

## Toward a historical grammar of elevation in Kartvelian

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**Abstract:** This paper in detail addresses and, for the first time in the field, presents linguistic evidence related to the expression of elevational semantics in the Kartvelian languages. The domains of its expression include a wide range of parts of speech, such as adverbs, adjectives, postpositions, and verbs. Provided with a broad synchronic illustrative base, as well as with respective diachronic commentaries, the material under discussion is meant to lay the groundwork for the establishment of a diachronic grammar of elevation in Kartvelian.

**Keywords:** diachrony, elevation, Kartvelian, spatial semantics

**Acknowledgements:** This paper is based on our talk presented at and designed for the purposes of the Zoom Workshop “Typology and Diachrony of Elevational Spatial Deixis” (23–24.11.2020; convenors: Gilles Authier, Antoinette Schapper). We are indebted to the participants thereof and to Timur Maisak and Yakov Testelet for their valuable comments. Sofia Ovchinnikova and Michael Ireton deserve special thanks for their assistance in the refinement of the pilot questionnaire. We would also like to credit our native consultants: Sopo Berulava, Maia Memišiši, Natia Poniava, Lile Tandilava (Laz); Lik’a Žalayo-nia (Megrelian); Rusudan Ioseliani, Medea Sayliani and Nat’o Šavrešiani (Svan). The rest goes to the anonymous reviewers who made their comments on the previous versions of the paper.

**For citation:** Rostovtsev-Popiel A. A., Chukhua M. J. Toward a historical grammar of elevation in Kartvelian. *Voprosy Jazykoznanija*, 2024, 3: 31–59.

**DOI:** 10.31857/0373-658X.2024.3.31-59

## На пути к созданию исторической грамматики элевации в картвельских языках

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**Аннотация:** В статье подробно рассматриваются и впервые вводятся в научный обиход сведения, касающиеся выражения семантики элевации в картвельских языках. Сферы ее выражения включают в себя широкий частеречный спектр: наречия, прилагательные, послелого, глаголы. Материал, обеспеченный и снабженный как широким синхронным контекстом, так и диахроническим комментарием, призван лечь в основу исторической грамматики элевации в картвельских языках.

**Ключевые слова:** вертикальный дейксис, диахрония, картвельские языки, пространственная семантика

**Для цитирования:** Rostovtsev-Popiel A. A., Chukhua M. J. Toward a historical grammar of elevation in Kartvelian. *Voprosy Jazykoznanija*, 2024, 3: 31–59.

**DOI:** 10.31857/0373-658X.2024.3.31-59

## Introduction

This paper descriptively explores the semantic domain of elevation in Kartvelian from both synchronic and diachronic perspectives. The expressions involved are spatial adverbs, nominal postpositional constructions, adjectives, verbal valency derivatives, and preverbed verbs. We also present the findings of our pilot fieldwork research which feature a substantial amount of our first-hand data and place emphasis on particular patterns that characterize the trajectory of motion and the type of position. Furthermore, the paper provides a number of observations concerning diverse conventionalization paths travelled by the expressions in issue over the traceable history of Kartvelian.

## 1. Kartvelian languages

The Kartvelian languages, also called South Caucasian, represent an indigenous language family spoken in Transcaucasia, primarily in Georgia, Northeastern Turkey, and Northwestern Iran [Deeters 1930; Harris (ed.) 1991; Boeder 2005; Testeleets 2021], namely Georgian (g), Megrelian (m), Laz (l), the latter two often referred to as one Zan language (z), and Svan (s).

Kartvelian languages are well-known in typological literature for their capacity to express spatial semantics in great detail, both in the verbal and non-verbal domains. This paper focuses on the elevational component of the system, its arrangement, and further conventionalization traits.

## 2. Elevation

By elevational semantics, we understand here any kind of spatial semantics that is associated with upward motion along the vertical axis, upstairs position, and placing/being on a surface that is above the ground level.

With Levinson [2003] rather entirely ignoring this phenomenon in his study on space in language, the domain of elevation *per se*, apart from a rather psychologically-oriented paper [Carlson-Radvansky, Irwin 1993], has hardly been addressed elsewhere as a central topic of a dedicated study either. Among the lexical sources for the expressions meaning ‘above’, ‘on top’, and ‘overhead’, Svorou [1994: 72, 80, 252] mentions such terms as ‘head’ (Abkhaz, Abkhaz-Adyghean/Northwest Caucasian, and Tigre, Ethiopian Semitic), ‘upper back, top surface’ (Shuswap, Interior Salish), ‘heaven’ (Guaymi, Chibchan), and ‘sky’ (Ewe, Gbe). None of these, apart from ‘head’ in Megrelian and Laz, is paralleled in Kartvelian.

In Kartvelian studies, much attention has been paid to the expression of spatial semantics. The sources being either dedicated ones (e.g., [Gabunia 1988; Kobalava 2002; Kutscher 2003; 2011] or those dealing with space in language as a domain adjacent to the major focus of grammar under investigation (e.g., [Asatiani 1952/2015; Mart'irosovi 1953; 1956; Vašap'ize 1967; Rostovtsev-Popiel 2012b; Reseck 2014], no special work, either synchronic or diachronic, has been devoted to the grammar of elevation in Kartvelian. This paper therefore aims to fill in this gap and establish a frame of reference for further research.

### 3. Major grams expressing elevational semantics

The major grams associated with the expression of elevational semantics in Kartvelian are:<sup>1</sup>

(i) adverbs and verbal prefixes:

- CK \**z<sub>1</sub>e-* ‘up(ward), atop’  
 (paradigmatic counterpart (henceforth PC)<sup>2</sup>) \**kwe-* ‘down(ward), low(er)’  
 G *ze-* (PC OG *kue-*, G *k(v)e-*)  
 Z *ži-* (PCs *ko-*, *tu-* (resp. G *tav-* ‘head’))  
 S *ži-* (PC *ču-*, *kw-*)

(ii) verbal prefixes:

- GZ \**aγ-* ‘up(ward)’ (PC \**da-* ‘down(ward) on surface’)  
 OG *aγ-* (PC *da-*)  
 G *a-* (PC *da-*)  
 Z (*g*)*e-* (< \**o-*), ?*o-* (PC *do-*)

(iii) verbal prefixes:

- Z *ge-* ‘up(ward), upright’, *e-* ‘idem’  
 M *ge-* ‘up(ward), upright’, *e-* ‘idem’  
 L *ge-* ‘up(ward), upright’, *e-* ‘idem’

(iv) valency markers:

- CK \**a-* ‘on(to)’  
 G *a-*  
 Z *o-*  
 S *a-*

Although both types (i) and (ii) can be involved in the expression of elevational semantics at the same time, there is a crucial difference between them. The former are relative, whereas the latter express absolute values of orientation in space.

### 4. Domains of the grams’ use

The grams in issue have conventionalized as (parts of) diverse parts of speech including (a) adverbs, (b) postpositions, (c) adjectives, and (d) verbs. Type (c) represents the most lexicalized stage of the grams’ conventionalization, whereby type (d) is the least grammaticalized one, with the highest degree of PCs’ range and variation.

<sup>1</sup> For etymological references, see [Klimov 1998; Fähnrich, Sarǰvelaḡe 2000; Fähnrich 2007].

<sup>2</sup> Considering that there is no entire symmetry between upward and downward motion, this term is rather technical and taken here for granted.

## 4.1. Adverbs

Adverbs featuring conventionalized grams with elevational semantics include, but are not limited to the following list:

- G *ze-d(a)* ‘on top’, *ze-mo-t* ‘up(ward)’, *ze-v-it* ‘idem’, *ze(-mo)-re* ‘a bit upward’, *ze-ze* ‘upright’  
 S *ži(:)-b* ‘up(ward)’, *ži-ba-w* ‘idem’, *žü-b* ‘idem’, *le-ža-w* ‘idem’, *ži-ka:-w* ‘idem’, *ži-xi* ‘higher than *ži(:)b*’  
 Z *ži-n* ‘up’, *ži-mo(-le)* ‘a bit upward’  
 M *ži-do* ‘up(ward)’  
 L *ži-ndo* ‘up(ward)’, *ži-le(-n)* ‘idem’, *ži-le-ndo-n* ‘idem’, *(le-)ž-a:n* ‘idem’, *ži-b(-aw)* ‘idem’

Their PCs are:

- G *kve-mo-t* ‘down(ward)’, *kve-v-it* ‘idem’, *kve(-mo)-re* ‘a bit downward’  
 S *čwä:-b* ‘down(ward)’, *čwi-b* ‘idem’, *(le-)kw-a:n* ‘idem’  
 M *tu-do(-le)* ‘down(ward)’  
 L *tu-de(-le-ndo-n)* ‘down(ward)’, *c’a-le* ‘idem’

The absolute reference item is:

- G *m-aγ-l-a* ‘atop, upstairs; above the ground level’<sup>3</sup>  
 (PC G *dab-l-a* ‘downstairs; on the ground level’)

Thus, the Georgian sentence (1a) has two basic readings: ‘Gio is on a **higher** ground’ and ‘Gio is **upstairs**; Gio is **on top** (of the mountain)’, whereby the construction in (1b) can only have the latter meanings. The same applies to their PCs *kvemot* vs. *dabla*, respectively.

