SPACE AND MOTION IN LANGUAGE REPRESENTATION

IZABELA KOBALAVA
RUSUDAN GERSAMIA

Izabela Kobalava
Doctor of Philological Science, Professor Emerita of Ilia State University
Research interests: theoretical linguistics, general and experimental phonetics/phonology, Kartvelian languages.

Featured publications:

Rusudan Gersamia
PhD, Associate Professor at Ilia State University
Research interests: formal grammar and semantics of the Kartvelian languages, historical-comparative linguistics, field linguistics and corpus linguistics, teaching and studying Georgian as a second language.

Featured publications:

Izabela Kobalava
Rusudan Gersamia

SPACE AND MOTION IN
LANGUAGE REPRESENTATION
(Analyses of Megrelian and Laz Linguistic Data)

Ilia State University
2020
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Ilia State University

Izabela Kobalava, Rusudan Gersamia

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Edited by Prof. Zaal Kikvidze

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<td>[+]</td>
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INTRODUCTION

Space, as it occurs in its linguistic representation, is a locus from our dwelling environment, that is, from the third (the only inhabited) planet of our solar system – the Earth, to distant galaxies. It is a part of the unitary universe with its constituents: land, earth (Megr. dixamangari), water (Megr. čqari ), air (Megr. hava), a conglomeration of inhabiting living organisms (humans, fauna, flora) and objects of inanimate nature (mountains, seas, lakes, rivers, etc.).

The physical existence of humans and living organisms, at large, is associated with space. This is natural as long as it is space that provides for the environment which is necessary for vital activities of organisms. This is motion (Megr. gilula) – a dynamic form of the existence of the matter. Its most common type – movement is represented as basic kinds of motion occurring in nature: on the land; these are to walk (Megr. gilula), to run (Megr. rula), to crawl (Megr. xoxua), to go up/down (Megr. eš-ul-a/gilu-l-a), to enter/leave (Megr. minula/ginula), etc.; in the water: to swim (Megr. nčurua), to dive (Megr. qvintua); in the air: to fly (Megr. purini).

For a greater part of humans and animals, motion on the land considerably depends on earth terrain, that is, shapes of its surface, having been structured either in the entrails of the earth or on its surface influenced by geomorphological changes and/or atmospheric phenomena.

Walking, on its own, is a complex process. While, on the one hand, it depends on the aforementioned external factors, on the other, it seems to have been conditioned by a mobile subject’s physical properties, being immediately reflected on the general character of his/her movement. I mean widespread instances of synaesthesia:
Meaningful words, making up multiple and semantically diverse groups in various languages, render in what situation an action, referred to by a verb, takes place or what features accompany it. Thus, they play a significant role both in the linguistic representation of spatial relations at large and in the processes of *lexicalization* and *conceptualization*. The role is salient in languages which, according to L. Talmy’s *typological classification*, pertain to the Satellite-framed group. As different from Verb-framed languages, in which directions of movement and places of localization are referred to by verb roots proper, in Satellite-framed languages they are referred to outside the verb root, by means of auxiliary devices – *satellites* (Talmy 1985: 85); cf. Fr. *monter* - ‘to go up, to ascend’ / *descendre* ‘to go down, to descend,’ Rus. *Приходит* ‘s/he comes,’ *Уходит* ‘s/he leaves,’ *заносит* ‘s/he brings sth in,’ cf. Geo. *čamo-svla* ‘to come down’ / *a-svla* ‘to go up’...

With respect to the lexicalization type, Megrelian and Laz (resp. Kartvelian languages) belong to the Satellite-framed languages (Boeder 2004: 88-94); however, in them, as in agglutinating languages, analyses of satellite components generates specific problems to be necessarily solved when establishing meanings of grammatical data.

In Megrelian and Laz, having the highest score of the index of agglutination among the Kartvelian languages (Melikishvili 2010), the number of various morphs (excluding obligatory and emphatic vowels) in a multi-componential stem frequently reaches 15 and possibly even more. A notional meaning is conveyed by a verb root. Notional roots encode the necessary features as *dynamicity / stativity* (motion / immobility), *a subject* of motion (animate / inanimate), *aspect* (perfective /
imperfective), and *tense* (present, past, future). However, roots are essentially neutral with respect to their characteristics with locative features of motion/immobility. This kind of meaning is encoded beyond a root: within a stem – by means of *preverbs*, and beyond a stem – by means of independent words: *spatial adverbs* and *case forms of adverbials*. These devices render spatial relations from various angles and provide a linguistic representation of the system of these relations.

The semantics of motion is primarily about identification of markers encoding characteristics of motion and occurring as *components of motion* without which a motion will not take place. Only after having established their linguistic, that is, lexico-grammatical, correlations, they can be considered as *semantic components of motion*. In order to establish semantic and grammatical categories and their interrelationships, in the present study, a linguistic item is conceived of as a structural-semantic unity. Therefore, we apply the *method of componential analysis*; in this process, we also make use of data of the *morphosyntactic* analyses of languages.

Analyses are based on data of dynamic verbs referring to *motion/movement* and of stative verbs referring to *immobility/location* – the most widespread and salient kind of motion. Besides, we make use of both motion/movement verbs proper (*motion per se*) and transfer verbs. In addition, we discuss stative forms of same roots, the verbs referring to state – *to be, to sit, to lie*.

Semantic features, associated with motion, have been encoded *lexico-grammatically* in the languages in point. In the present book, we have established the following:

1. *components, constituting motion* are encoded according to semantic components in roots of dynamic verbs
referring to motion/movement and of stative verbs referring to immobility/location;
2. semantic components of roots that make up its lexical meaning and are concepts;
3. constituents of stems, satellite morphemes, by adding of which onto roots of verbs of motion/movement (and any kind of action, at large), new, semantically distinct verb stems emerge. Hence, the study provides a detailed investigation of the structure and use of preverbs and adverbs in Megrelian and Laz;
4. besides, we provide detailed analyses of categories, marked within a stem, which are not represented within a root, however, introduce additional information into a general meaning of a stem.
PART ONE

Izabela KOBALAVA

SPACE AND MOTION IN LANGUAGE REPRESENTATION

(Analysis of Megrelian Linguistic Data)
Dynamicity and Stativity in Linguistic Representation of Space

Linguistic studies of the recent decades have particularly focused linguistic representations of spatial relations in our world. The latter is based on the interplay of the constituents of motion/immobility, that is, dynamicity and stativity, as an integral process. Within this framework, every language is significant with their specific and universal features both in terms of special linguistic and general typological studies. The present work is not meant as a typological investigation. At this stage, it only provides relevant linguistic data for such studies.

0. The opposition of dynamicity vs. stativity, that is, encoding of the processes of action, as proceeding in time, and immobility, as that of being in a single state (Shanidze 1973: 313), plays a significant role in formation of grammatical and semantic structures of Kartvelian verbs. It has been a subject of common discussions in Kartvelian linguistics, and a number of noteworthy opinions have been stated on the issue in point.1 Particularly interesting have been problems of the essence of stativity, history and formation of stative verbs, incorporation of various semantic groups in their class, and the like. The role of the said opposition is relevant for Megrelian where, instead of transitivity/intransitivity, the basic classification feature of verbs in forms of the Aorist group is dynamicity/stativity (Chikobava 1936: 105).

The present work is aimed at structural and semantic analyses of dynamic and stative verbs in terms of linguistic

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1 For the problem dynamicity/stativity of verbs in the Kartvelian linguistics literature, see Sukhishvili 1976; on Megrelian proper, see Lomtadze 1946; Chikobava 1948; Chikobava 1950; Rogava 1953; Chumburidze 1986; Sherozia 1996; Danelia 2006; Kartozia et al. 2010.
representation of spatial relations. We will also use data from morpho-syntactic analyses of dynamic and stative forms.

In accordance with the problem in point, the investigation will be based on the data of dynamic verbs referring to motion/movement, the most widespread and salient kind of motion, and of stative verbs, referring to immobility/location; specifically, I will use the dynamic verbs both referring to motion/movement proper (motion per se) and of transfer meaning (to take). Parallel stative verbs are presented as forms referring to standard location/state: -rina 'to be, to stand,' -xvena 'to sit,' -n’fi'ra 'to lie,' -svena 'to be laid,' dgvena/dguma 'to be laid' (for inanimate objects), etc.

0.1 Alongside with other semantic features, Megrelian (resp. Kartvelian) dynamic and stative verb roots convey kinds of motion/immobility: ul-a 'to go,' purin-ua 'to fly,' nčur-ua 'to swim,' rula-a 'to run,' xox-ua 'to crawl,' s'v-ena 'to be laid,' n’fi’ira 'to lie,' xv-ena 'to sit,' etc.; however, they are essentially neutral in terms of any locative reference. This kind of information is rendered by adverbial derivational formants, included in the verb stem – preverbs which are taken on by verb roots referring to motion/movement (any action, at large) to derive new, semantically distinct verb stems.

Preverbs occupy a stable position within a verb stem and are normally reiterated in all conjugational forms (for exceptions, see 2.2.). Besides, such verbs take on one and the same preverbs

---

2 The class includes numerous synaesthetic verbs (mi-cvacval-u 'a small creature is mincing along') as well as double active verbs (me-ḳusans 's/he walks groaning').

3 With respect to this feature, the Kartvelian languages pertain to the Satellite-framed group, according to L. Talmy’s classification.

4 Derivation of new stems is not the only function of preverbs; among them, the preverbs of direction: ge-, go, do-, me, mo- play a rather significant role in formation of aspectual forms (for details, see 2.2...).
predominantly with same (sometimes, modified) meanings; owing to this, it is necessary to discuss in detail the structure and usage of the preverbs as those of basic means for the encoding of *spatial relations* within a neutral root. The significance of a visual factor in the encoding of spatial relations has also been considered when establishing meanings of preverbs.

With respect to the problem in question, the following have been established:

- types of direction and orientation of motion encoded in the aforementioned verb forms;
- peculiarities of spatial locations of motion/immobility;
- semantic features of dynamic and stative forms.

1. Structural and Semantic Analyses

1. Megrelian has a complex system of preverbs with respect to both quantity and structure and semantic and functional diversity. The present paper discusses the following structural and functional-semantic peculiarities of verbs referring to motion/movement: structure, functions, orientation.

1.1. Structure. In terms of structure, the following types of preverbs have been distinguished: simple, monosyllabic – V, CV, and compound, bisyllabic – VCV, CVCV.\(^5\) *Simple structure preverbs* – *e-, ge-, go-, do-, me-, mo-* mostly encode a direction of motion/movement. They may be referred to as *preverbs of direction*.\(^6\)

\(^5\) Experts refer to the occurrence of so called *compound complex preverbs* being taken on by the verbs already combined with derivational preverbs, albeit not modifying their meanings (I. Kipshidze, I. Asatiani, K. Danelia, O. Kajaia, etc.). Here we, in fact, deal with perfective verb forms taking on derivational preverbs (Kobalava 2010: 238).

\(^6\) In the sequence of prefixal morphemes of the stem, preverbs occupy either an initial or second position (following affirmative or negative particles), and, from the root, they are the fourth from its left (Kipshidze 1914: 117; Gudava &
Compound preverbs are derived by addition of adverbial particles (to-, la-, no-, ša-, etc.) to simple ones. The particles do not occur as independent words (Gudava & Gamkrelidze 2000: 192-193); however, they occur (as various phonetic varieties) in adverbs of place (Gabunia 1993: 66-67). Within complex preverbs (e-la, mi-to, etc.), they provide additional information about a place of motion/immobility. Thus, the latter ones are units with double meanings; with respect to the second, specific component, they can be referred to as locative preverbs.

The aforementioned distinction between simple and compound preverbs has been normally used as properties of their functional groups. There are exceptions in both groups: compound preverbs denote only a direction, while simple ones a location in addition with a direction (for details, see below).

1.2. Functions. In combination with verb roots referring to motion/movement, preverbs, as derivational formants: 1. convey direction (and orientation) of motion; 2. characterize a place of motion/movement. Individual functions of preverbs are established with respect to meanings they render in the linguistic representation of spatial relations. It primarily means implications of the preverbs taken on by one and same verb root referring to motion/immobility, providing for maximum precision in establishing individual meanings. In terms of polysemy or homonymy peculiar to preverbs in Megrelian, meanings of each of them are discussed with respect to included semantic components being relevant for determining a direction.
of body movement in space and their possible dislocations.\textsuperscript{7} Besides, I have also considered meanings of preverbs in various verb stems which do not immediately imply motion/movement but refer to an action performed with a salient direction (cf. me-\textsuperscript{7}na ‘to look at,’ mino-\textsuperscript{7}na ‘to look in,’ dino-\textsuperscript{7}na ‘to look into,’ ela-\textsuperscript{7}na ‘to look from aside,’ etc.), or are represented in other parts of speech: adverbs, nouns (cf. e\textsuperscript{7}ko-ula ‘to go uphill,’ – adverb e\textsuperscript{7}k ‘upwards,’ noun e\textsuperscript{7}ox-oni ‘uphill’).

With respect to physical properties of motion and to specific features occurring in their linguistic representation, the work provides individual discussions of the preverbs denoting direction in linguistically encoded motions in horizontal and vertical areas.

1.2.1. Occurrence of three semantically independent phases\textsuperscript{8} is logically expected in the entire framework of the horizontal area of motion/movement as a dynamic process. On the one hand, it is a basic phase of motion – \textit{course},\textsuperscript{9} and, on the other, there are boundary-related phases – \textit{beginning} and \textit{end} of motion. The three phases are linguistically encoded in Megrelian. They are independent of each other in terms of the fact that none of them in no way assumes a necessity of existence of the rest; however, in the process of natural communication, according to

\textsuperscript{7} In actual speech, the initial vocalic component of VCV preverbs occurs as freely alternating vowels a/e/i (a\textsuperscript{-7}k o/e-\textsuperscript{-7}ko/i-\textsuperscript{-7}ko). In this work, each preverb is presented with a vocalic component evidenced in adverbs or other parts of speech of corresponding meanings.

\textsuperscript{8} As long as the three constituents of motion actually assume a process, however, unequal, I regard it adequate to refer to them by means of the term ‘phase’ (in the meaning adopted at the Moscow Semantics School).

