar{\mathfrak{t}}i-g-a$ $lologoni\bar{\iota}$ $e\bar{\iota}'\cdot id-e.$ mountain-GEN tongue-N₀-OR₃-LOC 1PL₀(GEN) village-N₀-OR₁-ALL Lologonitl say-IPF₂-N 'In Avar our village is called Lologonitl.'

(128) $\tilde{u}\bar{s}i$ $\check{c}'\tilde{a}k'$ -*e*-*he g*-*o*-*di m*-*a* \bar{q} -*unu*La $\check{s}o$ *ł*-*i*ka $\hbar a$ - $\bar{t}i$ - \bar{q} -*e*. ground harden-N-CVB COP-N-POS N-plough-INF be.good-IPF₂.NEG state-N₀-OR₃-LOC 'The ground has got hard to such a point that it cannot be ploughed.'

(129) bahada $\hbar a$ - $\overline{t}i$ - \overline{q} -e g- $\overline{u}ruLa$ different state-N₀-OR₃-LOC do-INF 'to do something differently'

With masdars, the locative of the $-\bar{q}$ - series of spatial forms expresses 'in the same way as'.

- (130) b-ik'-ero- \bar{q} -e b- $e\bar{t}$ -a di ustu- $\bar{t}i$ -g-e Sadilo!N-be-MSD₀-OR₃-LOC N-leave-IMP 1SG₀(GEN) table-N₀-OR₁-LOC order 'Leave the things on my table as they were before!'
- (131) du-La-da $k^{w}\tilde{l}$ -ero- \bar{q} -e guj-a! $2SG_{o}$ -DAT-INT want-MSD_{o}-OR_{3}-LOC do.N-IMP 'Do it as you want!'

(132) is-e ũča b-iq^w-ero-q-e w-uq-id-o ũča b-iq^w-ada ek^wa.
1PL-ERG ox N-kill-MSD₀-OR₃-LOC M-kill-IPF₂-M ox N-kill-PF₂ man
'We are going to kill the man that killed the ox in the same way as he himself killed the ox.'³

4.3.3. The meaning illustrated by ex. (131-3) suggests that, etymologically, the similative particle $-\tilde{u}\bar{q}e \sim -u\bar{q}e \sim -\tilde{o}\bar{q}e \sim -o\bar{q}e$ (as in ex. (124) above) includes a formative cognate with the locative of the $-\bar{q}$ - series. Comparative data from the other Andic languages shows that the ancient form of this particle was something like **mu* $\bar{q}e$, but unfortunately, I have found no evidence of a possible origin of the formative **mu*-.

4.3.4. The locative of the $-\bar{q}$ - series of spatial forms is also found with adjuncts meaning 'in exchange of' (but NOT with adjuncts expressing price, which in Akhvakh are in the dative case).

(133)	beq'-ada	ači-łi- ą̄-e	dare-zahwa	b-eχ-e-wudi.
	come-PF ₂	money-N _o -OR ₃ -LOC	silk-есно	N-buy-N-PF ₃
	'With the	money he had g	ot he bought	precious cloth.'

(134) huna- $\overline{t}i$ - \overline{q} -e geroj $\overline{t}e$ o- \overline{x} -ari. feat- N_0 -OR₃-LOC title.of.hero N-give-PF₁ 'For his feats he got the title of hero.'

4.3.5. OR_3 also has temporal uses with the shade of vagueness that characterizes one of its two productive spatial meanings.

(135) ha $\bar{s}aSa-\bar{t}i-\bar{q}-e$ di-be sanaSate g-o-La. PROX hour-N₀-OR₃-LOC 1SG₀(GEN)-N ... COP-N-NEG 'For the moment (lit. by this hour) I cannot do that.'

4.4. Non-spatial uses of OR₄

The only non-spatial use of this orientation marker is its extension to non-spatial situations in which a participant undergoes some constraint.