- (1) G a. *Gio zemot aris.*<sup>4</sup>  
 Gio:NOM atop X\_is  
 ‘Gio is **on a higher ground / upstairs.**’  
 b. *Gio mayla aris.*  
 Gio:NOM atop X\_is  
 ‘Gio is **on top / upstairs.**’

Further examples contribute to the understanding of the issue:

- (2) G ... *u-txra gatamamebul-ma režisor-ma, mk’lav-ši xel-i*  
 VAL:O-X\_told\_Y\_Z overconfident-ERG director-ERG arm-ILL hand-NOM  
*ga-mo-s-do da zevit c’a-i-q’vana.*  
 PRV-PRV:PROX-IO3-X\_put\_Y and upward PRV-VAL:S-X\_took\_Y  
 ‘The overconfident director told her (...), drew her hand through his arm and took her away upstairs.’ [Soso P’aič’aže. “The Last Take”, 1973]<sup>5</sup>

<sup>3</sup> The component *aγ-* was already mentioned above among preverbs, but here it functions as a root. The same applies to the expression *dab-* right below.

<sup>4</sup> This paper applies a simplified glossing convention. Respective techniques of more sophisticated glossing for Kartvelian can be found in, e.g., [Harris (ed.) 1991; Tuite 1998; Rostovtsev-Popiel 2012b; 2020].

<sup>5</sup> The non-elicited Georgian examples were retrieved from the Ilia Uni Georgian Corpus ([http://corpora.iliauni.edu.ge/search\\_words](http://corpora.iliauni.edu.ge/search_words)).

An optional use of *mayla* instead of *zevit* in this context, beside the ‘upstairs’ reading, would have meant ‘He took her sky-high to God’, i.e. to the ultimate place at the top of the world.

- (3) G *ra* *cocxl-eb-i*, — *ga-i-oca* *ciala-m* *da* *c'arb-eb-i*  
 what live-PL-NOM PRV-VAL:S-X\_got\_amazed Ciala-ERG and brow-PL-NOM  
*mayla* *a-zida*.  
 atop FACT-X\_lifted\_Y  
 “‘What on Earth the quick?’ Ciala got amazed and raised her eyebrows.’  
 [Levan Malazonia. “Self-Flagellation”, 1972]

In the above example, a substitution of *mayla* by *zemat* / *zevit* would have read as ‘She [cut off somebody’s eyebrows and] lifted/took them upward’.

## 4.2. Postpositions

The postpositions in issue only feature the CK archetype’s descendants:

- G *-ze-d* ‘on(to)’, *-ze* ‘idem’ (PC *kve-š* ‘beneath, below’)  
 S *-ži* ‘on(to)’, *-ži-ka:-n* ‘idem’ (PC *-ču* ‘down(ward)’)

## 4.3. Adjectives

The elevational semantics is also expressed in the domain of dedicated spatial adjectives:

- G *ze-mo* ‘upper’, *ze-da* ‘idem’, *ze-na* ‘high’, *ze-mo-ur-* ‘one living in the upland’  
 M *ži-n(-o)* ‘upper’, *ži-mo-le-n-* ‘one living in the upland’, *ži-do-le-n-* ‘idem’  
 L *ži-ndo-le-n-* ‘upper’, *ži-le-ndo-n-* ‘one living in the upland’  
 S *ži-be(-š)* ‘upper’, *le-ža:-w-iš* ‘one living in the upland’

Their PCs include:

- G *kve-mo* ‘low(er)’, *kve-da* ‘idem’, *kve-mo-ur-* ‘one living in the downland’  
 M *tu-do* ‘low(er)’  
 L *tu-de* ‘low(er)’, *c’a-le* ‘idem’  
 S *ču-b-eš* ‘low(er)’, *ču-b-e* ‘one (INANM) from below’

The absolute reference item is:

- G *m-ay-al-* ‘high, tall’ (PCs: OG *m-da-b-al-* ‘downward, dishonorable’, G *da-b-al-* ‘low, short (in stature)’, *m-da-re* ‘low-quality’)

## 4.4. Verbs

The expressions of elevation occur as (quasi-)preverbs of distinct degree of grammaticalization throughout Kartvelian.<sup>6</sup> The Old Georgian data feature quasi-preverbs that used to wander around the clause and never became preverbs *proper*. The Svan data, conversely, demonstrate

<sup>6</sup> On preverbs in Kartvelian, see [Asatiani 1952/2015; Hewitt 2004: 284–315; Rostovtsev-Popiel 2012b; 2016; 2017a; 2020: 553–556; Reseck 2014].

items that entered a firm system of detachable preverbs, whereby Laz features perfectly grammaticalized preverbs.

- OG *ze-* ‘upright’, *ze-da-(da-)* ‘onto, down(ward) from above’, *ze-na-(da-)* ‘idem’  
*ze-mo-* ‘onto, upward hither’, *ze-da-mo-* ‘onto, down(ward) from above hither’, *ze-na-mo-* ‘idem’
- L *mo-ža-* ‘hither over’, *me-ža-* ‘thither over’, *e-ža-* ‘up(ward)’
- S *ži-* ‘onto, upward’, *ži-la-* ‘up(ward) hither (slowly, constrainedly)’,  
*ž-a(d)-* ‘onto, up(ward) thither, PFV’, *ž-es-* ‘idem, IPFV’, *ž-an-* ‘onto, up(ward) hither’

The PCs are:

- OG *kue-* ‘down(ward)’, *kue-da-* ‘idem’, *kue-na-* ‘idem’, *kue-mo-* ‘down(ward) hither’,  
*kue-da-mo-* ‘idem’, *kue-na-mo-* ‘idem’
- S *ču-* ‘down(ward)’, *ču-la-* ‘down(ward) (slowly, constrainedly)’, *čw-a(d)* ‘down(ward) thither, PFV’, *čw-es-* ‘idem, IPFV’, *čw-an-* ‘down(ward) hither’

#### 4.4.1. Verbs of motion

In Georgian and Svan, verbal prefixes that express spatial semantics typically attach to verbs of motion (including verbs of movement, the prototypical instance of motion, cf. *go* vs. *wave one's hand*). Preverbs in Zan can do this, too, and, as we shall see, in a much more sophisticated way.

- OG *aγ-* ‘up(ward)’, *aγ-mo-* ‘up(ward) hither’, *aγ-mi-* ‘up(ward) thither’
- G *a-* ‘up(ward) thither’, *a-mo-* ‘up(ward) hither’ (from the VII-IX<sup>th</sup> centuries A. D. on)
- Z *ge-* ‘up(ward), upright’, *e-* ‘idem’, (< \**o-*), ?*o-* ‘idem’

The PCs are represented by:

- OG *da-* ‘down(ward) on surface (thither)’, *da-mo-* ‘down(ward) on surface hither’
- G *da-* ‘down(ward) on surface’
- Z *do-* ‘down(ward)’

Preverbs in Kartvelian, while used in verbs of motion, are most often (albeit with certain reservations with respect to Zan) sensitive to the expression of spatial deixis (e.g., *hither* vs. *thither*), which circumstance is not affected by the compatibility with distinct elevational adverbs (cf. Section 4.1 above):

- (4) G a. {*a-/a-mo-*} *vida* *zemot*  
 {PRV-/PRV-PRV:PROX-} X<sub>went</sub> up(ward)  
 ‘X {went/came} up(ward)’
- b. {*a-/a-mo-*} *vida* *mayla*  
 {PRV-/PRV-PRV:PROX-} X<sub>went</sub> atop  
 ‘X {went/came} upstairs’

In certain instances, Georgian *a-* functions both as a spatial and an aspectual operator (cf. Section 6.3):

- (5) G a. *dgeba*  
           X\_stands\_up  
           ‘X stands up’  
       b. *a-dga*  
           PRV-X\_stood\_up  
           ‘X stood **up** (PFV)’

Compare with its semantic counterpart:

- (6) G a. *ždeba*  
           X\_sits\_down  
           ‘X sits down’  
       b. *da-žda*  
           PRV-X\_sat\_down  
           ‘X sat **down** (PFV)’

The cited verbal roots, viz. *stand* and *sit*, while producing further lexical items through the recruitment of grams that are not originally associated with elevation, such as *c’a-mo*- ‘hither away’ (cf. G *c’a-mo-vida* ‘X came **hither away**’), yield specific nuances of *standing up* and *sitting*:

- (7) G *c’a-mo-dga* (zeze)  
       PRV-PRV:PROX-X\_stood\_up upright  
       ‘X stood **up** (upright) (from a position either on one’s knees or on one’s all fours)’  
 (8) G *c’a-mo-žda* (zeze)  
       PRV-PRV:PROX-X\_sat\_up upright  
       ‘X sat **up** (from a lying position)’

The examples below illustrate the actual use of these preverbed verbs:

- (9) G *muxl-eb-ma u-mt’q’una, sak’vare-ši ča-e-k’eca*  
       knee-PL-ERG VAL:O-X\_betrayed\_Y drainpipe-ILL PRV-VAL:REL-X\_fell  
       *da žlivs c’a-mo-dga.*  
       and hardly PRV-PRV:PROX-X\_stood  
       ‘Her knees betrayed her, she fell down into the drainpipe (on her fours) and (later) managed with endeavour to stand up.’ [Egnat’e Ninošvili. “Our Treasury”, 1961]  
 (10) G *bič’-i... i-c’va, mere ertbašad gada-i-xada saban-i,*  
       boy-NOM VAL:S-Y\_lay then suddenly PRV-VAL:S-X\_took\_off\_Y blanket-NOM  
       *sac’ol-ze c’a-mo-žda, grzel,*  
       bed-SUPERL PRV-PRV:PROX-X\_sat long  
       *daluržebul-daxok’il pex-eb-ze c’a-mo-i-marta.*  
       blued-scratched foot-PL-SUPERL PRV-PRV:PROX-X\_stood\_straight  
       ‘The boy <...> lay, then he suddenly took off his blanket, sat **upright** on the bed, (and) stood up on his blued-scratched legs.’ [Irine Bakanize. “Bright, Bright You”, 1993]

Zan proves to distinguish diverse ways of vertical movement, see Section 5.2, such as step-by-step, e.g., up the slope or stairs, and upright, e.g., up the ladder:

- (11) M *ek’o-rtu gola-ša*  
       PRV-X\_went mountain-ALL  
       ‘X went **up** the mountain’  
       L *ek’o-xt’u day-iša*  
       PRV-X\_went mountain-ALL  
       ‘idem’

- (12) M *eša-rtu* *cxvrin-ša*  
 PRV-X<sub>went</sub> attic-ALL  
 ‘X went **up** to the attic’
- L *(g)eša-xt’u* *ocxone-ša*  
 PRV-X<sub>went</sub> attic-ALL  
 ‘idem’

#### 4.4.2. Verbs of position

Before we proceed to the verbs dealt with in our questionnaire (Section 5), we would like to briefly touch upon a typologically unusual phenomenon that is characteristic of Zan (on the system of the expression of spatial relations via preverbs in the Artašen variety of Laz, see [Kutscher 2003; 2011]). It involves expression of spatial semantics, including that related to elevation, i.e. upright posture or being upstairs, in verbs of position.

- (13) M a. *re(n)*  
 X<sub>is</sub>  
 ‘X is’
- b. *ge-re(n)*  
 PRV-X<sub>is</sub>  
 ‘X stands (**upright**)’
- (14) M a. *žanu(n)*  
 X<sub>lies</sub>  
 ‘X lies’
- b. *cxvrin-s* *ama-žanu(n)*  
 attic-DAT PRV-X<sub>lies</sub>  
 ‘X lies **upstairs** in the attic’
- (15) L a. *žans*  
 X<sub>lies</sub>  
 ‘X lies’
- b. *otva-s* *gela-žans*  
 roof-DAT PRV-X<sub>lies</sub>  
 ‘X lies **atop** on the roof’

In Megrelian (but not in Laz), verbs of position that attach complex spatial prefixes (see, e.g., [Reseck 2014; Rostovtsev-Popiel 2020: 553–556]) can also be sensitive to spatial deixis (e.g., *here* vs. *there*) and reflect this in the first syllable of the complex prefix. A front vowel, typically *i*, marks distal deixis, whereas a back vowel, typically *u*, marks proximal deixis:

- (16) M a. *gima-re(n)*  
 PRV-X<sub>is</sub>  
 ‘X is/stands upstairs **there**’
- b. *guma-re(n)*  
 PRV-X<sub>is</sub>  
 ‘X is/stands upstairs **here**’

Note that such preverbs occasionally attached to verbs of position in Old Georgian as well.



- (17) OG *ze-zis* *igi* *k'icu-s=a* *vir-s=a*.  
 QPRV-X\_sits DEM.DIST:NOM colt-DAT=DEF.ART donkey-DAT=DEF.ART  
 ‘He sits **on** a donkey’s colt.’ (John 12.15)

However, with the formation of the present-day system of preverbs that marked the end of the Old Georgian period around the XI<sup>th</sup> century A. D. (cf. [Rostovtsev-Popiel 2012a: 305–307], and references therein), such instances disappeared from extant texts.

#### 4.4.3. Double exponence

In explicit constructions featuring both the verb of motion and the goal, Georgian and Svan usually tend to encode both of them with the relevant marking, thus providing evidence for double exponence of dedicated spatial grams:

- (18) G *mta-ze* *a-vida*  
 mountain-SUPERL PRV-X\_went  
 ‘X went **up on** the mountain’
- (19) S *lic-te-ču* *ču-a-čäd*  
 water-ALL-INFRAAL PRV-PRV:DIST-X\_went  
 ‘X went **down into** the water’

In (18), there is a preverb *a-* on the verb that underscores upward movement, while the postposition *-ze* on the noun marks the goal as the *top of the mountain*. Likewise, (19) demonstrates the same strategy of double exponence: the preverb *ču-* contributes to the expression of downward motion, and the same looking postposition highlights coming in contact with the goal.

At the same time, certain conventionalized constructions do not require double exponence, thus expressing elevational semantics only by means of the lexical adverb:

- (20) G *mayla* *c'a-vida*  
 atop PRV-X\_went  
 ‘X went **away upstairs**’<sup>7</sup>
- (21) S *leža:n* *a-čäd*  
 upward PRV-X\_went  
 ‘X went **upward/uphill** (lit. went **away upward**)’

#### 4.5. Supressive / superlative

Applicatives in Kartvelian<sup>8</sup> feature several values, one of which is the so-called locative, or superessive/superlative applicative.<sup>9</sup> To put it briefly, the locative applicative obligatorily marks the venue, either position of the state or goal of the action, which is usually represented as an indirect object of the clause, cross-referenced on the verb and marked by the dative case in the NP.

<sup>7</sup> Note that the construction *mayla a-vida* ‘X went **upstairs**’ is also available. However, it has a different implication from that cited in (18). The one with the preverb *c'a-* ‘away’ reads as ‘X went away upstairs (, so don’t bother X)’, while the one with the preverb *a-* entails such additional readings as ‘X will do something important there’ or ‘X will come down soon’.

<sup>8</sup> On the notion of applicative (also known as *version*) in Kartvelian, see [Boeder 1968; Mač’avariani 1980; Harris 1981: 87ff.; Hewitt 2004: 118ff.].

<sup>9</sup> For more details, cf. [Tuite 2024].

The respective inventory found in Kartvelian features:

CK \**a-*

G *a-*

M *o-*

L *o-*

S *a-*

This marker is a valency operator that controls an obligatory dative argument which refers to an object having an upper side or surface on which the referent of either the subject of a monovalent verb or the direct object of a bivalent verb either resides (superessive) or lands/ is placed (superlative), respectively. This operator functions with verbs of both motion and position throughout the whole family. (In the elicited examples below, the dative argument is the *cow*, resp. G *zrox-a*, s *pwir-*, whereas its *back*, resp. G *zurg-*, s *č'eč'är-*, is an adjunct and coded postpositionally.)

- (22) G a. *buz-i zrox-a-s zurg-ze a-ždeba*.<sup>10</sup>  
 fly-NOM cow-DAT back-SUPERL VAL:SUP-X\_sits\_down  
 'The fly is sitting down on the cow's back.'
- b. *buz-i zrox-a-s zurg-ze da-a-žda*.  
 fly-NOM cow-DAT back-SUPERL PRV-VAL:SUP-X\_sat\_down  
 'The fly sat down on the cow's back.'
- (23) G a. *buz-i zrox-a-s zurg-ze a-zis*.  
 fly-NOM cow-DAT back-SUPERESS VAL:SUP-X\_sits  
 'The fly is sitting on the cow's back.'
- b. *buz-i zrox-a-s zurg-ze e-žda*.  
 fly-NOM cow-DAT back-SUPERESS VAL:REL<sup>11</sup>-X\_sat  
 'The fly was sitting on the cow's back.'
- (24) S a. *mer pwir-s č'eč'är-ži x-e-gni*.  
 fly-NOM cow-DAT back-SUPERL IO3-VAL:REL-X\_stands<sup>12</sup>\_(DYN)  
 'The fly is sitting down on the cow's back.'
- b. *mer pwir-s č'eč'är-ži es-a-gan*.  
 fly-NOM cow-DAT back-SUPERL PRV:DIST-VAL:SUP-X\_stood\_(DYN)  
 'The fly sat down on the cow's back.'
- (25) S a. *mer pwir-s č'eč'är-ži x-a-g*.  
 fly-NOM cow-DAT back-SUPERESS PRV-VAL:SUP-X\_stand\_(STAT)  
 'The fly is sitting on the cow's back.'
- b. *mer pwir-s č'eč'är-ži x-a-gan*.  
 fly-NOM cow-DAT back-SUPERESS PRV-VAL:SUP-X\_stood\_(STAT)  
 'The fly was sitting on the cow's back.'

<sup>10</sup> Not to mix up with the preverb *a-* (cf. Section 4.4.1), cf. G *a-bams* 'X hangs Y on Z' vs. *a-a-bams* 'X will hang Y on Z'.

<sup>11</sup> The VAL marker *e-* is a distinct prefix of the same slot, but in certain instances, such as this one featuring the VAL-prefixed past vs. VAL-prefixed present, it substitutes *a-*.

<sup>12</sup> For particular reasons of lexical compatibility, a *fly* in Svan *stands* on a surface, not *sits*.