\textsuperscript{9} In the present paper, \textit{course} is used in the same meaning as Eng. \textit{path} (Talmy 1985; Rus. \textit{Маршрут} (Plungyan 2002). The Georgian term \textit{gezi}, introduced by Akaki Shanidze, does not perfectly correspond to the meaning ascribed to the aforementioned term. The latter refers not only to only direction but also to an entire process of movement (cf. Veshapidze 1967).
narrative needs, there occurs an opportunity of their amalgamation into a single cycle: based on a logic of motion and long-standing practical experience, they are united around one and the same mobile subject within a sentence.  

**1.2.1.1.** In accordance with their participation in the aforementioned phases on a horizontal surface, preverbs make up two functional groups: 1. Directional preverbs, normally encoding the basic phase of motion – course; 2. Locative (marginal) preverbs, encoding either a beginning or end of motion (for a detailed semantic analysis, see 2.).

a) The first group incorporates preverbs, which, notwithstanding structural differences, present motion as a dynamic process, the specific direction of which (from an observer's position) is established as **hither – thither; forward – backward; from above – from beneath; through thither – through hither; beside; around.**

The basic directional preverbs are used to convey the aforementioned meanings: me- ‘thither,’ mo- ‘hither.’ They may also include the preverb mi-, being used more narrowly; normally, in a certain phonetic position, it occurs as a phonetic variant of the preverb me- (mida < *meda, cf. Laz menda = Geo. ɕa-); however, as a result of semantization, with some verb stems, it occurs as an independent preverb encoding a direction of motion both **thither** and **hither.**

10 Cf. possible instances: Ḹočk ‘uđeše gimilu do midartu ‘A man left the house and went away;’ šaras mišeš mešeepi do kemertes arti oxoriša ‘Passengers walked along the road and came to a house;’ bošik gimilu ozeše, idu, idu do kimiodirtu art ʧes ‘The boy left the yard, walked, walked, and came up to a forest.’

11 By this function, the preverb opposes gila- which encodes undirected motion without either an adverb or a locative case-marked member of sentence; cf. me-urs ‘s/he goes,’ mo-urs ‘s/he comes,’ but gil-urs (<gila+urs) ‘s/he goes hither.
thither/hither,’ *mi-kerkerl-u* ‘s/he/it rolls thither/hither,’ etc. Besides, the preverb *mi-* is used to encode bilateral motion/movement with *mi-R-al-* synaesthetic verbs: *mi-sva,sv-al-u* ‘A big, fat creature runs thither/hither,’ *mi-qar-q-al-u* ‘A tall and skinny creature walks thither/hither,’ *mi-cvacv-al-u* ‘A small creature walks thither/hither,’ etc. (Kobalava 1979). In this and similar instances, a direction is established by means of either semantically corresponding adverbs or of a context.

The same function is also attested for preverbs encoding horizontal and vertical directions with an implication of horizontal motion/movement. They are: simple preverbs – *ge-, go-, do-,* and compound preverbs – *gino1-, eta-, eko-, ela-, eço-, kiño-, miko-.*

b) *Locative* (marginal) preverbs ancode a motion inwards – outwards, that is, entering a certain space or exiting it. Hence, a motion is characterized not only by its direction but also by topological features of space in which a motion goes on, either begins or ends.

As long as the processes in question conditionally coincide with either a beginning or end of a path of motion, one may distinguish between the preverbs encoding a beginning: *gito-, gimo-, giša-, gino2-,* and the preverbs encoding an end: *mito-, mino- (/mila-, /mimo-), miša-.*

1.2.2. As different from motion in a vertical area, the nature of motion/movement excludes an opportunity of identification of various phases (even conditionally); however, in some instances, this in no way prevents from encoding of a beginning or end of a process beyond a verb form, this making it possible to establish a

and thither,’ *gila-kasans* ‘S/he goes hither and thither groaning,’ *gila-purinuns* ‘S/he/it flies hither and thither,’ etc.
beginning and end of motion, together with a path, in vertical motion as well.

a) A direction of motion in a vertical area is presented as processes going on both from below upwards and from above downwards. In both cases, movements along vertical proper and inclined trajectories have been distinguished. The following simple and compound preverbs are used for their encoding: upwards – e-, eša- (vert.), eḳo-, ela- (incl.), and downwards – gela-, dino- (vert.), diko-, dila- (incl.).

b) In vertical space, where the occurrence of the beginning and end phases of a path is not assumed, however, pertaining points may be encoded, the following ones are used: for a beginning (and course) of motion – gela-/ dino-, and for an end of a path – ge-, do-, diša-. The latter ones render not a duration process proper, which is not encoded linguistically, but essentially an end of a motion from above downwards on a surface.

1.3. Orientation. In a broad sense, orientation has been dealt with as a verbal category presenting a direction of motion, conveyed by a verb, in relation to an external landmark. Various types of orientation have been distinguished according to what kind of a landmark is preferred in a given case.

The study of spatial relations in Megrelian has revealed the following types of orientation:12

1.3.1. Deictic Orientation. The label is used to refer to a widespread type of simple orientation whose external landmark is the first or speaker person. In relation with the latter, its position occurs as the first person’s area (respectively, as well as that of the second person being immediately related to the first person in the

12 When dealing with orientation in Megrelian (despite some rare exceptions) (Gabunia 1993), normally, deictic meanings of the preverbs me- and mo- (sometimes of individual compound ones derived from them) have been addressed (Kipshidze 1914: 0118).
process of communication). The said orientation is essentially *egocentric* as far as the transfer of a speaker’s role to another person causes the transposition of a deictic center (Lyons 1978: 291-292). In Megrelian, a deictic orientation is encoded by means of the preverbs *me-, mo-*: The preverb *me-* encodes an exit from an area by a speaking person – *me-urs* ‘S/he goes away from here (from the first person).’ More generally, this a *distal* (away from the speaker) direction of motion; The preverb *mo-* encodes a direction of motion towards the first person’s area – *mo-urs* ‘S/he comes from here (not from there),’ that is, *proximal* (toward the speaker) (Shanidze 1973: 238-240); however, this does not happen always (see below). Thus, in terms of deixis, the problem of the third person does not arise, naturally enough (Benveniste 1974: 261 ff.).

The discussed type of orientation may be treated as a *spatial orientation proper* as far as it denotes a direction of motion only based on spatial relations, independently from a visual factor; however, there are instances in Megrelian where process of motion/immobility are opposed according to proximity/distance with the speaker. The latter is established by means of a visual factor. The following adverbs of place are used: *amar* – ‘over here’ – *emer* ‘over there.’ In both cases, a landmark is still the first person within whose field of vision a place of motion/dislocation is determined: *amar/emer mepurinuns* ‘S/he/it flies here/there,’ *amar/emer ēsmurs* ‘here/there s/he goes up,’ *dotmassxa Lans* ‘S/he jumps down,’ *gīmar gans* ‘S/he throws sth from above,’ *minmuw ģu* ‘S/he takes sth inside,’ *geʒu* ‘it is laid,’ *etoxe* ‘S/he/it sits under sth,’ *dīnogans* ‘S/he/it lies inside sth,’ and the like.

1.3.2. **Subject Orientation.** This type of orientation is rather rare across languages. In Megrelian, we may assume that it is encoded by means of the proximal direction preverb *mo-* which

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1 For details of subject orientation, see Plungyan 2002.
seems quite natural: as different from the preverb *me*-*, encoding distance from the first person, and not implying any specific landmark directed to the aim of motion (in a sentence, it is rendered by a substantive in the lative case), the preverb *mo*- unambiguously refers to the first person as a landmark of motion. This is an indication of an occurrence of a deictic component in the meaning of the preverb (Kobalava 2010: 247), which, in its turn, makes it possible to use it in cases when not only the first person’s space occurs as an external landmark but also predominantly a variable one which is in some way significant for a subject of motion: their country, village, home, a familiar, notable place or person, etc. (cf. *Muš ʿudeša meurs* ‘S/he goes home,’ *Muš ʿudeša* – ‘S/he comes home’).

1.3.3. Anaphoric (Canonical) Orientation. In Megrelian, this is the most widespread type of orientation. As different from a deictic one, being normally directed towards a speaker’s area, in case of an anaphoric orientation, processes of motion/movement are localized in relation to any landmark (for instance, in from of a house, behind a tree, on top of a mountain, etc.) (Klein 2009).

As different from a deictic one, an anaphoric orientation is encoded by preverbs; however, they are used selectively.

2. Morpho-syntactic Analysis

Preverbs, as elements of a linguistic system, occur not in an isolated way but rather in relation with other linguistic items. Specifically, they are associated with certain categories of the noun and the verb, with other parts of speech. Without consideration of these associations, it is impossible to present a complete picture of spatial relations.

A direction (and orientation), as well as a place of motion/immobility, rendered by preverbs, are only general
references to spatial relations. Their individual linguistic (lexico-grammatical) meanings are specified at the morpho-syntactic level with relevant grammatical categories included. This is equally true with respect to the encoding of both horizontal and vertical directions. Below I discuss the relevant grammatical categories: declension, aspect.

2.1. Declension. As it was stated in (1.2.1.), Path, as a basic phase of motion of any direction, is presented as an incessant process in its linguistic representation, independently of a beginning and end. It is encoded by means of attaching either directional or locative preverbs of the same function to imperfective aspectual (pertaining to the Present and Present Resultative groups) verb stems which contain roots referring to motion/movement. In the given case, the preverbs encode only a general direction of motion; however, it is case forms of nouns and/or adverbs of corresponding meanings that denote where from, where and where to a motion is directed. Specifically, the following locative cases are used: 1. Ablative (in the function of ablative and illative): case marker -še; answers the question soure ‘where from;’ 2. Lative (in the function of illative): case marker -ša; answers the questions so, soiša ‘where, where to.’ The direction ‘towards sth’ is encoded by the ablative marker -še, causing the coincidence of forms with opposite meanings (they are distinguished by means of a context; see below).

With stative verbs, a location is encoded by a dative form of a substantive.

As it is seen from the presented examples, in the first three instances, a direction is specified by means of case forms: a direction of going towards a certain point is encoded by the allative marker -ša, whereas distancing from it – by the ablative marker -še. As for the fourth instance, a direction towards sth is mostly specified by a context:
(1) mo-ur-s teure-še  
    PRV-come-S3SG ADV-ALL  
    ‘[S/he] comes thither.’

(2) mažira dğas me-ul-a kći-a-ša  
    second.NUM day.ADV:T PRV-go-S3SG Kitsia-ALL  
    ‘Next day they are going to Kitsia.’  (Lol. 122.25)

(3) muti š-i-leb-e zugidi-ša ula?  
    by what.PRON PRV-PASS-able Zugdidi-ALL go.MSD  
    ‘How can one get to Zugdidi?’  (Kip. 1.7)

(4) boši-k muš 'udeša-ša mola-rt-u.  
    boy-ERG his.PRON house-ALL PRV-go-S3SG.PRS  
    ‘The boy went to this home.’

2.1.1. Horizontal Area

Among the directions of encoded motions in a horizontal area (1.2.1.1), the simplest one is a proximal-distal direction. It denotes Path of a motion determined by a deictic orientation without obstacles and delays. However, Megrelian has a more complex instances in which a motion is defined not by its direction but rather by its relation to another subject, either mobile or not (relational orientation). Therefore, a direction is defined as forward - backward; from above – from below; through thither – through hither; beside; around. A noun, referring to a landmark subject, is morpho-syntactically represented by a dative form (answering the questions mis ‘to whom,’ mus ‘to what’). The compound preverbs: gino1-, eto-, ako-, ela-, eço-, ñino-, miço-, moço- and the simple preverbs: – ge-, go-, do- are predominantly used for pertaining meanings. They are associated with the me-, mo- and each other with a common semantics – they render a motion as an imperfective process.
without referring to a beginning and end. Forms, denoting in/animacy, differ. A direction of motion, together with its deictic orientation, is encoded predominantly by the preverbs of direction me-, mo-, as well as by the mi- (without deixis 1.2.1.1.), being morpho-syntactically aligned by ablative/elative and allative case forms.

cf.:

1. Ablative/Elative -še
   me- ur-s 'ude- še 'S/he leaves home'
   mo-ur-s 'ude- še 'S/he leaves from home'

2. Allative -ša
   me- ur-s 'ude- ša 'S/he goes home'
   mo-ur-s 'ude- ša 'S/he comes home'

3. Ablative + Allative -še/-ša
   mi-rul-e 'ude- še 'S/he runs from home'
   mi-rul-e 'ude- ša 'S/he runs to home'

4. (Allative) -še
   me- ur-s 'ude- še 'S/he goes towards home'
   mo-ur-s 'ude- ša 'S/he comes towards home'

The preverbs me-, mo-, mi- (and preverbs of direction, at large) encode only dynamic processes and usually are not used with stative verbs. The preverbs me- demonstrates a few exceptions:

Stat. ǯoġorens čqirı me-xe
'Dogs are swarmed with fleas.'