(136)	hu-du-we	de-de	ą̄ati− ī'−i	w-oĸ-ō-he	g ^w i-d-o.
	DIST-SL-M	1sg-erg	palm-OR ₄ -LOC	M-remain-CAUS.M-CVB	COP.M-INT-M
	'I keep hir	n under	my control.'		

(137) dene $\tilde{\iota}$ - $\bar{s}u$ -La heba- $\bar{\iota}$ '-i g-u-L-o. 1sg ANA-M₀-DAT debt-OR₄-LOC COP-M-NEG-M 'I am not indebted to him.'

³ The precise meaning of *biquruLa* is 'kill by cutting the throat'.

(138) hu-du- $\bar{s}u$ $ko\bar{\tilde{s}}i$ - $\bar{t}i$ - \bar{a} b- $u\bar{x}$ -ero-g-une \check{c} 'in-a $a\bar{l}a$ - \bar{s}^w -e. DIST-SL-M_o(GEN) power-N_o-OR₄-ALL H⁺-fall-MSD_o-LOC₁-ABL protect-IMP God-M_o-ERG 'Let God prevent [me] from falling into his power.'

4.5. Non-spatial uses of OR₅

4.5.1. As already mentioned above, historically, the locative of this series constitutes the probable origin of one of the two variants of the genitive in Akhvakh and other Andic languages; the distribution of this variant of the genitive (which in Akhvakh is obligatory with non-human nouns, and is in competition with the unmarked genitive in the case of human nouns) strongly suggests that the reanalysis started with inanimate nouns, which mainly occur in genitive constructions expressing whole-part relationships (Alekseev 2003).

4.5.2. Synchronically, the only non-spatial use of this series of spatial forms is the sporadic use of OR_5 -LOC with masdars.

(139) \check{z} - $\bar{a}ro$ - \bar{L} -i \bar{q} ' $ac\tilde{a}dil$ - $\bar{a}re$ j-ik'''-ari hu-du-je di-k'ena. learn-MSD_0-OR_5-LOC compete-PROG F-be-PF_1 DIST-SL-F 1SG_0-COM 'She competed with me in study.'

5. The emergence of a mediative case

Cross-linguistically, the expression of means ('by means of', 'thanks to', etc.) is a common extension of the use of ablative/perlative cases or adpositions. In Northern Akhvakh, this meaning is regularly encoded by means of the mediative suffix *-gule*, with the variants *-gul-o* (M) and *-gul-i* (H') due to adverbial agreement.

- (140) hu-do komoki- $\bar{t}i$ -gul-o hu-we w-oq'-ari dasista- $\bar{t}i$ -g-a. DIST-H[•]_o(GEN) help-N_o-MDT-M DIST-M M-come-PF₁ Daghestan-N_o-OR₁-ALL 'He got to Daghestan with their help.'
- (141) $B^{w}-\bar{e}ro$ -**gule** minada w-oq'-ari di-La hu-du-we. speak-MSD₀-MDT separately M-know-PF₁ 1SG₀-DAT DIST-SL-M 'I recognized him by his way of speaking.'
- (142) hu-šte b-ouoda hok'orada $ku\bar{q}$ 'i g^{w} - $\bar{e}ro$ -gu+e Se+il- $\bar{a}ri$ dene. DIST-thus N-much heavy work do.N-MSD₀-MDT get.handicapped-PF₁ 1sG 'It is by doing much hard work that I got my handicap.'
- (143) mik'e-lo-gul-ohe $\check{c}'u\hbar il-\bar{o}ruLa$ $w-u\bar{x}-id-o$ mene. child- H_{o}^{\dagger} -MDT-M be.proud-INF M-must-IPF₂-M 2sG 'You must be proud of your children.'

This suffix also expresses the temporal meaning expressed in English by 'within', which cross-linguistically constitutes a common extension of the use of cases or adpositions with similar meanings.

(144) $\bar{s}aSati$ -**gułe** *m*-a?-oji. hour_o-MDT H^{*}-go-POT.H^{*} 'We are leaving within an hour.'