The similar pattern is found in Hopa Laz, whereby the *cow*, HL *puži*, receives dative marking (-s), albeit the adjunct *back*, HL *k'ap'ula*, is coded by the genitive case (-š):

- (26) HL a. *mč'až-i puž-i-s k'ap'ula-š žin n-o-xedun.*  
 fly-NOM COW-B-DAT back-GEN on\_top IO3-VAL:SUP-X\_sits\_down  
 'The fly is sitting down on the cow's back.'
- b. *mč'až-i puž-i-s k'ap'ula-š žin n-o-xedu.*  
 fly-NOM COW-B-DAT back-GEN on\_top IO3-VAL:SUP-X\_sat\_down  
 'The fly sat down on the cow's back.'
- (27) HL a. *mč'až-i puž-i-s k'ap'ula-š žin n-o-xen.*  
 fly-NOM COW-B-DAT back-GEN on\_top IO3-VAL:SUP-X\_sits  
 'The fly is sitting on the cow's back.'
- b. *mč'až-i puž-i-s k'ap'ula-š žin n-o-xet'u.*  
 fly-NOM COW-B-DAT back-GEN on\_top IO3-VAL:SUP-X\_sat  
 'The fly was sitting on the cow's back.'

In Sarpi Laz and in Megrelian, both the *cow*, resp. SL *puži*, M *čxou*, and its *back*, resp. SL *k'ap'ula*, M *oč'iš-*, are coded by the dative case (-s), whereby it is the indirect object dative in the former instance and the locative dative<sup>13</sup> in the latter:

- (28) SL a. *mč'až-i puž-i-s k'ap'ula-s n-o-xedun.*  
 fly-NOM COW-B-DAT back-DAT IO3-VAL:SUP-X\_sits\_down  
 'The fly is sitting down on the cow's back.'
- b. *mč'až-i puž-i-s k'ap'ula-s n-o-xedu.*  
 fly-NOM COW-B-DAT back-DAT IO3-VAL:SUP-X\_sat\_down  
 'The fly sat down on the cow's back.'
- (29) SL a. *mč'až-i puž-i-s k'ap'ula-s n-o-xen.*  
 fly-NOM COW-B-DAT back-DAT IO3-VAL:SUP-X\_sits  
 'The fly is sitting on the cow's back.'
- b. *mč'až-i puž-i-s k'ap'ula-s n-o-xet'u.*  
 fly-NOM COW-B-DAT back-DAT IO3-VAL:SUP-X\_sat  
 'The fly was sitting on the cow's back.'
- (30) M a. *č'and-i čxou-s oč'iš-i-s gi-tmi-o-doxodu(n).*  
 fly-NOM COW-DAT back-B-DAT PRV-PROGR-VAL:SUP-X\_sits\_down  
 'The fly is sitting down on the cow's back.'
- b. *č'and-i-k čxou-s oč'iš-i-s ki-gi-o-doxod(u).*  
 fly-B-ERG COW-DAT back-B-DAT AFF-PRV-VAL:SUP-X\_sat\_down  
 'The fly sat down on the cow's back.'
- (31) M a. *č'and-i čxou-s oč'iš-i-s gi-a-xe(n).*  
 fly-NOM COW-DAT back-B-DAT PRV-VAL:REL-X\_sits  
 'The fly is sitting on the cow's back.'
- b. *č'and-i čxou-s oč'iš-i-s gi-a-xed(u).*  
 fly-NOM COW-DAT back-B-DAT PRV-VAL:REL-X\_sat  
 'The fly was sitting on the cow's back.'

Finally, in Artašen Laz, there is no case-marking on the goal (due to the loss of core case markers such as dative -s, cf., e.g., [Harris 1985: 385–389; Kutscher 2001: 149–151]) and the

<sup>13</sup> On the locative dative, see, e.g., [Rostovtsev-Popiel 2020: 542].

genitive marking on the possessee (*-iši*) persists. Nevertheless, the superessive prefix *o-* appears on the verb:

- (32) AL a. *k'amk'ul-i* *p'už-iši* *k'ap'ula* *n-o-xedun*.  
fly-NOM cow-GEN back IO3-VAL:SUP-X\_sits\_down  
'The fly is sitting down **on** the cow's back.'
- b. *k'amk'ul-i* *p'už-iši* *k'ap'ula* *ko-n-o-xedu*.  
fly-NOM cow-GEN back AFF-IO3-VAL:SUP-X\_sat\_down  
'The fly sat down **on** the cow's back.'
- (33) AL a. *k'amk'ul-i* *p'už-iši* *k'ap'ula* *n-o-xen*.  
fly-NOM cow-GEN back IO3-VAL:SUP-X\_sits  
'The fly is sitting **on** the cow's back.'
- b. *k'amk'ul-i* *p'už-iši* *k'ap'ula* *ko-n-o-xertt'u*.  
fly-NOM cow-GEN back IO3-VAL:SUP-X\_sat  
'The fly was sitting **on** the cow's back.'



5. Our study











In order to avoid the usage of exhaustive consistency- and context-deficient data often represented in grammatical descriptions, we compiled a questionnaire which dealt with diverse aspects of motion events related to elevation.



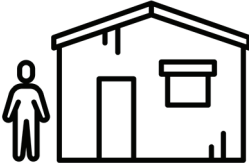


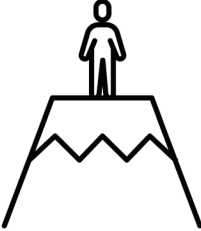
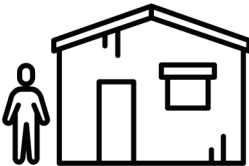

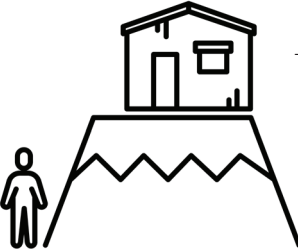
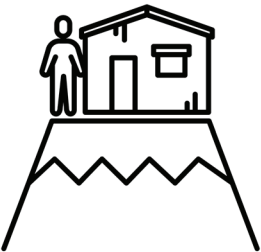
5.1. Questionnaire

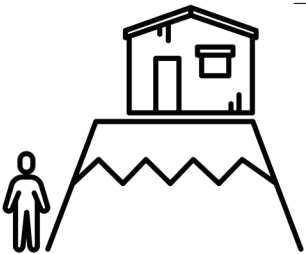
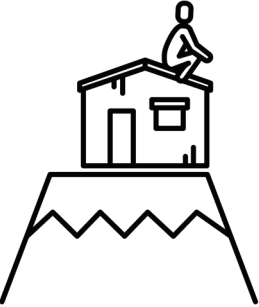
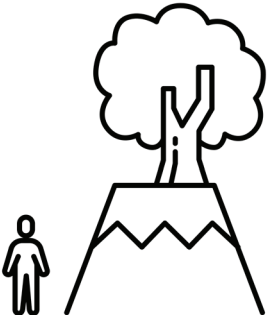
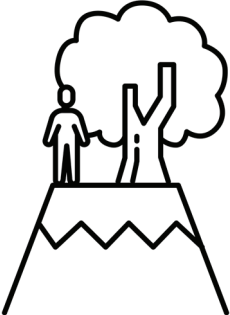
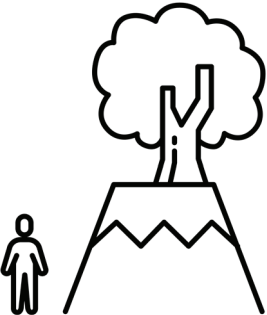
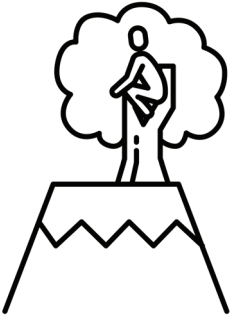


The questionnaire consisted of a number of picture stimuli. Table 1 specifies the exact events described. The pictures and respective actions were presented to the native speakers of Georgian, Megrelian, Laz, and Svan. The basic task for the native speakers was to describe the action that took place between the “initial state” and the “resulting state” represented in the table.

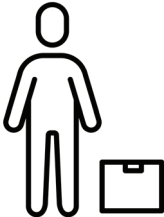
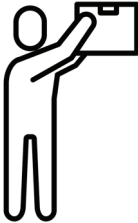
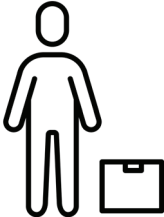
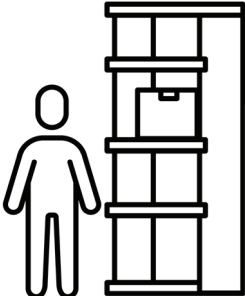
Table 1

Stimuli			
No.	Initial state	Resulting state	Legend
i		→ 	'X looked up at the sky.'

No.	Initial state	Resulting state	Legend
ii		→ 	'X moved their head up.'
iii		→ 	'X raised their hand.'
iv		→ 	'X lifted up their arm.'
v		→ 	'X extended their foot up.'
vi		→ 	'X extended their leg up.'

No.	Initial state	Resulting state	Legend
vii			'X climbed up the tree.'
viii			'X climbed the ladder to get onto the roof of the house.'
ix			'X hiked up to the top of the mountain.'
x			'X climbed up onto the roof of the house.'
xi			'X went up the mountain to get to the house.'

No.	Initial state	Resulting state	Legend
xii			'X went up the mountain in order to climb up onto the roof of house.'
xiii			'X went up the mountain to see the tree.'
xiv			'X climbed up into the tree on top of the mountain.'
xv			'X picked up the box.'