\textbf{from above < --- > from below}

\textit{gino1-}

a) with dynamic verbs – motion onto some point from above by overcoming obstacles: ginula (<<gino-ula) 'to go over sth,'
gino-purinua 'to fly over,' gino-'nčurua 'to swim over,' gino-xoxua 'to crawl over,' etc.
b) with stative verbs – to be above something: gino-rina 'to step over,' gino-xuna 'to sit over,' gino-ţra 'to lie over.'

eto-/ito-
a) with dynamic verbs – motion beneath something, from below (it rarely occurs in this meaning): etoluapa 'motion under sth,' eto'una 'to follow from below,' eto-ţrinapa 'to stretch sth from below,' etc.
b) with stative verbs – to be beneath something (a tree, sth covered, sth roofed, etc.): eto-rina 'to stand beneath sth,' eto-xuna 'to sit beneath sth,' eto-ţra 'to lie beneath sth,' eto-şvena 'to be laid beneath sth,' etc.

forward < --- > backward

eço-/aco-/ico-
a) with dynamic verbs – motion for proceeding ahead, for outstripping; to lead: eçula (<>ec'oula) 'to go ahead,' aço-luapa 'to oustrip,' eço-una 'to lead,' etc.
b) with stative verbs – to be in front of sb, sth: eço-rina 'to stand, to sit, to lie in front of sth.'

kino-
a) with dynamic verbs – motion backwards: kîn-ula (<>kîno-ula) 'to move backwards,' kîno-kîna 'to back up,' kîno-skilada 'to stay back,' kîno-ţeba 'to leave back,' etc.
b) with stative verbs – to be, to lie in a rear area: kîno-re 'S/he/it stand behind sth,' kîno-xe 'S/he sits behind sth,' kîno-ţanu 'S/he lies behind sth.'

miko-
a) with dynamic verbs – to walk, to pass by sb, sth: mîkula 'to pass by,' mîk-royala 'to run by,' etc.
b) with stative verbs – to be beside sb, sth: *miḳo-*rīna 'to stand by sth,' *miḳo-*xuna 'to sit down by sth,' *miḳo-*dvala 'to place sth by sth,' *miḳo-*dguma 'to put sth by sth,' *miḳo-*ʒvena 'to be placed beside sth,' *miḳo-*ʧirua 'to tie to sth,' etc. The variant *moko-* is rare than others. It is not attested with stative forms.

c) with dynamic verbs – to pass by sb, sth.

ela-

a) with dynamic verbs – to pass by, beside sb, sth; to accompany: *ela-*ula (<*ela+ula*) 'to pass by,' *ela-*luapa 'to get out of sb's way,' *ela-*una 'to walk beside sb,' *ela-*rtina 'to detour,' *ela-*onapa 'to accompany.'

b) with stative verbs – to be, to stand, to sit, to lie beside sb, sth (as Neutral Version with animates): *ela-*rīna 'to be beside,' *ela-*ɭ̣ra 'to lie beside,' *ela-*dguma 'to stand beside,' *ela-*ʒvena 'to be laid beside,' *ela-*xuna 'to sit beside sb, sth,' etc.

ekọ-

a) with dynamic verbs – motion from below upwards, on an inclined surface, on a certain non-vertical height – to climb uphill, mountain, etc. (but not a staircase): *ekọ-*ula (>ek-*ula*) 'to go uphill,' 'to climb the shore;' *ekọ-*rula 'to run uphill,' *ekọ-*gala 'to bring sth uphill,' *ekọ-*n/čurua 'to leave the water,' *ekọ-*otama 'to throw sth from the water,' etc. In this case too, motion from below upwards is grammatically encoded in two stages: 1. From the water to the shore – to come up over a land surface (= Ge. *amo, a*); it is encoded by an ablative form: *ẓ gouver e kọlu* 'to get out of the sea;' 2. To go uphill from a land surface is encoded by an allative form: *ekoxonîsa ekọlu* 'S/he went uphill.' In both instances, a starting surface is a natural landmark, either a water or land surface.

b) for stative verbs, a location, encoded by the preverb *ekọ-*, occurs only within a downward area – on a natural starting
surface: eko-rina 'to stand by a shore,' eko-xuna 'to sit by a shore,' eko-ʒvena 'to be laid by a shore,' etc.

However, as long as the aforementioned starting surface is meanwhile a part of a horizontal area as well, the preverb eko- will be used in a broadened meaning: to encode being near/by any object: eko-una 'to go after.'

ge-
  a) with dynamic verbs – to follow, to pursue, to catch up with: ge-txozini 'to pursue,' ge-una 'to follow,' ge-ʒšapa 'to catch up with.'
  b) with stative verbs – to sit, to lie, to stand on an even surface: ge-re 'to stand on sth,' ge-ʒanu S/he lies on sth,' ge-xe 'S/he sits on sth,' etc.

go-
  a) with dynamic verbs – motion/movement from inside outwards or around something: go-dguma 'to put sth outside,' go-lapa 'to rush out,' goleba 'to call on,' go-la'pini 'to play, to dance around,' go-rsiolua 'to turn around,' go-sxa-pua 'to jump, to dancing around; to jump from,' gorua'ua 'to drive,' gorkuala 'to run away quickly.'
  b) with stative verbs – to be around something: go-rina 'to stand around sth,' go-xuna 'to sit around sth,' go-ʒvena 'to be laid around sth' (Kipshidze 2014: 69).

do-
  a) with dynamic verbs – motion from above downwards distonintued at a certain surface. A process of self-action has been focused (cf. ge-buma 'to pour on sth,' - do-buma 'to pour down,' etc.). Stative forms are not derived: do-rtα 'to return,' do-gapa 'to spread,' do-dguma 'to put (in an upright position),' do-dvala 'to put sth down,' do-ʃorua 'to put up a
tent,’ do-lapa ‘to drop,’ do-ntxapa ‘to fall,’ do-nʒra ‘to lie down,’ do-ragyapa ‘to make fall,’ do-sorgua ‘to pile,’ do-čkarua ‘to lay down,’ do-xuna ‘to sit down,’ etc.

inwards <----> outwards

2.1.1.1. For the encoding of a direction of motion, case forms with -ša and -še are used in combination with preverbs denoting an end of motion. As long as, in terms of their meanings, beginning and ending phases unambiguously coincide with the processes of entering (end) and leaving (beginning) an area, usage of pertaining case forms has been strictly regulated: the Allative case (with the desinence -ša) encodes a process of entering a certain area, while the Ablative case (with the desinence -še) encodes that of leaving. Different preverbs characterize an area which is entered/leave in different ways.

mito- (<mi+to)

a) with dynamic verbs – motion from outside inwards, into some depth, into a small, circumscribed area – den, forest, hollow, and the like: mit-ula (<mito+ula) ‘to go into,’ mito-xoxua ‘to crawl into,’ mito-purinua ‘to fly into,’ mito-‘onapa ‘to take sb into,’ mito-dguma ‘to place sth into,’ mito-dvala ‘to put into,’ etc.

b) with stative verbs – to be in an aforementioned area: mito-rina ‘to stand, to be in,’ mito-ʒvena ‘to be placed in,’ mito-xuna ‘to sit in,’ mito-(n)ʒra ‘to lie in,’ mito-svanʒua ‘to rest in,’ etc.

mino- /milə- / mimo–

Synonymous preverbs among which (with the meaning below):

a) with dynamic verbs – motion from outside inwards into a certain closed, circumscribed, but not into a very limited area – room, building, yard, etc.: min-ula (<mino+ula ‘to go into,’
mila-ra'ua 'to drive into,' mino-dguma 'to place sth into,' mino-'onapa 'to bring sb into,' mino-ğala 'to bring sth into,' mino-rula 'to run into,' mila-rganua 'to roll into,' mila-dvala 'to put into,' mila-ğona 'to send into,' etc.

b) with stative verbs – to be in an aforementioned area (only the mila- is used): mila-xuna 'to sit inside,' mila-rina 'to stand, to live inside,' mila-(n)ira 'to lie inside,' mila-dguma 'to stand inside furniture and the like,' mila-ğvena 'to be placed inside,' etc.

miša-

a) with dynamic verbs – motion from outside inwards into depth, tight environment, mass – crowd, forest, sea, etc.: miš-ula 'to go into,' miša-(n)čurua 'to swim into,' miša-'onapa 'to bring sb into.'

b) with stative verbs – to be, to sit, to lie, to stand, etc. in a closed or circumscribed area: miša-xuna 'to sit inside,' miša-rina 'to be inside,' miša-(n)ira 'to lie inside,' miša-dguma 'to lie inside,' miša-ğvena 'to be placed inside,' etc.

gito (<gi+to)-

a) with dynamic verbs – motion from inside outwards, from depth, from a small, circumscribed area (den, hollow, and the like, as well as forest, princkly hedge, etc.): git-ula (<gito+ula) 'to come out,' gito-rula 'to run out,' gito-sxa 'to skip out,'

b) with stative verbs – to be, to stand, to lie under an object: gito-xuna 'to sit under sth,' gito-ira 'to lie under sth,' etc.

gimo- (<gi+mo)

a) with dynamic verbs – motion from inside outwards; to leave a certain circumscribed area: gim-ula (<gimo+ula) 'to come out.'

b) with stative verbs – to be, to stand, to lie, above a certain object: gimo-rina 'to be above,' gima-xuna 'to sit on,' gima-ira 'to lie on,' etc.
giša-
It mostly occurs with dynamic verbs encoding:
a) motion from inside; to leave certain depth, a tight environment, or certain mass – water, crowd, forest, sea, etc.: giš-ulà ‘to come out of a circumscribed area,’ giša-gala ‘to take sth out of a circumscribed area,’ etc.

gino- 2
a) with dynamic verbs – motion from inside outwards; to leave a territorially circumscribed but not limited area (house, yard, etc.): ezoše gin-ulà ‘to leave a yard,’ etc.

Both kinds of motion are distinguished: a) vertical direction proper; b) upward direction in a vertical way but with an inclined trajectory.

2.1.2 . Vertical Area

Motion from below upwards

Owing to its character, certain peculiarities reveal about vertical motion/movement. First of all, motion in a vertical area does not allow for identification of phases. I mean only a Path whose direction is established in relation to the earth surface (metaphorically, with any other surface). Therefore, forms with -šé and -šà are used to encode motions of distancing from a surface (direction: from below upwards) and towards it (from above downwards).

eto-

It is less widespread with a dynamic meaning occurring frequently in that of stative, encoding:
a) with dynamic verbs – motion from beneath something: eto-ùnàpa ‘to take sth along down,’ eto-luapa ‘to pass sth under sth;’
b) with stative verbs – to be, to sit, to lie, to stand under sth: *eto-rina* ‘to stand under sth,’ *eto-xuna* ‘to sit under sth,’ *eto-nįra* ‘to lie under sth,’ *eto-dguma* ‘to put under sth,’ *eto-dvala* ‘to be placed under sth,’ etc.

e-

Motion from below upwards, with dynamic verbs – cropping up of a plant (grass, bush, tree) but not its further growth. In a similar way, it refers to emergence of hair, beard, moustache, teeth. Other dynamic verbs, marked with *e-*, not referring to motion/movement (being rather numerous), convey action upwards for a short distance (at least, within a human height): *e-ulâ* ‘to come up,’ *e-purinua* ‘to fly up,’ *e-sxaṗua* ‘to jump up,’ *e-’onapa* ‘to lift sb,’ *e-çopua* ‘to take up,’ *e-ķina* ‘to lift sth,’ etc.

e+-ša

a) with dynamic verbs – motion/movement in a vertical direction from below upwards ( = Ge. amo-, a-): *eš-ula* (<*eša+ula*) – ‘to go/come up,’ *eša-txozini* ‘to chase up,’ *eša-rula* ‘to run up,’ *eša-sxaṗua* ‘to jump up,’ *eša-xoxua* ‘to crawl up,’ *eša-’gala* ‘to take sth up,’ *eša-’onapa* ‘to take sb up,’ *eša-čkumala* ‘to send sb up,’ *eša-’giona* ‘to send sth up,’ etc.

The given type of motion, provided that a preverb is unaltered, is presented in two stages of grammatical encoding:

- A motion may refer to coming out from any lower starting point – nether regions, a pit, a well, a tree hollow, a pot, a tube, a chink, etc. up to a landmark surface. Hence, a direction of motion, as distancing from a starting point (answering the question *soure* ‘where from?’), is encoded by an ablative case form (marked by -še):

- A motion may start from a landmark surface (or continue, having started before the surface) proceeding upwards into an open area, be it on a tree, on a staircase, on a mountain, in the
sky, etc. In this case, a direction of motion eše- ‘upwards’ (answering the question so ‘where to?’) is encoded by an Allative case form (marked by -ša).

b) with stative verbs, the preverb eša-, naturally enough, encodes a process of being a subject of motion in the ži/žido ‘upper’ area. Hence, there are: źas ‘on a tree,’ ortvals ‘on a roof,’ etc. eša-xe, eša-su ‘s/he lies, sits, is laid above, on a tree, on a roof, etc.’;\footnote{The eša-, occurring in the stative form eša-xuna referring to a lower area and being defined as ‘to sit down between’ (Kaj. 1: 569), may be only a variant of the preverb diša- ‘below between;’ cf. dino > ino ‘from above downwards into depth.’} visually from below, cf. gimo,žvena ‘to be placed above,’ etc.

\textit{eko-}

a) with dynamic verbs – motion from below upwards on an inclined surface (on a mountain or some non-vertical height), to come out of water: \textit{eko-ula} (>ek-ula) ‘to go/come uphill,’ \textit{eko-rula} ‘to run uphill;’

b) motion upwards but not vertically: \textit{eko-/n/čurua} ‘to swim out,’ \textit{eko-otama} ‘to throw up from the water,’ \textit{eko-ğala} ‘to carry sth uphill,’ etc.

\textit{ela-}

a) with dynamic verbs – it encodes ascending from a side, predominantly used to refer to rise of the sun and the moon: \textit{elula} (<ela+ul-a);\footnote{On the semantics of the preverb –ela, see Gersamia & Akhalaia 2017.} b) with stative verbs – to be beside something: \textit{ala-rina} ‘to be, to stand beside,’ \textit{ala-dguma} ‘to place sth beside,’ \textit{ala-žvena} ‘to be put beside,’ \textit{ala-njiira} ‘to lie beside,’ etc.