Given the semantic proximity with the ablative, it is probable that the first syllable *gu* of the mediative suffix is cognate with the ablative of the *-g-* series. This hypothesis is confirmed by the fact that Magomedbekova's texts include occurences of the ablative of the *-g-* series expressing meanings that, in my corpus, are regularly expressed via the mediative suffix *-gule*.

(145) če \tilde{a} čada $r\tilde{i}$ - \bar{i} i-**g-une** \bar{q} ^{*w*}arada ruša- \bar{i} e- \bar{i} -a \tilde{i} k^{*w*}-*e*-he one few time-N₀-OR₁-ABL thick forest-N₀-OR₅-ALL swallow-F-CVB *L*'oq'-ari. disappear-PF₁ 'Shortly afterwards she disappeared into a thick forest.' (Magomedbekova)

Consequently, the mediative suffix probably results from the combination of the ablative of the -g- series with a second formative cognate with the essive suffix -*le*.

6. The emergence of a comparative particle

As already mentioned above, in Northern Akhvakh, standards of comparison are regularly encoded as NPs in the ablative of the *-g-* series of spatial forms. But there are also constructions expressing comparison in which a suffix identical to one of the variants of the ablative does not attach to the oblique stem of a nominal, but to a fully inflected form to which a further case suffix normally cannot attach.

Let us compare the following two examples:

(146)	bešanoč'e	ã1-e- ł-une	ĩč'i	harig ^w -ada-be	šoda-be.	
	a.hundred.times	hear -MSD-N _o -ABL	more	see-PF ₂ -N	good-N	
	'Seeing once is better than hearing a hundred of times.'					

(147) *hu-d-e-***i***une ha-g-e šoda g-o-di* DIST-SL-LOC-CMPR PROX-LL-LOC good COP-N-POS 'One feels better here than there.'

In example (146) $\tilde{a}_{Le}\bar{t}_{une}$ is a regular ablative form of the masdar \tilde{a}_{Le} . As explained above, the absence of the orientation marker -g- is regular in the presence of the neuter oblique stem formative - $\bar{t}i$ -. By contrast, in ex. (147), the same ending - $\bar{t}une$ attaches to the locative form of the spatial adverb hude 'here'. The ablative of this spatial adverb is hudu(ne). As an oblique stem marker, - $\bar{t}i$ - can only attach to nominative forms. Consequently, in hude $\bar{t}une$, - $\bar{t}une$ has been reanalyzed as a

comparative particle that, contrary to $-\bar{l}$ -une $|-N_0$ -ABL|, is not subject to the selectional restrictions that characterize case endings.

The same phenomenon is illustrated by the following example from Magomedbekova's texts.

(148) *imiχi* sig-i-tune čãka *L*-ēri.
donkey before-LOC-CMPR very be.afraid-PF₁
'The donkey was more afraid than before.' (Magomedbekova)

Abbreviations

_o: oblique stem / ²: reduplication /ABL: ablative / ADD: additive particle / ALL: allative / ANA: anaphoric pronoun / CAUS: causative /CMPR: comparative / COM: comitative / COMP: complementizer / CONC: concessive converb / COND: conditional converb / COP : copula / CVB: converb / DAT: dative / DIST: distal / ECHO: second element of an echo compound / ERG: ergative / ESS: essive / F: feminine / GEN: genitive / H': human plural / HORT: hortative / IMP: imperative / INCL: inclusive / INF: infinitive / INT: intensive / IPF: imperfective / LL: lower level / LOC: locative / M: masculine / MDT: mediative / MSD: masdar / N: non-human / N': non-human plural / NEG: negation / OR: orientation / ORD: ordinal / PF: perfective / PL: plural / POS : positive / POT: potential / PROG: progressive / PROX: proximal / Q: interrogative / SG: singular / SIMIL: similative particle / SL: same level / TERM: terminative converb / UL: upper level

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