No.	Initial state	Resulting state	Legend
xvi		→ 	'X picked up the box and raised it above their head.'
xvii		→ 	'X picked up the box and put it onto the shelf.'

5.2. Remarkable findings

A number of contexts that we checked with our native speaker consultants proved to demonstrate crucial differences — in the domain of verbal prefix choice for the conceptualization of spatial events — between Georgian and Svan, on the one hand, and Megrelian and Laz, on the other. Furthermore, in certain instances, Megrelian stood out from the whole family in terms of the degree of detail it provides when it comes to the expression of spatial semantics.

5.2.1. Underscoring starting position

In contexts (iii) and (iv), Georgian, Svan, and Laz exhibited uniform encoding, that is, both events in each language were described by the same verb featuring the same prefix(es):

- (34) G    *a-s-c'ia*<sup>14</sup>  
          PRV-DO3-X\_raised\_Y
- (35) S    *ž-an-k'ače*    (< *ži-an-*)  
          PRV-PRV:PROX-X\_raised\_Y
- (36) L    *j-o-nč'u*        (< *e-*)    //    *ge-o-nč'u*  
          PRV-VAL:SUP-X\_raised\_Y

On the other hand, Megrelian turned out to encode contexts (iii) and (iv) diversely. For (iii), we found:

<sup>14</sup> Here and henceforth we cite the third person singular of the aorist indicative.



- (37) M *ge-u-č'opu* // *e-u-k'inu*  
 PRV-VAL:O-X\_{lifted // raised}\_Y

Context (iv) was rendered as follows:

- (38) M *at-u-č'opu* (< *a-to-*) // *eš-u-č'opu* (< *e-ša-*)  
 PRV-VAL:O-X\_lifted\_Y

### 5.2.2. Underscoring posture

Similarly, in both contexts (v) and (vi), Georgian, Svan, and Laz appeared to use the same expressions:

- (39) G *a-s-c'ia*  
 PRV-DO3-X\_raised\_Y
- (40) S *ž-an-k'ače* (< *ži-an-*)  
 PRV-PRV:PROX-X\_raised\_Y
- (41) L *gj-o-nč'u* (< *ge-*)  
 PRV-VAL:SUP-X\_raised\_Y

Megrelian, in its turn, demonstrated distinct treatments of (v) and (vi). For context (v), we received one response:



- (42) M *ge-u-k'inu*  
 PRV-VAL:O-X\_lifted\_Y

Context (vi) was rendered in five distinct, but relatively synonymous, ways:

- (43) M *git-u-k'inu* (< *gi-to-*)  
*et-u-k'inu* (< *e-to-*)  
*eš-u-k'inu* (< *e-ša-*)  
*giš-u-k'inu* (< *gi-ša-*)  
*geš-u-k'inu* (< *ge-ša-*)  
 PRV-VAL:O-X\_raised\_Y

Furthermore, once uncovering such abundance in this domain, we tested an additional context featuring lifting up one's leg from the lying position:

Table 2

Additional Stimulus			
No.	Initial state	Resulting state	Legend
vi+		→ 	'X lifted up their leg.'

Surprisingly, Megrelian appeared to choose yet another preverb for this type of motion:

- (44) M *e-u-k'inu*  
 PRV-VAL:O-X\_lifted\_Y

### 5.2.3. Underscoring trajectory type

In contexts (vii), (viii), and (ix), Georgian and Svan respondents chose the same verbs:

- (45) G *a-vida*  
PRV-X<sub>went</sub>
- (46) S *ž-a-čäd* (< *ži-ad-*)  
PRV-PRV:DIST-X<sub>went</sub>

Note that the Georgian expression is deictically unmarked, whereas its Svan counterpart is (cf. preverb *-ad-*). Both therefore denote distal deictic values. Their proximal deictic counterparts are *a-mo-vida* and *ž-an-qäd* (< *ži-an-*), respectively.

Conversely, both Laz and Megrelian proved to have a specific way of coding each of these three contexts. Thus, context (vii) was rendered as:

- (47) L *k-e-xt'u*<sup>15</sup>  
AFF-PRV-X<sub>went</sub>
- (48) M *eš-i:-lu* // *eš-e:-lu* (< *e-ša-*)  
PRV-VAL:S-X<sub>went</sub>

Context (viii) was distinctly worded by our consultants as:

- (49) L *je-xt'u* (< *ge-*)  
PRV-X<sub>went</sub>
- (50) M *geša-rtu*  
PRV-X<sub>went</sub>

For context (ix), the following renditions were provided:

- (51) L *eša-xt'u*  
PRV-X<sub>went</sub>
- (52) M a. *ko-ma-dirtu*  
AFF-PRV-X<sub>return</sub>
- b. *ek'-i:-lu* (< *e-k'o-*)  
PRV-VAL:S-X<sub>went</sub>
- c. *gek'o-rtu*  
PRV-X<sub>went</sub>

### 5.2.4. Underscoring reference point

Contexts (xv) and (xvi) appeared to be diversely coded in all of the languages of the family. In Georgian and Svan, both contexts required the same prefix, whereby the verbal roots turned out to be distinct.

- (53) G *a-i-γo*  
PRV-VAL:S-X<sub>took</sub>\_Y
- (54) G *a-s-c'ia*  
PRV-DO3-X<sub>raised</sub>\_Y

<sup>15</sup> On the nowadays non-spatial prefix *ko-* in Zan, see [de Jong 1989; Rostovtsev-Popiel 2012b; 2017b].

(55) s *ž-en-k'id* (< *ži-an-*)  
PRV-PRV:PROX-X\_picked\_Y

(56) s *ž-en-k'o:de* (< *ži-an-*)  
PRV-PRV:PROX-X\_raised\_Y

In Laz, on the contrary, the verbal root involved in the expression of both (xv) and (xvi) was the same, whereby the difference lay in the choice of the prefix:

(57) L *je-zdu* (< *ge-*)  
PRV-X\_raised\_Y

(58) L *ec'a-zdu*  
PRV-X\_raised\_Y

Finally, Megrelian demonstrated distinct roots and, to some extent, variation in prefixes:

(59) M *e-č'opu* // *ge-č'opu*  
PRV-X\_picked\_Y

(60) M *e-u-k'inu*  
PRV-VAL:O-X\_lifted\_Y

## 6. Semantic shifts and conventionalization of spatial grams

Over the history of the Kartvelian languages, which can be traced thanks to the uninterrupted literary tradition of Georgian that goes back to the V<sup>th</sup> century A. D., the grams expressing spatial values have undergone diverse semantic shifts, thus yielding a number of conventionalizations. The grams expressing values of elevational semantics are here no exception. These conventionalizations include specific instances of lexicalization—either in compounds or via affixation,—blending with specific (verbal) roots, development of derivational affixes, and grammaticalization resulting in the semantic shift of postpositional functions.

### 6.1. Lexicalization

The usual word in Georgian for ‘the day after tomorrow’ is *zeg*, an expression of unclear origin but suspiciously containing the component *ze*, dialectal speech preserves other items as well. The first one involves the element *zevit* ‘up(ward) (see Section 4.1): *xval-zevit* ‘the day **after** tomorrow’, lit. ‘**above** tomorrow.’ The second one, viz. dialectal *dyei-ze* (from *dye* ‘day’), has the same meaning.

Svan features the blend of the basic wh-expression *im* ‘what’ with the spatial marker *ži* (cf. Section 4.2), which yields the expression *im-ži?* ‘how?’ that most probably has to be analyzed as purpose-oriented ‘what **for?** / [based] **on** what?’ (cf. Section 6.4).

Another pattern of lexical semantic shift can be illustrated by the Svan expressions (*le-*)*ž-a:b* ‘upward’ and (*le-*)*kw-a:b* ‘downward’:

(61) s *leža:n* *a-čäd*  
upward PRV:DIST-X\_went  
‘X went (toward the) **East** (lit. went away upward)’

(62) s *lekwa:n* *a-čäd*  
downward PRV:DIST-X\_went  
‘X went (toward the) **West** (lit. went away downward)’

As the above translations suggest, these items have acquired new specific meanings related to the expression of cardinal directions.<sup>16</sup> (Note that the terms for the North and South in Svan are not diachronically connected with spatial grams.)

## 6.2. Blending with verbal roots

The locative applicative marker (cf. Section 4.5) can be traced back to the CK level. Already then, the marker in question demonstrated the potential to blend with certain verbal roots, thus yielding finite verbs, such as the copula *be*, and nouns often built by means of superessive prefixation (and sometimes either participial or locative suffixation). We shall begin with the latter, for the grammaticalization path of the former is somehow more complicated.