\textit{Motion from above downwards}

Both simple and compound preverbs are used: \textit{ge-}, \textit{do- gela-}, \textit{di-ko-, dila-, dino-}.
ge-
a) with dynamic verbs – motion directed from above downwards and ending onto something, onto some surface, being encoded by a Dative case form of an aligned noun: ge-buma ‘to put onto sth,’ ge-gapa ‘to spread onto sth,’ ge-ntxapa ‘to fall on sth,’ ge-nçqula ‘to be placed on sth,’ ge-’otama ‘to be thrown onto sth,’ ge-dguma ‘to put on sth,’ ge-nząra ‘to lie on,’ ge-xuna ‘to sit on,’ etc.

b) with stative verbs – a body, an object on something, on some surface: ge-re ‘s/he stands on sth,’ ge-dgu ‘it stands on sth,’ ge-çans ‘it (a plant) stands on sth,’ ge-xe ‘s/he sits on sth,’ ge-ţanu ‘s/he lies on sth,’ ge-ţu ‘it is placed on,’ ge-sorgu ‘they lie scattered on,’ etc.

dino- (> ino-)
a) with dynamic verbs – motion from above, from a landmark surface downwards; the same preverb dino- is used; space and distance of motion are not specified: din-ulula (dino+ulula) – ‘to go down into sth,’ dino-dvala ‘to put sth into,’ dino-sxapua ‘to jump into,’ dino-ţala ‘to take sth down,’ dino-’onapa ‘to take sth down,’ dino-ntxapa ‘to fall into,’ dino-xunapa ‘to put sb into,’ dino-ţvapa ‘to throw into,’ dino-çkarua ‘to pack.’

b) stative verbs refer to being only in the final phase of motion; cf. dino-rina ‘to stand inside,’ dino-ţvena ‘to be placed inside.’

gila- (<ge+la-)
a) with dynamic verbs – motion from above or from a side part of a certain upper area downwards, towards a landmark surface: gil-ulula ‘to come down,’ gila-sxapua ‘to jump down,’ gila-ntxapa ‘to fall down,’ gila-cuma ‘to fall down (PL),’ gila-ra’ua ‘to drive sth from above,’ gila-purinua ‘to fly down hither from somewhere,’ etc.
b) with stative verbs – to be in an upper area: əvena 'to be put,' 
'ŋəfira 'to lie,' xvena / xuna 'to sit,' gilaxuna 'to sit down 
beside on a chair, a staircase; gila-əvena 'to be put on a table, 
a shelf, etc.,' gila-nɔq'ula 'to place (dishes, etc.) on a table, a 
shelf,' gila-nəfira 'to lie down on a sofa, a bed, etc.'

dila- (di+la)
a) with stative verbs – to go down beside in the opposite 
direction of ela-: dil-ula 'sunset;' cf. bJuldu 'west.'
b) stative: diləvena 'to put sth in,' dilaxunapa 'to sit down on/to 
sit up on.'

diko
a) with stative verbs – a location is a natural landmark (i.e. 
starting) surface: dikə-əvena 'to be put by the shore,' dikə- 
xuna 'to sit on a shore.'
b) with dynamic verbs – direction of motion from above 
downhill: dikula (< dikə-ula-a) – 'to go/come down,' dikə- 
ɡala 'to bring sth down t/hither,' dikə-ˈonapa 'to bring sb 
down t/hither.'

do-
with dynamic verbs – motion directed from above 
downwards discontinued at a surface (see above): do-buma 'to 
pour down,' do-dguma 'to put down,' do-dvala 'to put down,' do- 
ɡina 'to pull down,' do-lapa 'to be dropped down,' do-ntxapa 'to 
fall down,' do-ragvapa 'to knock down,' etc.
2.2. Aspect

Similarly with any action, motion/movement may be treated both as a continuous and discontinuous or a completed process. Linguistically, the former is encoded by perfective aspectual forms: those of Present and Present Resultative groups, whereas the latter is encoded by imperfective aspectual forms: those of Aorist, Perfect, and Future groups. The aspectual difference significantly alters an outline of motion and makes certain changes in meanings of pertaining preverbs as well.

2.2.1. In imperfective forms, as it was stated in (2.1.1.), the basic preverbs of direction me- and mo- encode motion as a (orientated) direction of a continuous process without referring to a beginning and end. They encode only either departure from a certain point \textit{in a distal} direction (me-) or movement towards a certain point \textit{in a proximal} direction (mo-). In perfective forms, encoding a different situation – discontinuous or completed motion, the aforementioned preverbs acquire a distinct meaning. Specifically, in order to encode entering/leaving a certain point, the compound preverbs mida- and moda- are used specially for perfective forms, while the preverbs me- and mo- take on opposite meanings – to go/to come to a certain point. The root ul- also undergoes changes. In perfective forms, it is supplanted by the root rt- (< \*qed):

- \textit{mida-rt-u} ‘to go thither from somewhere’
- \textit{mola-rt-u} ‘to come hither from somewhere’
- \textit{ke-me-rt-u} ‘to come there’
- \textit{ko-mo-rt-u} ‘to come here’
- \textit{midu-rt-um-u} ‘has gone thither’
- \textit{molu-rt-um-u} ‘has gone hither’
- \textit{me-urt-um-u} ‘has come there’
- \textit{mo-urt-um-u} ‘has come here’
As for a path, judging from its semantics as a continuous process, it cannot be encoded by perfective forms. However, a portion of motion implying movement from one point to another is in no way 'empty' (Kobalava 2010: 242-243): in accordance with narrative requirements, this gap is filled by means of various linguistic devices. For this purpose, the most widespread usage is attested for the Aorist form id-, pertaining to the perfective root *vid ‘s/he went,’ the meaning of which has been modified in Megrelian and Laz, hence, encoding Imperfective aspect (Chikobava 1938: 274). The sense is enhanced by instances of the repetition of the root id-, occurring in the process of narration and having a significant impact on an impression of continuity (for the said tendency, see also Shanidze 1980: 506-508; Machavariani 1974: 120-121; Arabuli 1999: 50).

2.2.2. Aspectual alternations have to do with the phases of beginning and end as well. In these forms, preverbs stay unaltered; however, a present stem is replaced by an aorist one:

\[\text{giti-l-u} \text{ 'crawled out'} \quad \text{miti-l-u} \text{ 'crawled in'}\]
\[\text{gimi-l-u} \text{ 'came out'} \quad \text{mini-l-u} \text{ 'went in'}\]
\[\text{giše-l-u} \text{ 'came out'} \quad \text{miše-l-u} \text{ 'went in'}\]
\[\text{gitu-l-eb-u} \text{ 'has crawled out'} \quad \text{mitu-l-eb-u} \text{ 'has crawled into'}\]
\[\text{gimu-l-eb-u} \text{ 'has come out'} \quad \text{minu-l-eb-u} \text{ 'has gone into'}\]
\[\text{gišu-l-eb-u} \text{ 'has come out'} \quad \text{mišu-l-eb-u} \text{ 'has gone into'}\]

2.3. Aspect formation has been associated with the issue of the Future tense. Several ways of future formation are known for Megrelian (Chumburidze 1986: 141-146). The basic among them is addition of the preverbs of direction ge-, go-, do-, me-, mo- to a Present stem (either with or without a thematic marker) (2.1.1.). They are taken on both by simple stems, with no derivational
preverbs, and by already derived ones, albeit not modifying their meanings; cf.

<table>
<thead>
<tr>
<th>Tense</th>
<th>Form</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPFV.</td>
<td>me-uns</td>
<td>'takes sb'</td>
</tr>
<tr>
<td>PFV. AOR.</td>
<td>mide (&lt;mida)-unu</td>
<td>'took sb'</td>
</tr>
<tr>
<td>PFV. FUT.</td>
<td>mide (&lt;mida)-onans</td>
<td>'will take sb'</td>
</tr>
<tr>
<td>IPFV.</td>
<td>ge-uns</td>
<td>'follows'</td>
</tr>
<tr>
<td>PFV. AOR.</td>
<td>ke-gia-unu</td>
<td>'followed'</td>
</tr>
<tr>
<td>PFV. FUR.</td>
<td>ke-gia-unu</td>
<td>'will follow'</td>
</tr>
</tbody>
</table>
| IPFV.  | mi (<miko+ma)-otans | 'you will drop down sth that is put, hung above'
| PFV. AOR. | gimka (<ge+miko)-otu | 'put, hung above'
| PFV. FUT. | gimka-otans | 'dropped down from below' |
| IPFV.  | Gima-otsns | 'will drop down from below' |
| PFV. AOR. | ginma (<gino-ma)-otans | 'throws away' |
| PFV. FUT. | ginma-otans | 'will throw away' |
| IPFV.  | Gigna-otans | 'will throw away' |
| PFV. AOR. | dotma-otans | 'drops down' |
| PFV. FUT. | koo-da-otu | 'dropped down' |
| PFV. FUT. | koo-da-otans | 'will drop down' |

The association with Aorist is supported by verbs with suppletive stems where the association between forms of Aorist and Future is evident;

orçē ‘sees’  ko₃iru ‘saw’  ko₃iruns ‘will see’
argens ‘gives’  kemeču ‘gave’  kemečans ‘will give’
ore ‘is’  i’u ‘was’  i’ii ‘will be’

There is another approach according to which forms of future reiterate not that of present but rather that of aorist (that

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16 In perfective forms, the ge- is the most widespread among the aspectizer preverbs.
is, a perfective aspect form) with or without a present thematic marker (Chumburidze 1986: 144-145).

Thus, as different from derivational preverbs, aspectizers take part only in construction of perfective forms. Hence, when, in forms of the Future group, a Present stem (same as an Aorist stem) takes on them, the perfetive aspect is marked. A future meaning is encoded by means of Present Stem + Perfective Aspect: an action, going on in the present, may end in the future.

**The semantics of the verb ul-a (‘to go up’) in Megrelian**

Among the verbal roots referring to motion/movement, the *ul* (→ - *ur* – before consonants, and - *i* – in an intervocal position18) ‘to go,’ as that of denoting a human’s most essential and significant activity, has been the most widespread. In addition, it is unique with respect to the fact that it belongs to the most ancient layers of the Kartvelian lexicon, carrying their structural and semantic features.

The meaning of the root *ul*, similarly with other ones referring to motion, is normally neutral in terms of the encoding of locative properties: it conveys a process of movement from one point towards another.20 In this meaning, it is represented by the

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17 A similar view was put forth by I Kipshidze who did not consider forms of Future as independent ones. He only distinguished Present-Future from Present as a perfective aspect form (Kipshidze 1914: 059).

18 The issue of reflexes of the root - *ul* – in forms of Present Resultative is to be specified.

19 The Megrelian (Zan) root - *ul* - is assumed to have originated from the stem *val-*<sup>→*vol-*</sup>; cf: Ge. *val-* (Chikobava 1938: 273-274). In Megrelian, the initial *v*- is dropped but its identity is unambiguously confirmed by means of the process *o* > *u*. The initial *v*- is also dropped in the perfective form of the verb *ula*: *vid-* > *id*.

20 In addition to the semantics of movement, there are verbal roots in Megrelian which include a locative component: *txoz-ini* ‘to chase, to follow,’ *ge-čis-apa* ‘to catch up with,’ etc.; however, their numbers are rather low and they do not modify the common picture.
preverbless participles of the masdar - *ul* – *ma-* *l-* *u* ‘going, coming,’ *mo-ma-l-u* ‘coming’ *ul* - *ir* – *r* ‘gone,’ and by imperfective verb forms. In actual use, they occur in nominal functions, as an NP within a VP, and in the roles of a subject or an attribute:

Locative information (direction and orientation of motion, place, starting and end points) are encoded by *preverbs* – prefixal formants, carrying adverbial meanings and being incorporated into finite verbs in combination with a root. Within a stem, they occupy a stable position (Kipshidze 1914: 117; Gudava, Gamkrelidze 2000: 190-191) and, with either a same or modified meaning, are reiterated in masdar and finite forms. In combination with neutral roots, preverbs derive particularly multiple and semantically diverse dynamic and stative verb forms in which a root is a carrier of a basic lexical meaning.21

The lexical meaning, conveyed by the root -*ul*- in derived forms, is too general and implies only *general semantic features* of motion, such as:

- *Dynamicity*,
- *Subject of motion*,
- *Kind of motion*,
- *Time of motion*.

1. **Dynamicity.** Verbal stems, including the root *ul* as the smallest semantic unit referring to a *dynamic process*, convey three independent portions or *phases* extended in time. As data from numerous languages have demonstrated (see Semantics ... 2002; for the Georgian data, see Apridonidze 1980: 85-92), a

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21 With respect to a position of a preverb outside a root, Megrelian, resp. Kartvelian (also Indo-European except Romance, as well as Finno-Ugric, Chinese, etc.) languages fall into a single group, and, according to L. Talmi’s classification, they referred to as satellite-framed languages, as different from verb-framed ones (Romance, Semitic, etc.), in which a path of motion is included in a verb meaning (Talmi 1985: 85).
beginning of motion generates a sense of the perspectives of growth, development, future; however, its realization becomes known only at the end, giving the latter a special meaning: "the semantics of a targeted motion turns into the semantics of the end of the process of achieving the goal" (Melikishvili 2002: 120).

In a horizontal area, the aforementioned phases are represented as a motion in a certain direction being encoded by:

1. Preverbs of specific meanings: - 'v'išo/ašo 'thither/hither;' 'a'taure/'e'teure 'from here/from there;' çoxole/ukaxale 'in front/behind;' mele/mole 'across thither/across hither;' ole 'beside;' ganiše 'aside,' dinaxale/gale 'inside, outside,' etc. 23

2. Specific case forms: ablative (marker -še) for a distal direction, and illative (marker -ša) for a proximal direction.

Naturally enough, a phase of course is conveyed by imperfective forms pertaining to the Present Subseries. A direction of motion is predominantly encoded by the simple preverbs me-/mo-, their meanings excluding any, even a general implication of an area. Their use implies motion with an orientation defined only by deictic dimensions, that is, by the position of a speaker ('here' / 'not here'). 24

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22 Such an assumption is supported by linguistic data; specifically, in actual life, the sequence of the aforementioned process coincides with a beginning or an end (ginilu do midartu 'S/he went away and left,' etc.) so frequently that, in human consciousness, they are amalgamated into a single cycle (for details, see Kobalava 2010: 241-242). Therefore, one may distinguish between the preverbs encoding the phases of a beginning and an end associated with the phase of a course (see below).

23 Alongside with the aforementioned independent adverbs referring to path in a general way, Megrelian abounds in instances whereby preverbs, used within a verbal form, are reiterated with the same ones in the function of an independent adverb (Kipshidze 1914: 121); e.g. mini minilu 'S/he went into (into an area encoded by a preverb);' dini kidney-naxal 'S/he jumped into,' etc.