Throughout the family, we observe expressions featuring the superessive vowel in nouns, derived from (most often verbal) roots, which denote a specific locality the root's semantics is associated with [Fähnrich, Saržvelaze 2000: 73; Fähnrich 2007: 27]:<sup>17</sup>

- G *a-dg-il-i* 'place' (< *dg-/deg-* 'stand', *-il* PTC), *a-ban-q* 'bath' (< *ban-* 'bathe', *-o* LOC),  
*a-lag-i* 'position' (< *lag-* 'place, arrange')
- M *o-bed-i* 'tinder, touchwood'
- S *a-q 'b-a* 'jaw' (< *q 'ab-* 'beard')

The verbal root *r-* 'be', according to the etymologists of Kartvelian [Klimov 1998: 153; Fähnrich, Saržvelaze 2000: 374; Fähnrich 2007: 336], attached the superessive applicative marker already at the CK level, which resulted in the blend that is now viewed as a whole, separately unanalyzable root *\*ar-* [Klimov 1998: 3]:

OG	<i>a-r-s</i>	[VAL:SUP-be-s3SG]	'X is (Y)'
G	<i>a-r-i-s</i>	[VAL:SUP-be-EV-s3SG]	'idem'
M	<i>o-r-e(n)</i>	[VAL:SUP-be-SM]	'idem'
L	<i>o-r-en</i>	[VAL:SUP-be-SM]	'idem'
S	<i>a-r-i</i> // <i>ä-r-i</i>	[VAL:SUP-be-SM]	'idem (temporary state)'

Consequently, a similar process could have been undergone by another verb, namely *x-* 'sit' in Zan, which, similarly to the copula, features the pre-radical vowel in finite forms only:

M	<i>o-x-e(n)</i>	[VAL:SUP-sit-SM]	'X sits'
L	<i>o-x-en</i>	[VAL:SUP-sit-SM]	'idem'

The copula expressions have developed a specific form of an enclitic as well, albeit, as it happened, from distinct morphological sources. Thus, the enclitic in Georgian is the copy of the originally applicative marker from what was left of the verb, whereby its Megrelian counterpart is a replica of the series marker that attaches to the copula; in Laz, the enclitic is a merger of the superessive from the anlaut and the series marker consonant auslaut:

<sup>16</sup> Similarly, in Georgian, *ay-mo-* 'up(ward) hither' is found in *ay-mo-savlet-i* 'East', while *da-* 'down(ward) on surface' is found in *da-savlet-i* 'West', both expressions being old participial derivations of the verb with the meaning 'go'.

<sup>17</sup> On the involvement of another pre-radical vowel, viz. the objective applicative marker, in the formation of comparatives in Georgian, resp. Kartvelian, see [Gippert 2000].

G	<i>k'arg-i</i> good-NOM	<i>aris</i> X_is	=	<i>k'arg-i=a</i> good-NOM=COP
	'X is good'			
M	<i>žgiri</i> good-NOM	(o)-r-e(n) X_is	=	<i>žgir-i=e</i> good-NOM=COP
	'idem'			
L	<i>k'ai</i> good-NOM	(o)-r-en X_is	=	<i>k'ai=on</i> good-NOM=COP
	'idem'			

### 6.3. Development of derivational grams

In Georgian, both *ze-* and *ay-*, alongside their PCs, viz. *kve-* and *da-*, respectively (see Sections 4.1, 4.4), prove to have developed into derivational grams with abstract semantics originally associated with height.

G	<i>ze-nič'ieri</i> 'super talented'	<	<i>nič'ieri</i> 'talented'
	<i>ze-c'armat'ebuli</i> 'super successful'	<	<i>c'armat'ebuli</i> 'successful'

The corresponding PCs are:

G	<i>kve-cnobiereba</i> 'subconsciousness'	<	<i>cnobiereba</i> 'consciousness'
	<i>kve-dargi</i> 'subfield'	<	<i>dargi</i> 'field'

The productivity of this derivational model, however, is not to be overestimated, whereby the number of items attaching both prefixes remains scarce (cf., e.g., *ze-mdgomi* 'superior' vs. *kve-mdgomi* 'subordinate').

The above examples with *ze-* illustrated the marking of a high degree of a scalar feature, whereby the gram also proves to be involved in the derivation of items lexically marked as expressing a meaning beyond (i.e. above) the domain of the source:

G	<i>ze-p'art'iuli</i> 'non-partisan' (lit. "above-")	<	<i>p'art'iuli</i> 'partisan'
---	---	---	------------------------------

The second diachronically eminent element, viz. *ay-*, along with its PC *da-* (see Section 3), appears to be less productive, once not a gram representing a verbal prefix on verbs *proper*, and can be detected in such expressions as *ay-marti* 'upward slope, ascent' (vs. *da-γ-marti*<sup>18</sup> 'downward slope, descent') (< *mart-* 'direct').

### 6.4. Semantic shift of postpositional functions

In their seminal "World Lexicon of Grammaticalization", Heine and Kuteva [2002/2004: 305–308] point at three major grammaticalization paths that the expression *up* takes cross-linguistically: these are (i) additive (numeral linker) (Kono, Romanian); (ii) comparative (Indo-European, Basque, Swahili); and (iii) concern (Sino-Tibetan, Abkhaz-Adyghean, Chukchee, Tamil, etc.). The latter two are also attested throughout Kartvelian. Apart from those,

<sup>18</sup> The spirant *γ* in *da-γ-marti* is most likely the remains of *ay-* from *ay-marti* by analogy, due to the semantic bleaching of *ay-*, superseded by its recent counterpart *a-*.

a number of further functions have turned out to be identifiable in Kartvelian as well. Five of them were outlined by Žorbenaze et al. [1988: 174–175], and five additional ones will be discussed here.

These semantic developments undergone by the respective postpositions can roughly be classified as old semantic shifts and recent semantic shifts, the borderline being drawn somewhere in the Middle Georgian period (XII–XVII<sup>th</sup> centuries A. D.). The primed examples are respective Svan parallels elicited from native speakers of Svan, as long as they have a native command of Georgian, too, and can provide adequate renditions of the respective Georgian sources. These prove either long-contact phenomena, or parallel developments, or, possibly, ancient traits traceable back to CK.

#### 6.4.1. Old semantic shifts

The functions yielded by the relevant elevational postposition *-ze* in Georgian (alongside its etymological counterpart in Svan, viz. *-ži*) back in the past include (i) location and direction:

- (63) G *sk'am-ze* *zis.*  
 chair-SUPERESS X\_sits  
 'X is sitting **on** the chair.'
- S *sk'äm-ži* *sgur.*  
 chair-SUPERESS X\_sits  
 'idem'
- (64) G *sk'am-ze* *da-žda.*  
 chair-SUPERL PRV-X\_sat\_down  
 'X sat down **on** the chair.'
- S *sk'äm-ži* *es-sgu:rda.*  
 chair-SUPERL X\_sat\_down  
 'idem'

(ii) location in time:

- (65) G *dila-ze*<sup>19</sup> *c'a-vida.*  
 morning-SUPERESS PRV-X\_went  
 'X left **in** the morning.'
- (66) G *or* *saat-ze* *da-brunda.*  
 two hour-SUPERESS PRV-X\_returned  
 'X returned **at** two "hours" o'clock.'
- S *je:ru* *sa:t-ži* *an-t'ax.*  
 two hour-SUPERESS PRV:PROX-X\_returned  
 'idem'

<sup>19</sup> Parallel with: *dila-s* [morning-DAT] and *dil-it* [morning-INS], with historically dative and instrumental case-marking, respectively. Some of our consultants expressed their views with respect to *dil{a-s/-it/ a-ze}* *mogc'er* 'I'll text you (SG) **in** the morning' in the following way: the dative marking *-s* highlights the middle of the morning time, the instrumental marking *-it* draws attention to the very time of dawn, whereas the postpositional marking by means of *-ze* rather underscores the end of the morning time, thus taking us back to the lexicalization patterns mentioned in Section 6.1. Other native speakers claimed that they associated the expression *dila-ze* with the sphere of the future: *dila-ze* = *xval dil{-a-s/-it}* 'tomorrow morning.'

(iii) standard of comparison:

- (67) G *čem-ze* *axalgazrda=a.*  
 1SG-SUPERESS young=COP  
 ‘X is younger **than** me.’

(iv) purpose:

- (68) G *p'ur-ze* *ga-vida.*  
 bread-SUPERL PRV-X<sub>1</sub> went  
 ‘X went out **for** (resp. **to buy** some) bread.’

and (v) concern:

- (69) G *ra-ze* *pikrob?*  
 what-SUPERESS you(SG)<sub>1</sub> think  
 ‘What are you (SG) thinking **about**?’
- S *ime-ži* *xač'k'väri?*  
 what-SUPERESS you(SG)<sub>1</sub> think  
 ‘idem’
- (70) G *mot'an-is* *taoba-ze* *g-i-rek'avt.*  
 delivery-GEN subject-SUPERESS IO2-VAL:O-I<sub>1</sub> call you(SG)  
 ‘I am calling you (HNR) **in connection with** the delivery.’
- S *liqde-ži* *ž-i-rek'ävi.*  
 delivery-SUPERESS IO2-VAL:O-I<sub>1</sub> call you(SG)  
 ‘idem’

#### 6.4.2. Recent semantic shifts

Relatively recent developments of postpositional functions include: (vi) superseding the function of *-ši* ‘in’ (and its etymological counterpart in Svan, viz. *-isga*):

- (71) G *saburtalo-ze* *v-cxovrob.*  
 Saburtalo-SUPERESS s1-I<sub>1</sub> live  
 ‘I live **in** (lit. “**on**”) Saburtalo.’<sup>20</sup>
- S {*saburtalo-ži* // *saburtalo-s*} *xw-i-zge.*  
 {Saburtalo-SUPERESS Saburtalo-DAT} s1-VAL:S-live  
 ‘idem’

Here also belong such expressions attested in the Ažarian dialect of Georgian as *ag-ze* (< *ak* ‘here’ + SUPERESS *-ze*) and *ig-ze* (< *ik* ‘there’ + SUPERESS *-ze*) [Žorbenaze et al. 1988: 175] which represent clear instances of spatial reinforcement.

(vii) extension of spatio-temporal conceptualization (very likely, under Russian influence, cf. the use of the preposition *na* in *na lekcii* ‘**at** a lecture’, lit. “**on**”):

- (72) G *lekcia-ze* *v-i-q'avi.*  
 lecture-SUPERESS s1-VAL:S-I<sub>1</sub> was  
 ‘I was **at** a lecture.’

<sup>20</sup> Saburtalo is a district in the city of Tbilisi, the capital of Georgia; the expected expression would be *Saburtalo-ši* ‘in Saburtalo’.

- S *lekcia-ži* *xw-ard.*  
 lecture-SUPERESS s1-II\_was  
 ‘idem’

(viii) reason:

- (73) G *ra-ze* *q'viri?*  
 what-SUPERESS you(SG)\_shout  
 ‘Why (lit. “what **on**”) are you (SG) shouting?’

(ix) means (possibly a Russian influence as well, cf. the preposition *na* in *jazyk, na kotorom ja dumaju* ‘the language I think **in**’, lit. “**on**”):

- (74) G *ena,* *romel-ze(da)=c* *v-pirkrob*  
 language:NOM which-SUPERESS=REL s1-I\_think  
 ‘the language **in** (lit. “**on**”) which I think’
- S *nin,* *xedvāj-ži* *xv-ač'k'vāri*  
 language:NOM which-SUPERESS s1-I\_think  
 ‘idem’

(x) circumstantial recipient:

- (75) G *es* *q'vel-i* *k'argad* *iq'ideba* *ucxoel-eb-ze.*  
 DEM.PROX:NOM cheese-NOM well X\_is\_sold foreigner-PL-SUPERESS  
 ‘This cheese sells well **to** foreigners.’
- S *al* *ta:š* *xoč'a:md* *ihwdi* *ucxoel-a:r-ži.*  
 DEM.PROX cheese:NOM well X\_is\_sold foreigner-PL-SUPERESS  
 ‘idem’

(xi) adverbial reading:

- (76) G *gabrazebul-ze* *nu* *u-rek'av.*  
 angry-SUPERESS PRHB VAL:O-you(SG)\_call  
 ‘Don’t call X when {X is // you (SG) are} angry.’
- S *laxrina-ži* *nom* *x-o-rsk'əne.*  
 angry-SUPERESS PRHB IO3-VAL:O-you(SG)\_call  
 ‘idem’

## 6.5. Development of the perfectivizing function

Since the beginning of the Middle Georgian period in the XII<sup>th</sup> century A. D., nearly all preverbs in Georgian have been attested as perfectivizers (for the literature on the issue, see [Rostovtsev-Popiel 2012a: 305–307]), including *a-* and *a-mo-*:

- (77) G a. *bargdeba*  
 X\_packs\_Y  
 ‘X is preparing to depart’ (IPFV)
- b. *a-bargdeba*  
 PRV:PFV-X\_packs\_Y  
 ‘X **will** prepare to depart’ (PFV)



- (78) G a. *k'reps*  
           X\_picks\_Ys  
           'X picks Ys (from a surface)' (IPFV)
- b. *a-mo-k'reps*  
           PRV-PRV:PROX:PFV-X\_picks\_Ys  
           'X **will** pick Ys (from a surface)' (PFV)

However, it is the preverb *a-* that has become very productive in the marking of the perfective aspect in inchoatives and has become their dedicated perfectivizer:

- (79) G a. *t'irdeba*  
           X\_begins\_to\_cry  
           'X begins to cry' (IPFV)
- b. *a-t'irdeba*  
           PRV:PFV-X\_begins\_to\_cry  
           'X **will** begin to cry' (PFV)
- (80) G a. *myerdeba*  
           X\_begins\_to\_sing  
           'X begins to sing' (IPFV)
- b. *a-myerdeba*  
           PRV:PFV-X\_begins\_to\_sing  
           'X **will** begin to sing' (PFV)

The PC of *a-*, viz. *da-*, on the contrary, has become a default perfectivizer that usually takes part in the derivation of perfectives from recently borrowed and accommodated verbs:

- (81) G a. *u-laikebs*  
           VAL:O-X\_likes\_Y  
           'X likes Y's Z (e.g., on social media)' (IPFV)
- b. *da-u-laikebs*  
           PRV:PFV-VAL:O-X\_likes\_Y  
           'X **will** like Y's Z (e.g., on social media)' (PFV)
- (82) G a. *g-tagav*  
           DO2-tag  
           'I tag you (SG) (e.g., on social media)' (IPFV)
- b. *da-g-tagav*  
           PRV:PFV-DO2-tag  
           'I **will** tag you (SG) (e.g., on social media)' (PFV)

In Megrelian and Laz, *a-*'s possible diachronic cognate *o-* appears as a dedicated neutral perfectivizer in a small group of verbs, cf. (83) and (84a)–(84b) in contrast to, e.g., (84c):

- (83) M a. *č'k'omuns*  
           X\_eats\_Y  
           'X eats Y' (IPFV)
- b. *o-č'k'omuns*  
           PFV-X\_eats\_Y  
           'X **will** eat Y' (PFV)

- (84) L a. *č'opums*  
 X\_catches\_Y  
 'X catches Y' (IPFV)
- b. *o-č'opums*  
 PFV-X\_catches\_Y  
 'X **will** catch Y' (PFV)
- c. *ǝ-č'opums*  
 PRV:PFV-X\_catches\_Y  
 'X **will** pick Y **up**' (PFV)

While the distribution of aspectual functions of preverbs in Svan still awaits in-depth research, it has turned out that preverbs containing the component *ži-* 'up(ward)' operate as perfectivizers in inchoatives:

- (85) s a. *bepš igwa:ni.*  
 child:NOM X\_begins\_to\_cry  
 'The child begins to cry.' (IPFV)
- b. *bepš ž-en-gwa:na:n.*  
 child:NOM PRV-PRV:PROX:PFV-X\_began\_to\_cry  
 'The child began to cry.' (PFV)
- (86) s a. *ma:re liyra:l-s i-bne.*  
 man:NOM singing-DAT VAL:S-X\_begins\_Y  
 'The man begins to sing.' (IPFV)
- b. *ma:re ž-en-bria:la:n.*  
 man:NOM PRV-PRV:PROX:PFV-X\_began\_to\_sing  
 'The man began to sing.' (PFV)

## 7. Conclusions

In this survey, we have shown that the grams related to elevation in Kartvelian, in terms of their paradigmaticity, prove to be highly integrated into subsets of expressions that spread across such domains of use as adjectives, adverbs, postpositions, and verbs. With few exceptions, the majority of the expressions in issue have paradigmatic counterparts within the respective domains.

Compared to its sisters, Zan demonstrates a typologically significant feature in a sense that it expresses elevational semantics not only in verbs of motion, but also in verbs of position. The grammatical means of this mechanism are verbal prefixes. These prove to be sensitive to spatial deixis.

Surprisingly, Zan and, in particular, Megrelian which is primarily spoken in the lowlands appears to demonstrate higher linguistic complexity in terms of expressing elevational semantics than, e.g., Georgian and especially Svan which is spoken in the highlands. In synchronic terms, the semantic domains of this complexity include detailed treatment of such parameters as posture, trajectory type, and starting and reference points of movement.

Further conventionalization of elevational grams, being constrained both by the number of languages it occurs in and the spheres of use, calls for further research. Nonetheless, we observe high degrees of context generalization and potential for further development.

## In place of a post scriptum

It is well-known that Laz is the self-designation of the Laz people, *laz-* being the stem for human beings and *laz-ur-* for the rest of what belongs to Laz. At the same time, there is another term referring to Laz, viz. *č'an-*, and to their belongings, viz. *č'an-ur-*, attested already in Georgian medieval chronicles.

In Turkey and elsewhere outside of Georgia, the basic term being Laz, in the Georgian scholarly tradition the term Č'an<sup>21</sup> has gained prominence, whereby both designations are most often viewed as synonyms. A question arises now what this matter has to do with the expression of elevational semantics in Kartvelian.

The fact is that these terms do not turn out to be entirely synonymous. The term "Č'an" represents an instance of an elevation-marked lexical item.

Despite living primarily along the seashore, traditional Laz communities are rather highland-er-like, as their settlements are usually located on the mountain slopes that stretch uphill almost directly from the shore of the Black Sea. With that borne in mind, some settlements have a lower ground, whereas some other a higher one. All Laz considering themselves "Laz," the term "Č'an" is used among them to refer to those Laz who live on a higher ground than the speaker. That is, if there are three localities on the same slope, "Č'an" is going to be used to refer to a person living in the highest locality by the people living in two lower ones, while the dwellers of the lowest place (consequently, closest to the sea) would apply this term to those who live in two higher localities on the slope. For the rest of the usage, the term "Laz" is preferred.