24 If orientation is drawn as a system of coordinates, then a center of the intersection of the coordinated will be occupied by origo, an indicator of a spatial field incorporating the lexical items – here, now, I (Bühler 2000: 94-95).
a speaker’s position is assumed as a landmark of motion, the meanings of the preverbs me- and mo- differ, and they differ not only in terms of encoding a direction; specifically, the me-encodes a motion opposite from a speaker – ‘v’išo ‘thither,’ implying only distancing from it, departure from its area, and, thus, is encoded only by an ablative case form: čkim-d-e meurs ‘S/he goes from me.’ Hence, a specific addressee of motion is not implied in terms of a deictic orientation (Benveniste 1974: 50).

An opposite meaning is encoded by the preverb mo-, which, in the direction ašo ‘hither,’ conveys movement towards a speaker as a specific addressee, this being marked by means of an illative form: čkim-d-a murs; however, the preverbs me-/mo-, as occurring in the masdar forms me-ul-a / mo-ul-a ‘S/he has come there/here,’ encode not a process of a course but rather moments of departure of a beginning point and of arrival at an end point, as it is attested in dictionaries (cf. Charaia 1997: 13; Kipshidze 1914: 264-265; Kajaia 2001: 253, 313; Kobalia 2010: 491). The root -ul-, as one referring to a course proper, occurs only as preverbless, masdar form – ul-a and in preverbed stems the simplest type of which is represented with a tri-componential verbal structure:

me-PRV+ur-R+S3, of which, in the process of conjugation, semantic changes are associated with those of preverbal components whereas the root ul is subject to phonetic changes only (ul > ur, ul > l), while the S3 marker – to personal ones

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25 The aforementioned, that the preverb me- does not encode an end of a course of motion, does not imply that the motion, referred to by the verb ula, does not include it, that is, to achieve a goal. On the contrary, the verb ula, as referring to a human’s most significant activity (a goal-oriented verb, according to Ch. Fillmore), implies striving to an end of motion, that is, striving for the accomplishment of one’s goal.
(person 1, 2, 3); cf. me/mo - v-ur - k ‘I go/come,’ me/mo-ur-k ‘You go/com,’ me/mo - ur - s ‘S/he goes/comes.’

The mutually opposite paths v/išo / ašo ‘hither/thither’ are also encoded by the compound preverbs mi - ṛo < *me - ṛo < mo- ṛo – 'on way thither/on way hither’ and the preverbs e - ço / i - no ‘ahead/back’ in the verbs - mīkula, mōkula, eçula, ḳānula, in the meanings of which, alongside with a path encoded by the preverbs of motion, there appears a general implication of an area of path. Verbal stems, derived from the preverbs in point, convey different meanings for the sake of which various structures are used (however, this is not true for all preverbs); specifically, whenever a process of course is encoded, a simple structure of a verbal stem is used without any special shades of meaning (see above) which may include the particle m (<tmV-) distinguishing between Present and Future.

Thus, a stem structure occurs as PRV + m(V) + R + S3; verbal stems of distinct meanings, combining with same preverbs, occur as more complicated stems by way of attaching thematic markers:

PRV + IMPF+ R + THM + S3
PRV + m(V)+ R + [u + an] + S3

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26 Here and elsewhere, when discussing verbal forms, we only refer to forms of the Indicative mood as far as pertaining modal stems do not demonstrate any specific features with respect to aspectual meanings. Linguistic units under analysis are represented as S.

27 The preverbs in point (alongside with some other ones) are used in another meaning as well: the encode not a course proper but shades associated with a course – to turn off a road, to turn back thither/hither, to get out of sb's way, etc. However, in this case, another root rt < kc is used.

28 In Senaki-Martvili variety of Megrelian, the function of the particle m (<tmV) with dynamic verbs, notwithstanding various interpretations, has, however, been associated with differences between preverbed forms of Present and Future (Kipshidze 1914: 107; Margvelashvili 1980: 166; Chumburidze 1986: 137-138; Gudava & Gamkrelidze 2000: 189; Kajaia 2000: 60; 2001: 46; for details on the issue in question, see Kobalava 2010: 235-250).
mikul (mi + ko-ul-a) – ‘to pass (near, far) by sb, sth’
mikoluapa (miko-l-u-ap-a) – ‘to pay a special visit to sb, sth’
mokula (mo + ko-ul-a) – ‘to pass by sb, sth’
mokoluapa (moko-l-u-ap-a) – ‘to specially drop in to sb, sth’
ceula (e+co-ul-a) – ‘to go ahead, to move to a preceding area’
ecoliapa (eco-l-u-ap-a) – ‘to catch up with, to outrun sb, sth moving’.

In addition to the discussed forms, the Megrelian ul combines with preverbs also encoding (one of the meanings) course, however, without an implication to any specific path. Bilateral motion may be specified by means of adverbs and pertaining case forms; they are:

ginul-a 1 (< gino-ul-a)29 – ‘motion thither/hither above a point – to go over thither/hither (from a tree onto a tree, onto a mountain, etc.), to move by overcoming obstacles’.

kulpta (kola-ul-a) – ‘penetrating motion, to go through sth’

In the same guise, we can discuss the preverbs encoding a course which, according to a character of movement, do not imply an expressly directed motion:

goleba (<go-ul-eb-a) ‘motion (action) around sth;’ ‘to call on’.
doleba (<do-ul-eb-a) ‘to go all over (an area, a country)’.
moleba (<mo-ul-eb-a) ‘to go all over (an area, a country)’.

Marginal phases of motion – beginning and end – generally render the direction dinaxale/gale ‘inwards/outwards,’ implying motion which, from a speaker’s position, is conveyed by means of the adverbs višo/ašo ‘thither/hither,’ taure/teure ‘from here/from

\[29\] Opposite forms of such preverbs frequently occur in oral speech (for instance, mumula); however, their lexicalization has not taken place; independent masdars have not been derived from them.
there’ and compound preverbs which, alongside with a path, provide a spatial topological characteristics of motion. A verbal stem is represented as the following structure: $PRV + tmV + R + S3$:

$minula \left(< mimo-ula / milula < mila-ul-a / mimula < mimo-ul-a \right)$ – ‘to enter, to go from outside into a circumscribed but not a limited area: a room, a building, a yard, etc.’

$gimula \left(< gimo-ul-a \right)$ ‘to leave, to go/come out of an area in point’.

$ginula \left(< gino-ul-a \right)$ – ‘motion from inside outside, from a territorially circumscribed but not a limited area (a house, a yard, etc.);’ ‘to leave’.

$mitula \left(< mito-ul-a \right)$ ‘to crawl, to go into some depth, into a circumscribed are (a den, a hollow, a forest, etc.’).

$gitula \left(< gito-ul-a \right)$ ‘to leave such an area;’ $gitmurs \left(< gito-mV-ur-s \right)$ ‘S/he leaves’.

$mišul-a \left(< miša-ul-a \right)$ ‘to go into some depth, a tight environment, a crowd, water, etc.’ – $mišmurs < mišo-‘mV-ur-s ‘S/he goes into some depth’.

$gišula \left(< giša-ul-a \right)$ ‘to come out some depth, etc.”

$gišmurs \left(< giš-m-ur-s \right)$ ‘S/he comes out’.

In a vertical area, in accordance with the gravity conditions, an outline of motion is different. First of all, diversity of motion, characteristic of a horizontal area, is limited, and, significantly, a phase structure of motion is also different. A process of motion/movement is mostly represented by a phase of a non-oriented course, being specified by the path – $eše / gime$ ‘up/down.’ In both instances, vertical and inclined trajectories of motion are distinguished; however, in this area, a phase of course denotes: a) both a process of movement proper and phases of beginning and end (by means of perfective/imperfective forms); b) only either a beginning or an end (by
means of perfective forms). In all instances, the compound preverbs are used: from below upwards -eša- (vert.), eḳo-, ela-(incl.) and from below upwards - gela, dino - (vert.), diḳo-, dila - (incl.). Mostly ablative and illative forms are used. A stem structure, characteristic of a horizontal area, has been preserved: PRV+ mV + R + S3.

Hence, there are:

*ešula* (<eša-ul-a) – 'vertical motion from below upwards, to go/come up thither/hither (PRS: -ešmurs 'S/he/it rises').

*eḳula* (<eḳo-ul-a) – 'motion from below upwards on an inclined surface, to go uphill, to go over the shore' (PRS: eḳmurs 'S/he/it comes up').

*gilula* (<gila-ul-a) – 'a motion from above downwards, frequently from beside a certain point – a tree, a staircase, etc.,' 'to come down,' for instance, from the sky (PRS: gilmurs).

*dinula / inula* (< dino- / ino-ul-a) – 'motion from above downwards, to go into any circumscribed area – an abyss, a well, a bottle, a glass, etc.' (PRS: dinmurs).

*diḳula* (<diḳo-ul-a)- 'motion from above downwards downhill' (PRS: diḳmurs).

*dilula* (<dila-ul-a)- 'motion from above downwards, set of the sun, moon;' cf. bžadali/u 'west'. PRS: dilmurs 'It goes down,' 'It sets'

Apart from the discussed cases, marginal phases of motion may also be referred to for a vertical area, conveying only a beginning or end of motion and never its course. For a beginning, the preverbs -e and -ela are used, encoding motion from below upwards but only for a short distance from a surface (for higher areas, the ul is replaced by other roots):
eula (<e-ul-a>) – ‘(plant) to grow out of a soil, to rise (fig. to grow teeth, hair, bear, etc.)’
elula (<ela-ul-a>) – ‘to rise (from aside), usually, the sun, moon;’ cf. bžaiolu, bžaalalu ‘east’ (Imperfective elmurs ‘It rises’).

As for an end of motion, the phase denotes only a completion of a motion from above downwards in an area (implied by a preverb) – on a flat surface or in some depth. Besides, whenever one and the same preverbs are used, verbal roots differ in combination with animate and inanimate nouns: in case of inanimates, there is -ntx-, while the root -l- is used with animates;

<table>
<thead>
<tr>
<th>Animate</th>
<th>Inanimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>gentxapa (&lt;ge-ntx-ap-a)</td>
<td>gelapa (&lt;ge-l-ap-a)</td>
</tr>
<tr>
<td>to fall, to be dropped</td>
<td>on sth – earth, table, etc.</td>
</tr>
<tr>
<td>dontxapa (do-ntx-ap-a)</td>
<td>dolapa (&lt;do-l-ap-a)</td>
</tr>
<tr>
<td>‘to fall, to be dropped’</td>
<td></td>
</tr>
<tr>
<td>dinontxapa (&lt;dino-ntx-ap-a)</td>
<td>dinolapa (&lt;dino-l-ap-a)</td>
</tr>
<tr>
<td>to fall into some deep area</td>
<td>(a well, a pit, a pot, etc.)</td>
</tr>
<tr>
<td>dišantxapa (&lt;diša-ntx-ap-a)</td>
<td>dišalapa (&lt;diša-l-ap-a)</td>
</tr>
<tr>
<td>‘to fall into some area – into, between, etc’</td>
<td></td>
</tr>
</tbody>
</table>

2. Subject of motion. A subject of the verb ul-a is animate. The opposition – animate vs. inanimate (active vs. inactive) plays a significant role in the semantic organization of nominal and verbal lexicon of Megrelian as a language with some features of active typology. Animate, active subjects are considered to be referred to by nouns provided that their denotations are characterized by vitality; on the contrary, denotation, devoid of such vitality, are among lexico-semantic classes referring to dead nature (Klimov 1974: 83-84; Kortava 2008: 65). It is by means of these features that in Megrelian a class of active subjects incorporates
representatives of the living nature – humans, animals, plants. Among them, motion by humans and animals, that is, by subjects able to move by themselves, are referred to by one and the same verbal affixes – roots, preverbs (for details, see Kind of motion). As for plants, their vitality is demonstrated in specialized vocabulary denoting their sprouting and further growth and development (e-ul-a 'to sprout,' e-pal-ua ‘to sprout, to bloom’).  

3. Kind of motion. The root ul-, similarly to other verbal roots referring to motion/movement, provide certain information about a kind of motion. First of all, a kind depends on an occurrence of an active subject in various environments – land, water and air. Due to their habitats, various biological peculiarities cause the occurrence of basic kinds of motion: ula-a ‘to go’ – to move on land, ‘n’ čurua ‘to swim’ – to move in the water, purin-ua ‘to fly’ – to move in air.

3.1 Among the aforementioned kinds, as it was expected, the most diverse is motion on land where the most widespread kind is ul-a ‘to go, to walk.’ With humans, this kind of motion may be primarily characterized as movement on by one’s own force and will on a solid surface, alternating steps so that one leg always stays on the ground as a fulcrum for the body. Each of these features is necessary for identification of a motion, referred to by the root ul-, as that of an independent kind. However, apart from unchanging determining features of a kind of motion, the ul- may be characterized by other, non-essential features whose changes may be assumed within a given kind of motion. The following have been identified as such features: movement of a subject in a

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30 The root ul- is used for inanimate phenomena whose motion/movement is performed on their own: bža ešmurs/dinmurs ‘The sun rises/sets,’ tiri/čvima murs ‘It is snowing/raining,’ čipiri-meurs ‘Water flows,’ etc.

31 Cf. verbal roots referring to motion/movement also implying one’s movement by somebody else’s desire; e.g. onapa ‘to take sb against his/her will,’ čkumala ‘to send, to go somewhere by sb’s request or demand,’ etc.
vertical position, in an upright position – cf. gotinilo / modiraḳilo, mokvakwiro meurs ‘S/he walks upright / bent / crooked; pace of movement, which, as different from a moderate pace implied by the root ul-, may be characterized as either very accelerated or very decelerated – cf. neutral meurs ‘S/he goes’ – ḋkaras meurs ‘goes fast,’ neras, nerat meurs ‘S/he goes slowly, sluggishly;’ rhythmic alternation of steps – cf. marxet meurs ‘S/he goes gravely, pausing, resting,’ cf. also the words referring to walking: bandali ‘to totter,’ zaḳapi / zaḳini ‘to stagger,’ etc.

The kind of motion in point is characteristic of animals as well as whole (in accordance with their body structure) natural means of movement in vertical and/or horizontal positions are limbs; cf. ḋoči, xoʃi, geri, ʃoʃori ... me-ur-s ‘A man / an ox / a wolf / a dog ... goes.’

3.1.1 The ul-a is not the only kind of human and animal motion performed on land by their own. Such are other kinds of motion performed by either one’s legs or other body parts. With respect to how these kinds are encoded, they may be considered as marked kinds of movement denoted by the neutral ul-a; specifically, they are referred to by both various lexical items (verbal roots) and adverbial constructions in which a verb denoting movement is substituted by the ul-a, and a kind of motion is encoded by an adverbial form; they are:

rul-a ‘to run’– ‘to walk fast running when a body moves in space in the phase of double leaning of one’s legs’ (EDGL, VI, 377): bačana/ʃoʃori ... mirule ‘A child/dog ... runs.’

32 In Megrelian, there is another, particularly numerous class of so called phonosemantic (synaesthetic) verbs referring to motion/movement pertaining to the meaning of the verb ul; however, they render not specific features or specific kinds of motions but rather those associated with a subject’s (human’s, animal’s) individual physical characteristics (large/small, tall/short, thick/thin, elegant/ugly, etc.) (Kobalava 1979, literature ibidem).
sxağu ‘to jump’ – to move by means of jumping when legs leaves a surface simultaneously’ (EDGL);

c'o'-ua ‘hop-scotch’.

kerkeli ‘to roll’: mikerkelu ‘It rolls along’.

xox-ua ‘to crawl’ – ‘to move with a whole body, by means of hypodermic muscles’.

Owing to the neutral semantics of the verb ul-a, it is the only one being used to refer to movement on the ground not by one’s own.33 I mean movement by animals, for instance, a horse, and by transportation (a cart, a carriage, a train, etc.) and motion of such means by themselves; cf. paifonit ‘by a carriage’ / poeziit ‘by a train’ ... meurs and paifoni / poezi meurs ‘a carriage / train goes.’

3.2 A fairly similar situation is in terms of reference to movement in water. ‘n'çur-ua ‘to swim’ is a kind of movement by means of limbs, flippers, fins, body muscles which is primarily essential for creatures living in water (mammals, fish, amphibians); however, the water environment is not unfamiliar for land dwellers – humans and animals, as far as their lives have been tightly connected with the element of water. Therefore, for humans (and for some animals), ‘n'çur-ua ‘to swim’ is a rather widespread and even natural way of movement. In this instance, a human and an animal occur as creatures moving in water environment by themselves, and their movements are referred to by the verb to swim.

However, when it comes to a human’s movement in water by

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33 Alongside with the preverbs preferring a course proper, we may refer to the mi-. Normally, it occurs as a phonetic variant of the preverb me- and, hence, is not considered an independent item [cf. Gudava & Gamkrelidze 2000: 192-193; Kajaia 2001: 59; Danelia 2006: 135]. There is an only instance when it is referred to individually, albeit without any definition (Kartozia et al. 2010: 196); however, there are cases when semantization of the mi- is obvious and it occurs in the function of an independent preverb: miša ‘S/he was going [thither];’ it does carry a sense of deixis (for more details, see 3.1.1.).
means of a certain device or to movement of that device, speakers use both 'nčur-ua 'to swim' (nišit mečuruns 'S/he sails by boat;' niši mečuruns 'A boat sails') and, predominantly, the ula 'to go.'

3.3. The situation is different when it is about flying: for air dwellers, the only kind of motion is purinua 'to fly' which is also used to refer to flying objects' movement, if humans' presence in them is not specially focused: haeroṗłani dabalas mepurinuns 'The plane flies low;' haeroṗłank dus gignmopurines 'The plane flew over us;' etc. However, since, owing to humans' physical abilities, they movement in this environment is possible not by their own force (it is possible by means of a flying object), in most cases, motion by means of them is referred to by the natural item for human movement – ula: haeroṗlanit meurs 'S/he goes by a plane.'

4. **Time of motion.** In Megrelian (resp. Kartvelian languages), the aspectual opposition is instrumental for temporal differences (present, past, future) in a process of motion. The phenomenon in question is a trait characteristic of ancient formation of the Kartvelian languages "when verb conjugation did not imply tense alternations, conjugation was about the encoding of aspect, that is, kinds of a process" (Chikobava 1948: 77). It is variously realized in languages with and without the aorist (Lyons 1978: 332-333). In the Kartvelian languages where the aorist occurs as the third member of the aspectual opposition, an aspectual distinction between the present (resp. Perfect) and the aorist is encoded by means of *continuity-discontinuity* (for a detailed analysis of the issue in question see "Dynamicity and Stativity in Linguistic Representation").

34 If we neglect the instances of a definitely metaphorical usage of the verb ula for flying creatures; cf. ḷoŋnas minulebu maranisā 'A mosquito has got into the wine cellar' (Kip. 127: 9); rašik miđartu haerit zi do zi 'The steed went up into the air higher and higher' (Kip. 97,15); kumortu ḷoron 'A pigeon came' (Kart. 19); cf. kirk kigiopurinu 'The hawk flew down onto [sth].'}
1. Spatial adverbs, as notional linguistic items, refer to direction and orientation, places of localization of motion/movement. Cross-linguistically, their encodings have been significantly various, mainly due to the strategy which, based on geographic, cultural and/or other factors, is used in individual languages when specifying a direction and a place of localization of motion, that is, when selecting a principle of orientation in space.

In linguistics, orientation has been generally treated as a kind of spatial reference presenting a direction and place of localization of motion in relation to positions occupied by other, either mobile or immobile bodies, located in the spatial universe, – to landmarks, that is, to relata. With respect to what kind of a landmark is preferred in the process of encoding, the basic types of orientation – absolute and relative have been distinguished. The spatial analysis, applied in the present work, is based on a notion of a fixed landmark independent of positions of other bodies. Specifically, an orientation is absolute if systems of coordinates use fixed landmarks such as provinces of a country or fixed systems based on some other foundation (Levinson 2003: 31). Natural geomorphological formations may be assumed to be such – mountains, seas; celestial bodies have also been used but not man-made objects: buildings, bridges, and the like, owing to possible access from various sides to places of localization of the latter ones.

Relative systems of landmarks have been based on anthropocentric coordinates encoding a location in accordance with a position occupied by an ego-center, such as: ahead/behind, right/left, above/below, etc. (Levinson op. cit.); both man-made and natural objects, a human body among them, may be used in the function of a relatum.
An intrinsic (canonical in the German linguistics literature) orientation has been a subject to individual treatment; location of a body is specified by a relatum's intrinsic façadity, that is, in relation to its characteristic features as ahead, behind, right, left, etc. sides of an object.

Megrelian attests all kinds of the aforementioned systems. Pertaining adverbs may be considered as oriented ones, as different from simultaneously used individual, independent adverbs (see below).


Based on physical peculiarities of motion and on specific features occurring in their linguistic encoding, the lexico-semantic analysis of adverbs is presented in accordance with horizontal and vertical areas. The following types of relative orientation have been applied in a horizontal area: deictic, anthropocentric (viz., anthropomorphic), intrinsic.

1. Horizontal Area

The basic direction, denoted by adverbs, comprising all directions referring to places of motion/movement and immobility/location (answering the questions: so-, sode 'where,' soude 'where from,' soiša 'where to'), is encoded by an opposition pair višo (< išo) / ašo 'thither / hither.'

1.1. Deictic (personal, egocentric) orientation as a conceptual system is presented by three deictic members; they are: 1. A speaker, grammatically – first person; 2. Place of conversation (here); 3. Time of conversation (now). Among them, the concept place, as well as time are specified only from a speaker's view –
by proximity or distance from it, without considering other locative features (Bühler 2000; Fillmore 1997).

The aforementioned opposition - near / far is semantically presented by the adverbs: tak 'here;' (where a speaker is) / tek 'there,' that is, 'not here' (not where a speaker is). A deictic area is implied in the use of possessive pronouns as well; cf. čkimi, čkini sopeli, maxoroba, oze ... ‘my, our village, home, yard ...,’ that is, an area that may be assumed as a place of his/her being by the first person.

1.1.2. Adverbs, referring to place, occur as deictic pairs and primary, derived and compound adverbs are used;

a) simple, primary – alongside with the adverbs ak / ek ‘here/there,’ there occur their derivatives (without change of meaning) of various complexity: tak, 'a'tak, 'a' tak-ine-še-s, etc. 'here;' ek / tek / 'e'tek / 'e'te-ke-ne-še-s 'there.'

(5) tak cocxals or'ak do tek ūurelepsia. (Pop. Wsd. 1.51)
‘Living ones miss you here, dead ones miss you there.’

(6) atakneše ẕj ab do boši čoro rena. (coll.)
‘Here a girl and a boy are together.’

(7) takneše i'uapuk vara tekinešes doskiduki ar'asot artie. (coll.)
‘Whether you will are here or stay there, it is the same for all.’

b) Gestural deixis is treated with same respect. It specifies a place of bodies’ motion and location from a speaker’s position, however, with a visual factor: how far or near a body is visually located from an egocenter. The following adverbs of place are used in the function of gestures: a-mar ‘over here’/ e-mer ‘over there;’ a former opposition member encodes a place which is closer to a deictic center, while a latter one encodes a place which, being visually within an accessible area, is farther from a deictic center:
(8) *amar gečans kamenia*  
'A chamomile grows well over here.'

(9) *emer mindors sakoneli idiars*  
'Cattle grazes over there, in the field.'

(10) *žir bošenk miniles amari*  
'Two boys went in over here.'

c) A group of adverbs of place may also include those encoding double opposition, making up an opposition both with each other – within a pair (hither/-thither) and with a deictic center – in relation to a speaker (*near* / *far*); they are: 1. The adverbs derived as a result of the combination of the oppositional preverbs *me* / *mo* 'hither/thither' and the adverbial particles *le* (< *la*), *no*: *me-le/mo-le*, *mi-no-x/gi-no-x*. Both pairs refer to a place located on both sides of a certain (either natural or artificial) dividing point – a river, a mountain, a hedge, a road, and the like:

(11) *ččariši mele geedee do ččariši mole gegoskidunia*  
'Best defense is offence.'

(12) *te golaši minox do ginox eperi zigiri nočanue, leši vemšmenţiredua* (coll.)  
'They say, high up and beyond this mountain, there has been such a thorny undergrowth that a needle would not get into.'

However, which side is to be assumed 'hither' and 'thither,' is up to a speaker's position: which one is farther, that is, *mele, ginox* 'on the other side,' and which one is closer, that is, *mole, minox* 'on this side.'

A similar relation is rendered by the deictic adverb *aki-le / viki-le* 'hither / thither.' The opposition pair encodes (in)animate bodies' location in a single row with other ones, on a certain side.
from them, being viewed by a speaker as closer – *akile* 'hither,' or farther as in *vikile* 'thither:"

(13) siava čkimi 'udeša kemurkieva, muačkims *akile* koʒirunk, diačkims *vikileva*. (Khub. 50. 21);

'When you come to my place, you will see my father hither and my mother thither.'

(14) ate mindors ginilenkiada, *akile* ʒgva ʒgura ʒarı kaořxvadu, *vikile* ʒixvepiš golas kimiodirtukia. (coll.)

'When you cross the field, hither you will get to the water like a sea, thither you will come up to a mountain of wild goats.'

1.1.3. There is an approach in the scholarly literature according to which the deictic opposition has been weakened in Megrelian (Gabunia 1993).

One of the causes may be a permanent non-deictic use of the preverb *mo*; I mean instances when the preverb encodes not a motion directed towards a speaker but rather a mobile subject’s movement towards some point:

(15) komortu ʒgvaša

'came to the sea.'

(16) molartu muš saxelmčipoša

'went to his/her kingdom.'

(17) komadirtu muš 'udes

'came up to his/her house,' and the like.

However, the semantics of deixis (*here* vs. *not here*) opens opportunities for the extension of a class of adverbs; specifically:

d) the deictic opposition - *tak/tek* 'here/not here' allows for, by means of other (non-deictic) lexical items with a similar meaning formed as a result of a replacement of a member of the
pair, emergence of new deictic pairs denoting the same opposition, such as tak 'here'/šxvado 'there, elsewhere (not here)':

(18) ukläli čkini bošepi šxvado miišes očaluša. (coll.)

'Our boys were going elsewhere for hunting.'

xolos / šors 'here, near / there, far:'

(19) šors čqoni gečanduni, tiša xološa kemertes. (coll.)

'They came up to the oak standing far away.'

(20) mardoba ġoronts! koči kala vorek xolos. (Kip. 132.15)

'Thank God! I am close to man.'

(21) xološe ma si vagor čqek, šoriše šetmer črank šurs.

(Georgian Oral Lore 1: 132. 235).

'I cannot see you from close up, I will sacrifice my soul to you from afar.'

e) Reduplicated forms of oppositional adverbs of place (with or without the intensifying particle -t) encode widening of a deictic area in both directions - taki-t / teki-t 'here too/there too,' mele/mole 'across thither too/across hither too,' vikile/akile 'hither too/thither too':

(22) lekurk goṭirxu škas do vikile-akile kodol. (Khub. 37.16)

'The sword broke into two and fell here and there.'

(23) lačaciaš ġerze ugu, mele-mole kılourgu.

(Georgian Oral Lore 1: 37.66)

'It has an axis of an acacia, stretching hither and thither.'

f) It is reduplication as well that encodes a paucity of animate creatures, objects, facilities, a sparseness of vegetation at a given place: amar-emer 'here and there,' eki-eki 'here and there.'
bošik ... ‘muši dida’ rašiši ḳudelc keḳaḳiru do eki-eki kimḳasopu. (Kip. 62. 4)
‘The son tied her mother to a horsetail and smashed her here and there.’

bade muḳomidgi mara eki-ek gogipači.
(Georgian Oral Lore I. 173)
‘You set a net for me but I dismantled it here and there.’

amar-emer xolo kore ḩveši ḩata. (Kaj. 11. 83)
‘Here and there old people still exist.’