## ABBREVIATIONS

1, 2, 3 — person markers	GZ — Georgian-Zan	PROGR — progressive
AFF — affirmative	HL — Hopa Laz	PROX — proximal
AL — Artašen Laz	HNR — honorific	PFV — perfective
ALL — allative	ILL — illative	PRV — preverb
ART — article	INFRAL — infralative	PTC — participle
B — base	INS — instrumental	REL — relative/relativizer
CK — Common Kartvelian	IO — indirect object	S — Svan; subject (marker)
COP — copula	IPFV — imperfective	SG — singular
DAT — dative	L — Laz	SL — Sarpi Laz
DEF — definite	LOC — locative	SM — series marker
DEM — demonstrative	M — Megrelian	SUP — superessive/superlative
DIST — distal	NOM — nominative	SUPERESS — superessive
DO — direct object	NP — noun phrase	SUPERL — superlative
EV — euphonic vowel	O — object (marker)	VAL — valency operator
ERG — ergative	OG — Old Georgian	X, Y, Z — participants of the
FACT — factitive	PC — paradigmatic counterpart	event
G — Georgian	PL — plural	Z — Zan
GEN — genitive	PRHB — prohibitive	

<sup>21</sup> An unfortunate coincidence with the term *č'an-* in Georgian and Megrelian which means 'half-castrated, impotent (e.g. stallion, bull, etc.)' must not be viewed as decisive in the choice of self-designation, for the majority of Laz speak neither Georgian nor Megrelian. At the same time, we find in Georgia a number of surnames derived from this term, e.g. *Č'anía*, *Č'anaia*, *Č'anišvili*, that refer to the Laz origin of their bearers.

## REFERENCES

- Asatiani 1952/2015 — Asatiani I. *C'indebulebi zanur (megrul-č'anur) enaši* [Prepositions in the Zan (Megrelian-Č'an) language]. Tbilisi: Tbilisi Univ. Press, 2015 (first publ. 1952).
- Boeder 1968 — Boeder W. Über die Versionen des georgischen Verbs. *Folia Linguistica*, 1968, 2: 82–252.
- Boeder 2005 — Boeder W. The South Caucasian languages. *Lingua*, 2005, 115: 5–89.
- Carlson-Radvansky, Irwin 1993 — Carlson-Radvansky L. A., Irwin D. E. Frames of reference in vision and language: Where is above? *Cognition*, 1993, 46: 223–244.
- Deeters 1930 — Deeters G. *Das khartwelische Verbum. Vergleichende Darstellung des Verbalbaus der süskaukasischen Sprachen*. Leipzig: Markert & Petters, 1930.
- Fähnrich 2007 — Fähnrich H. *Kartwelisches etymologisches Wörterbuch*. Leiden; Boston: Brill, 2007.
- Fähnrich, Saržvelaze 2000 — Fähnrich H., Saržvelaze Z. *Kartvelur enata et'imologiuri leksik'oni* [Etymological dictionary of the Kartvelian languages]. Tbilisi: Pedagogical Univ. Press, 2000.
- Gabunia 1988 — Gabunia K'. *Sivrcul da droul mimartebata asxavis giritadi taviseburebani kartvelur enebši* [Major characteristics of the expression of spatial and temporal relations in Kartvelian]. Ph.D. diss. Tbilisi: Academy of Sciences Press, 1988.
- Gippert 2000 — Gippert J. The formation of comparatives in the history of Georgian. Part I: The prehistory of synthetic comparatives. *Enatmecnierebis sak'itxebi*, 2000, 1: 37–45.
- Harris 1981 — Harris A. *Georgian syntax. A study in relational grammar*. Cambridge: Cambridge Univ. Press, 1981.
- Harris 1985 — Harris A. *Diachronic syntax: The Kartvelian case*. Orlando: Academic Press, 1985.
- Harris (ed.) 1991 — Harris A. (ed.). *The indigenous languages of the Caucasus*. Vol. 1: *The Kartvelian languages*. Delmar; New York: Caravan Books; Orlando: Academic Press, 1991.
- Heine, Kuteva 2002/2004 — Heine B., Kuteva T. *World lexicon of grammaticalization*. Cambridge: Cambridge Univ. Press, 2004 (first publ. in 2002).
- Hewitt 2004 — Hewitt G. *Introduction to the study of the languages of the Caucasus*. München: Lincom Europa, 2004.
- de Jong 1989 — de Jong T. A. The morphology of the pre-root elements in the Laz verb form, and the meaning of *ko-*. *Revue des études géorgiennes et caucasiennes*, 1989, 5: 79–105.
- Klimov 1998 — Klimov G. *Etymological dictionary of the Kartvelian languages*. Berlin; New York: Mouton de Gruyter, 1998.
- Kobalava 2002 — Kobalava I. *ge- zmnisc'inis mnišvnelobisatvis megrulši* [On the semantics of the pre-verb *ge-* in Megrelian]. *Enatmecnierebis sak'itxebi*, 2002, 4: 166–174.
- Kutscher 2001 — Kutscher S. *Nomen und nominales Syntagma im Lasichen: Eine deskriptive Analyse des Dialekts von Ardeşen*. München: Lincom Europa, 2001.
- Kutscher 2003 — Kutscher S. Raumkonzeptionen im lasischen Verb: Das System der deiktischen und topologischen Präverbien. *Kaukasische Sprachprobleme. Caucasic Oldenburgensia 1*. Boeder W. (ed.). Oldenburg: Bibliotheks- und Informationssystem der Universität Oldenburg, 2003, 223–245.
- Kutscher 2011 — Kutscher S. On the expression of spatial relations in Ardeşen-Laz. *Linguistic Discovery*, 2011, 9(2): 49–77.
- Levinson 2003 — Levinson S. *Space in language and cognition. Explorations in cognitive diversity*. Cambridge: Cambridge Univ. Press, 2003.
- Mač'avariani 1980 — Mač'avariani G. *Kcevis k'ategoriis sak'itxvisatvis* [On the question of the category of version]. *Iberiul-k'avk'asiuri enatmecniereba*, 1980, 22: 39–66.
- Mart'irosovi 1953 — Mart'irosovi A. *Zmnisc'inebis šedgeniloba da mati p'irveladi punkciebi zvel kartulši* [The organisation of preverbs and their primary functions in Old Georgian]. *Iberiul-k'avk'asiuri enatmecniereba*, 1953, 5: 77–96.
- Mart'irosovi 1956 — Mart'irosovi A. *C'indebulisa da tandebulis ist'oriuli urtiertobisatvis kartulši* [On the historical relation between prepositions and postpositions in Georgian]. *Iberiul-k'avk'asiuri enatmecniereba*, 1956, 8: 39–46.
- Reseck 2014 — Reseck T. *Präverbien im Megrelischen*. Bochum: Universitätsverlag Dr. N. Brockmeyer, 2014.
- Rostovtsev-Popiel 2012a — Rostovtsev-Popiel A. Stanovlenie kategorii aspekta v gruzinskom yazyke [The development of the category of aspect in Georgian]. *Acta Linguistica Petropolitana*, 2012, 8(2): 290–310.
- Rostovtsev-Popiel 2012b — Rostovtsev-Popiel A. *Grammaticalized affirmativity in Kartvelian*. Ph.D. diss. Ms. Frankfurt: Frankfurt Univ., 2012.

- Rostovtsev-Popiel 2016 — Rostovtsev-Popiel A. Kartvelian preverbs in cross-linguistic perspective. *A talk presented at the VII International Symposium on Kartvelian Studies: Georgia in the context of European civilization. Oct., 17–22, 2016, Tbilisi*.
- Rostovtsev-Popiel 2017a — Rostovtsev-Popiel A. Review of Tamar Reseck. *Präverbien im Megrelischen*. Bochum: Universitätsverlag Dr. N. Brockmeyer. *Georgica*, 2017, 37: 105–121.
- Rostovtsev-Popiel 2017b — Rostovtsev-Popiel A. Zan prefixation challenging the theory of grammaticalization. *Historical linguistics of the Caucasus: Book of abstracts*. Authier G., Gérardin H., Magomedov M., Maisak T. (eds.). Makhachkala: Russian Academy of Sciences Press, 2017, 178–182.
- Rostovtsev-Popiel 2020 — Rostovtsev-Popiel A. Megrelian. *The Oxford handbook of languages of the Caucasus*. Polinsky M. (ed.). Oxford: Oxford Univ. Press, 2020, 529–569.
- Testeleets 2021 — Testeleets Y. Kartvelian (South Caucasian) languages. *The Oxford handbook of languages of the Caucasus*. Polinsky M. (ed.). Oxford: Oxford Univ. Press, 2021, 491–528.
- Svorou 1994 — Svorou S. *The grammar of space*. Amsterdam; Philadelphia: John Benjamins, 1994.
- Tuite 1998 — Tuite K. *Kartvelian morphosyntax. Number agreement and morphosyntactic orientation in the South Caucasian languages*. München: Lincom Europa, 1998.
- Tuite 2024 — Tuite K. Applicative constructions in Kartvelian. *Applicative constructions in the world's languages*. Zúñiga F., Creissels D. (eds.). Berlin; Boston: Mouton de Gruyter, 2024, 913–942.
- Vašap'ize 1967 — Vašap'ize I. *Zmnisc'ini zvel kartul enaši* [The preverb in Old Georgian]. Tbilisi: Tbilisi Univ. Press, 1967.
- Žorbenaze et al. 1988 — Žorbenaze B., K'obaize M., Beriže M. *Kartuli enis morpemebis da modaluri element'ebis leksik'oni* [Dictionary of the morphemes and modal elements of the Georgian language]. Tbilisi: Mecniereba, 1988.

Получено / received 21.01.2024

Принято / accepted 30.01.2024