1.1.4. **Adverbs of direction encode:**

a) Direction of motion/movement of bodies by means of adverbs referring to direction proper: ‘v'išo / ašo ’hither/thither,’ taure / ‘a’taure – še ’from here thither,’ teure / ‘e'teure - še’’from there hither,’ miḳi/moḳi (>muḳi) ’thither/hither,’ etc.

b) By means of attaching the Ablative case marker še to adverbs: mele-še / mole-še ’from across thither/from across hither,’ etc., this considerably increasing the number of the adverbs in question:

(27) ašo žica-žicat mo’undesia, višo ngarat vera’ua.
(Pop. Wsd. 1. 16. 98)
‘They brought them hither laughing, but could not drive them thither crying.’

c) Reduplication of adverbs causes modification of their meanings in various ways: reduplication of simple (without vowel change) adverbs of direction (with or without the intensifying particle -t) widens a distance in a single direction – višo-višo ’thither-thither,’ ašo- ašo ’hither-hither’:

(28) tekiani doċqapilo ašo-ašo gutmoludas teši. (Khub. 36. 36-37)
‘so that, having begun from there, it would throw [them] hither-hither.’
d) Reduplicated forms (with or without the intensifying particle -t) of vowel-alternating adverbs of direction encode widening of an area of motion in both directions: višo‘t’-ašo‘t’ ‘thither (too)+hither (too),’ taure-teure from here (too)+from there (too)’:

(29)  taure-teure gileçarçalu. (coll.)
      ‘S/he/it prowls about.’

(30)  [...] koğunapun do mukā·mukā gousku [...].(Kip. 62. 21-22)
      ‘[...] has led and besieged [...]’

1.2.1. In a horizontal area, except a deictic one, Megrelian abounds in other types of relative orientation: anthropocentric and intrinsic.

In case of an anthropocentric orientation, a place of localization of bodies is specified in relation to a human; however, here an area is described in analogy with the arrangement of body parts. The principle in question was taken over objects whose construction allows for identification of pertaining parts of a human body: front, rear, lateral sides.

1.2.2. In case of an anthropocentric orientation too, a direction of motion and a place of localization are encoded both by oppositional pairs and independent adverbs.

a) Oppositional adverbs: āxole ‘in front’ – a side where body parts are located - _CIDIRI  `breast,’  kora /kvara  `belly;’  ukaxale ‘behind’ – an opposite direction, where a back is – očši, opare ‘a back’:  

(31)  gaçirebas  Ĵgiri mezobeli vemgoçens, opares vagortinuans.  
      (coll.)
      ‘When you are in need, a good neighbor will not abandon you, will not turn their back to you.’
(32)  ṭoxole  očši do  ṭukaxale kvara.  (Kip. 184. 10)

'The back is ahead and the belly is behind.' (riddle: ‘a shin’)

(33)  ‘cirak’ ate  ‘udeši  ṭoxole  gel’onu arti źa. (Khub. 60. 15)

'The girl grew a tree in front of the house.'

(34)  [...] źiri  żoţorepi ... kek’una  ṭukaxale.  (Khub. 65. 15-16)

'[...] Two dogs ... follow.'

b) The direction in question is also encoded by individual
independent adverbs:  čimii  ‘ahead,’  kńox  ‘behind.’

(35)  źumaţinu  čimii  do  koţırı arti koči...  (Kip. 13. 11)

'S/he looked ahead and saw a man.'

(36)  čkver  koči  iro  čimii  iţine.  (coll.)

‘A clever man always looks ahead.’

(37)  kugašinu, te kočи xut čanaš  kńox apudu  nazirepuni.  (coll.)

‘S/he remembered the man whom s/he saw five years ago.’

c) Adverbs encode a direction of motion and a place of
localization without an oppositional pair, only on one side;
difference is conveyed by other adverbs:

1.2.3. The adverbs  ole  /  xasilas  /  ganiše  ‘beside’ encode only
a definite place of localization – ‘beside someone, something;’ a
specific side is distinguished by means of different adverbs:
marǔgvaniše  ‘to the right, from the right’  /  kvarčxaniše  ‘to the
left, from the left’:

a) used only for an area in immediate adjacency to a relatum:

(38)  diaras  sode  močqudus  daxunuatun,  tek  ole  kodomixunet...

(Khub. 18.32)

‘In the wedding party, where you seat the bride, there seat
[this woman] beside me.’

64
(39)  unčaši  boši xasilas kilerinuu.  

    (Georgian Oral Lore II. 522)  
    'S/he set his/her elder son beside himself/herself.'

b) škas - 'a place between two objects':

(40)  tiš uʒguši  çaš do dixaš škas muta debadebdu. (Kip. 82. 1-2)  
    'Nobody would be born between the heaven and the earth.'
    škabanias - 'middle, center of a bulky body, area':

(41)  eše elə̄̄nesuni, škabandixas ginoxorxili‘ope te čqoni. (Khub. 3. 4)  
    'When they looked up, the oak was stuck in the middle.'

c) ganmiki  'aside,' fig.,'away'

(42)  ti kučas art meʒobeli ganmike oxorans.  
    'In that street, one neighbor lives some distance away.'

Alongside with oriented adverbs, oral speech abounds in their semantic variants not implying a relation to any landmark. Same adverbs (however, insignificantly modified) render only a geometrical and topological characteristics of the same direction and the same place; cf.:

(43)  bošik gourku do oromes dini ki-dna (<dino)-sxaを迎.  
    'The boy rushed and jumped into the pit.'

(44)  bošik  minif(< mino)-ilu mini xenčpeši ozeša  
    'S/he went into the king's courtyard.'

(45)  mešarek giğinu, miği̯nu do  çımi  
    gamçoDIRTU  (< ga-miço /čimo -DIRTU).  
    'The passenger looked thither and yon and stood up.'

    Their use is rather emphatic in character, underlining an importance of a subject's motion.
1.3. (Intrinsic) Adverbs encode a direction of motion and a location of a body with respect to a (either mobile or immobile) relatum (Fillmore 1997; Klein 2009). They are lexically conveyed both by oppositional pairs and independent adverbs. The latter ones usually occur either with verb forms, encoding motion and orientation, and, reiterating a meaning conveyed by adverbs, serve as an emphasis, or occur independently encoding only a direction, without any relationship to a landmark.

A scenario of the spatial distribution of adverbs is rather complicated in Megrelian: dinaxale / milaxale / munaxale / mimaxale / mitaxale / mišaxale ‘inside’ / gale ‘outside’: 1. A bulky, circumscribed area (a stomach, a building, a forest, a yard, a pit, etc.) and to enter / to leave (dynamics) such an area or 2. To be inside it. Among the aforementioned adverbs – milaxale, minaxale, mimaxale are synonymic forms, predominantly encoding entering a yard, a house, a room, etc., such a bulky area, and leaving it is conveyed by a common form gimula ‘to get out’.

Dinaxale / gale encode a direction inwards/outwards (dynamics) or being in a different area (stativity). Alongside with the aforementioned process, a topological characteristics of a given area is provided, being encoded by distinct preverbs; there are three roots: 1. minaxale (synonymic variants) – ‘a circumscribed, hedged area, a house, a room; 2. mitaxale – under something narrow; mišaxale – a tight area – a crowd, a forest, a cornfield, water, etc., to enter/to leave and to be in such an area.

(46) mimeles dinaxale ‘udeša’ do ičiebuna. (Khub. 20. 9)
‘They went into [the house] and are talking.’

(47) xanṭep ... kodoskiduna minaxale.
‘The icons ... will stay inside.”

(48) toliš dovalapazuma xanc ťaši mitaxale gorčkindu. (Kip. 79.26)
‘In a twinkling of an eye, s/he went into in the forest.’

66
(49)  The girl sewed a pillow and put the bone into it.

mišaxale, mišax ‘into,’ miše, milaxiše ‘from inside,’ minox ‘inside,’ ginox ‘across thither,’ mini ‘inside,’ mine(l)/ minoli (adj.) ‘entrance,’ mite ‘beneath and inside sth,’ mito(l) (adj.) ‘entrance under sth,’ mini-mini / mine-mine ‘under-under,’ giše ‘from the center,’ gišali (adj.) ‘exit from the center,’ minox ‘thither, inside.’

A process of leaving an area is encoded by means of an ablative case form of the adverbs in question. Alongside with the processes of entering/leaving and being, topological features of the area are also encoded.

Another member of the opposition - gale ‘outside,’ as a free, irrelevant area does not provide a basis for a similar semantic differentiation, only location/stativity are encoded and is devoid of a similar topological characteristics:

(50)  Whatever s/he finds outside the yard, s/he throws everything into the pit.

2. The opposite of the process of entering an area – that of leaving is encoded by ablative case forms either of the aforementioned adverbs or of words denoting an adverbial modifier of place:

(51)  I will turn into… iron and will get myself laid over the entrance door upstairs.

(52)  S/he plastered the thatched wattle hut with red soil mud inside and outside.
(53) skuak kobals škaše gagšuğ guri.
   'The child took out a crumb from inside the loaf.'

   The reduplicated preverbs - miḳi-moḳi, miḳi-miḳi, mika-mike, muḳi-muḳi encode a new meaning 'around':

(54) te ezos miḳi-miḳi kuaši xibiri gu-'unsi. (Kh. 7. 21)
   'The yard is surrounded by a stone fence.'

(55) ...muḳi-muḳi mosan ḡvreepi ndemepi'undu. (Kh. 11. 17)
   'His/her neighbors around were ogres.'

3. Beside spatial ones, adverbs pertaining to other semantic groups also participate in linguistic construction of space:

   a) relative: sodeti, solegida 'where'

(56) sodet ḡoberi suṣṭi ren, sakoneli tek minursia. (Pop. Wsd. 1: 124)
   'Where a fence is weak, cattle will go into there.'

(57) uḳuli solegida idasuni, čkimi 'udeša
   Kumursi. (Kh. 59. 15)
   'Wherever s/he goes then, s/he will come to my home.'

b) indefinite: artdixas 'someplace,' mitinedixas 'somewhither,' sodga, sodgareni, sodgeni 'somewhere,' sotini 'somewhere':

(58) /bošik/ šors sogideni dačxiriši
    sinte koẓiru. (GOL 1: 14. 2-3)
    '[The boy] saw a light of fire somewhere far away.'

(59) sodgareni viri abazi ḡirudu... (Pop. Wsd. 1: 43)
    'Where a donkey cost twenty kopecks...'

As for independent adverbs, they usually occur in combination with verb forms encoding motion (and orientation) and, while reiterating a meaning encoded by preverbs, convey
emphasis; when used independently, they encode only a direction without relating to any landmark.

2. **Vertical Area**

Owing to a specific environment being due to gravity, a common picture of spatial relations in a vertical area has also changed: the basic direction, specifying a place of motion/movement and localization of bodies, is *eše / gime* 'up/down.' A direction is encoded by oppositional pairs of the anthropocentric adverbs –*eše / ži* 'from below upwards' (in the direction of one’s head) and *gime / tudo* 'from above downwards' (in the direction of one’s legs). In both cases, *vertical and inclined* trajectories are distinguished. In Megrelian, the *ži / tudo* vertical area is represented as two linguistically encoded areas (lexically, *-žini/tudoni ke ḡana* 'upper/lower world'), being specified in relation to *absolute landmarks – land and water surfaces* (which is natural for residents of a coastal area and is proved by the use of common means referring to space). An area, attached to the aforementioned landmarks from above, is encoded by the adverbs: *ži / ži-do / ži-do-le* 'up, above, and an area, located beneath oriented surfaces, is encoded by the adverbs: *tudo / tudo-le* 'down, below.'

(60)  ḡoni Ži koka ‘ope. (Khub. 3. 7)
  'The oak-tree appeared to have been ripped above.'

(61)  gaḳetes ḡibe do ešeles eše (Khub. 3. 6)
  'They made a ladder and went up.'

(62)  taš žimole do taš tudole ... tiš xeš tudo re. (Aia, 1. pp. 23)
  Thus above and thus down... is in his/her hands.”

(63)  atak *tudole kaḵašgura ḡari gitsmuru. (Khub. 8. 10)
  'Here, downwards, clean spring water runs down.'
2.1. The entire path of motion/movement in a vertical area, from a beginning to an end, is represented as two linguistically encoded stages. They reveal both common features, characteristic of vertical motion at large, and distinctions being due to the division into immediately above/below areas and to physical properties of motion/movement in vertical/inclined directions.

a) The first stage of the eše > iše / ži ‘upwards, above’ vertical motion (answering the question soure ‘where from’) is represented as a process having started from an underground area (according to preverbs – tudo / tudole), that is, from the nether world, an abyss, a sear-floor, a pit, a well, etc. In such an instance, a starting area of motion is grammatically encoded, by means of an ablative form substantives acting as adverbial modifiers marked by the -še. This kind of motion is directed towards an oriented (earth, water) surface and ends after climbing the surface. It is lexically conveyed by the preverb eša- ‘upwards, above’ (resp. Ge. amo-).

b) The second, visually more or less accessible stage of motion begins either from a natural starting (earth, water) surface or from any conditional, oriented surface (a roof of a building, a floor, a table, etc.) which may occur in the function of a landmark and will be directed eše > / -iše, ži ‘upwards,’ that is, to an end of motion (answering the question so ‘where to’); it is encoded by the preverb eša- , this time, marked by the allative -ša:

(64) mitiniši cxens ve-eša-sxaµu ži źixuri-ša. (Kip. 46. 15)

‘Nobody’s horse could jump up on the tower.’

2.2. There is a different situation when we deal with a movement from below upwards along an inclined surface. At both stages, the direction of motion eše / ži is encoded by the
adverb *eḳi* ‘above, upwards’ and the preverb *eko- ‘above, upwards;’ however, the stages are not distinguished grammatically.

a) At the initial stage of motion, an allative case form (the marker -*ša*) encodes to get out over an oriented surface from the water, that’s is, on a shore (resp. Ge. amo-): *eko-nčurua* ‘to swim up to a shore,’ *eko-’otama* ‘to throw sth onto a shore/bank’ (from the sea, a lake, a river, etc.), to get onto an oriented surface: *ż̕vaše ekula* ‘to get out from the sea;’ Where from? Verb forms demonstrate that an end point of the initial stage is implied:

(65) /ṭarielk/ gevončuru ż̕vaša. (Kip. 103. 27)
‘Tariel swam up to the shore.’

(66) xristagank... gourku do ekielu melen žgas. (Kip. 89. 25)
‘Kristagan... swam and went up the the shore across.’

b) At the second stage of motion, beginning on land as an oriented surface, the adverb *eḳi* and the preverb *eko-* denote to go up from this surface eše, ži ‘upwards,’ uphill, on an inclined surface. This motion too is grammatically encoded by an allative form: *eko-ula-* (< *eko-ula*) ‘to go uphill,’ *eko-rula* ‘to run uphill,’ *eko-γala* ‘to take sth uphill’:

(67) ẓ̕jar ekj/ eke meursia- kotkuansini, getuua. (coll.)
‘Water flows upwards – if s/he says that is all.’

c) As for a place of bodies’ localization when moving on an inclined surface from below upwards, it is attested only on a natural starting surface – in a lower area *tudo* ‘below’: *eko-rina* ‘to stand by a shore,’ *eko-xuna* ‘to sit on a shore,’ *eko-juvena* ‘to be put on a shore.’

Since the starting surface in question is simultaneously a part of a horizontal area as well, the preverb *eko-* was used in the
common area but with a modified meaning: 'to follow, to go after' (see the discussion of preverbs).

2.1.2 Motion from above downwards. Motion in this direction copies a path of a motion from below upwards; however, as different from it, stages of motion are encoded both lexically – by means of different adverbs and preverbs, and grammatically – by means of different case forms; specifically, an opposite direction of motion – gime / tudo 'below,' encoded by the adverb esë, complies with the following pattern:

a) In case of an inclined motion, the initial stage – gime starts somewhere above an oriented surface and proceeds downwards: from the sky, clouds, a mountain, etc., mostly from a lateral part of a certain object: a tree, a roof, etc., and ends on the same surface. It is encoded by the preverb gila- (< gila > ila) and an ablative form of a noun. A motion is performed in two stages: the initial stage denotes a beginning of motion from an above point till an oriented surface (encoded by the case marker -šê).

(68) žiše gegalu do tudo kudolu.
'S/he/it fell from above and dropped down.'

b) The second stage involves a motion directed from any oriented surface downwards, within some circumscribed depth; the adverbs dini and tudo and the preverb dino- (>ino) 'below, downwards' are used in combination with an allative form (the marker ša-):

(69) kidn‡otes çôoniši kokas didi kua dini. (Khub.3.8)
'They dropped a big stone into the hollow of the oak-tree.'

Stativity, as a localization process, is encoded at both a higher, beginning and a lower, ending portions: in a higher portions, a place of localization is encoded by the preverb gila< gela which, in these specific instances, conveys the meanings of
to be, to stand, to lie, to sit, to be put in a certain high place, frequently, beside (for details, see Dynamicity-Stativity);

2.3. Limited forms of motion are also attested in a vertical area, which, according to their direction and position occupied in space, may be considered as a beginning and end of motion; however, as different from similar portions of a horizontal area, they are not viewed as constituents of a complete cycle: motion with both vertical and inclined trajectories takes place only in the tudo ‘down’ visual area, on an oriented surfaces.

a) The direction of a vertical motion from below upwards till an oriented surface and appearance from a surface is conveyed by the adverb -eše. As for distancing from an oriented surface, it is encoded by an ablative form (marker -še). However, the preverb is eša- substituted by another one, this being caused by the change of the phase structure of motion: a motion, directed from below upwards, is encoded by the preverb e- which conveys only a beginning of motion – appearance on a surface: e-palua ‘to arise,’ e-ula ‘to grow (of plants: grass, bush, tree),’ ‘emergence but not further growth;’ figuratively – of hair, beard and moustache, teeth; it also implies departure from a surface, a beginning of a motion directed upwards: e-lapa ‘to rush upwards,’ e-purinua ‘to fly upwards,’ e-sxaṗua ‘to jump up,’ e- onapa ‘to take up sb,’ e-ćopua ‘to take up sth,’ e-kīna ‘to lift.’

To conclude, in Megrelian, spatial adverbs, as notional linguistic items, denote: 1. direction of bodies’ motion/movement in space (dynamics); 2. place of localization of objects (stativity). In terms of the form, three models have been distinguished: basic (occurring as a stem), derived by means of case markers, particles, derivational affixes, and complex – by means of reduplication. Formal structures of adverbs reflect their semantic structures and include information about a direction of motion, localization of a body, a
point of departure, arrangement of bodies in space, orientation
(deictic, anthropomorphic, anthropocentric, intrinsic), widening
and narrowing of space, visualization; their encoding seems to
have been caused by the strategy which is based on geographic,
cultural and/or other factors, their use in individual languages
when specifying a direction of motion and a place of localization,
that is, when selecting principles of orientation in space. Physical
properties of bodies’ motion and immobility in space and
peculiarities of their linguistic representation make it necessary
to characterize adverbs semantically and grammatically,
according to horizontal and vertical areas, in relation to a
landmark or without it.

The analysis of the Megrelian data has revealed both
common and distinctive properties of adverbs and preverbs. It is
primarily about their functions. Both of them in fact serve one
and the same objective – representation of spatial relations.
Alongside with their functional commonness, their physical
sameness is evident as well. These have caused to state an issue
of their interrelationship, this having immediately led to the
unambiguous finding: preverbs have been developed from
adverbs.
PART TWO

Rusudan GERSAMIA

SPACE AND MOTION IN LANGUAGE REPRESENTATION

(Analysis of Laz Linguistic Data)
1. The prefixal morphology of motion verbs

The morphological structure of the Laz verb is a rather complex agglutinating string, sequencing both prefixes and suffixes encoding various grammatical categories and modal particles and grammaticalized auxiliary verbs – morphemes encoding the Future Tense and Resultative, functionally differing particles; a verbal root is a minimum morpheme semantically encoding structuring concepts unarguably associated with specific meanings. A verbal stem, not coinciding with a root, is a structuring entity with more morpho-syntactic information.

Quantity and functional qualifications of the verbal prefixal system are essentially homogeneous. In that sequence, spatial meanings are encoding only in preverbs and partially in versionizers; the semantics of a verbal form of motion is referenced by causation and voice (resp. in the meanings of potential) markers, because the former denotes a transfer (with the help of somebody else) and causal (coercive) movement while the latter denotes volition of motion (ability of a subject / moving figure or qualitativeness of an object or an area).

With a sequence of preverbs (broadly speaking), an initial position is occupied by an affirmative particle ko-, which is a grammaticalized element in Laz, as different from its negative counterpart var || > va, whose process of grammaticalization, notwithstanding the deletable sonorant, has not been completed. I mean that the particle has gradually eroded; however, it is not a proclitic element (as it is in Megrelian); neither is it of a modal function; it only conveys negative modality.

35 Scholars have not been unanimous about the number and composition of morphemes located to the left and to the right of Laz verbs (Holisky 1991; Lacroix 2009; Kutscher 2011; Asatiani 2011; Asatiani 2018; Pazar laz 2011); this is particularly true of suffixal morphemes.
As for the affirmative, it merges with a following element (a simple, locative, or compound preverb) so frequently that its original version is hardly identifiable in the prefixal structure of a verbal form.

According to the ranking chart of morphemes, all of the preverbs pertain to Slot (-3); however, the three of them - o-, do-, menda- have been considered to have dual functions; there are contexts according to which their function is to encode spatial relations, albeit, in some of them, they do not render these relations, and, therefore, occur as affirmatives (Lacroix 2009: 260). Some scholars group them into Slot (-4) referring to them as ‘homophonic analogues;’ they also occur as spatial prefixes (Pazar laz 2011: 95-96). The aforementioned is based on data of the Pazar and Arhavi dialects.

Among the aforementioned, the distributions of the preverbs o- and menda- are rather limited being combined only with a handful of verbal roots:

Arhavi:

- o-bonṭalam 'I mix'
- o-bobšamt 'We fill' (Lacroix 2009: 429-430).

Pazar:

- o-imxors 'S/he eats'
- o-budvi 'I closed [the eyes]'  
tolepe obudvi36 'I closed the eyes’ (Pazar Laz, 2011: 96-99).

All the aforementioned forms, except (2), pertain to either the Present or the Future tense:

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36 cf. Stative form o-u.ʒi-n 's/he has closed his/her eyes' / o-m-i.ʒi-n 'I have closed my eyes' (Sarpi data: Asatiani 2012: 334).
(1a)  kat’a  čana-s
every(NOM) year-DAT
o-b-o-pš-am-t.37
PRV-S1-APPL-to fill-THM-1/2PL(FUT)
’We will fill [it] every year.’

(1b)  ma  lu  do  xaǯi
I(NOM) edible greens(NOM) and bean(NOM)
o-b-o-nțal-am
PRV-S1-APPL-to mix-THM(FUT)
’I will mix edible greens and beans.’

(1c)  o-i-mxor-s
PRV-APPL-to eat-PRS.S3SG
’S/he eats.’

(2)  ma  tol-ep-i  o-b-u-dv-i
I(NOM) eye-PL-NOM PRV-S1-APPL-to close-PM:AOR
’I closed my eyes.’

The preverb o- “is not able to encode direction and predominantly derives perfective aspectual forms” (Kiria et al. 2015: 376); however, the fact, that it can be used as an affirmative, is illustrated by (2)38 and by the scarce list below exhausting its distributional area:

37 Both patterns maintain the morphology of the ones with the same meanings in Georgian:
   a-v-a-vs-eb-t  ‘We will fill’
   PRV-S1-APPL-R-THM-1/2PL
   a-v-u-r-ev-t  ‘We will mix’
   PRV-S1-APPL-R-THM-1/2PL

38 In Pazar Laz, the o- does not at all occur in the function of a spatial prefix (Pazar Laz 2011: 99); it means that it is only an affirmative.
The preverb *menda-* is similarly limited in combining with verbal roots; however, it actively combines with roots of motion specifying a direction of motion, distancing from the deictic center:

- **xt-** ‘to go, to leave’
- **čkv-/ škv-/ škv-** ‘to send sb’
- **ężon-** ‘to send sth’
- **ǭ- / mer-** ‘to take sth’
- **ǭon-** ‘to take sb’

The **do-** is a preverb actively involved in the encoding of spatial relations being productive in terms of combining with roots. Structurally, the simple preverb specifies a direction from above downwards onto a wide spatial surface (cf. meaning of the preverb *ge-*); it also has another meaning which is associated with space. Some scholars believe that it has an affirmative function (Lacroix 2009: 436, 438; Pazar laz 2011: 97). It should also be noted that in combination with the stative verbal roots referring to a position -- **xed-** ‘to sit,’ **dgin-** ‘to stand,’ **dval-** ‘to put,’ **n-ǭr-** ‘to lie down, to go to bed,’ the preverb **do-** acquires a dynamization function retaining features of the same area possessed when taken on by roots referring to motion/movement. The provision in question cannot be extended from verbs of motion to the verb *nčvir-*, and the **do-** occurs with an affirmative function: **inčvir** (PRS.S3SG) ‘S/he swims’ - **d-inčvir** (FUT.S3SG) ‘S/he will swim’ - **d-inčviru** (AOR.S3SG) ‘S/he swam.’
As different from the preverb do-, the o- and menda- may be assumed to have an affirmative function based on some arguments; specifically,

1. They do not occur in a string with the ko-, that is, the sequence *ko-o-, *ko-menda- cannot be assumed (ko-do- can be assumed).

2. Based on the rule, verbs of motion/movement (except those referring to to fly and to swim) take on a preverb right in the Present, thus encoding a directed motion; on the contrary, the preverbs o- and menda- occur in the Future and Aorist: putxun (PRS.S3SG) ‘S/he/it flies’ - o-putxun (FUT.S3SG) ‘S/he/it will fly’ - o-putx-u ‘S/he/it flew’ (AOR.S3SG);39 as for the menda-, it alternates with preverbs in combination with verbal roots referring to to go in the Present, as well as the Future and Aorist: me-vulur (PRS.S1SG) ‘I go’ - menda-vulur (FUT.S1SG) ‘I will go’ - menda-pty (AOR.S1SG) ‘I went.’

The negative particle va-, which, as different from Megrelian, is not grammaticalized and never occurs in combination with an affirmative in Laz, normally occurs in combination with the preverbs o- and menda-; this is also different from Megrelian:

(3) va o-b-o-bš-am-t ‘We will not fill’
    NEG PRV-S1-APPL-to fill-THM-1/2PL

(4) va o-b-o-nšal-am ‘I will not mix’
    NEG PRV-S1-APPL-to mix-THM

The Laz examples demonstrate that, owing to their opposite meanings, the particles va- and ko- occur in a mutually exclusive

39 cf. referring to a directed motion menda-putxun ‘S/he/it will fly,’ menda-putxu ‘S/he/it will flew.’
way either in a verb form or prior to a verb form.\textsuperscript{40} Examples of the sequence $\{va \ ko\}$ are not evidenced in Laz, except a single instance attested by G. Kartozia published in a text in 1972.\textsuperscript{41}

(5) \footnotesize\textsuperscript{93} \textit{kapadağı-ş} \textit{var} \textit{menda-xt-}=ia (Kart. I. 132)

\begin{center}
\textbf{Kafdağ-ALL \ \textit{NEG \ PRV-to go-OPT}=DR}
\end{center}

‘That you would be able to go to Kafdağ.’

Its comparison with Megrelian yields in a considerable difference; specifically, in Megrelian, the sequence \textit{NEG-AFF} makes up an entire system; it is assumed almost for all verbs which can take on the \textit{ko}; the system also assumes the sequences \textit{NEG-PRV}: \textit{va-o-}, \textit{va-menda-}, \textit{va-do-}, etc. (in combination with a number of other preverbs), albeit with one distinction: verb patterns of such a structure necessarily take on the enclitic (discourse) particle \textit{-o}: \textit{va-}[$o\textsuperscript{-}\#\textit{komu}=o$], \textit{va-}[$\textit{mida}rtu=o$], \textit{va-}[$\textit{ko-mortu}=o$]. I consider such examples to be \textit{gradual structured patterns}:

\begin{enumerate}
\item \textit{\{AFF=PRV-R-AOR=QP\}} or \textit{\{NEG}=PRV-R-AOR=QP\})
\item \textit{\{NEG=\{AFF=PRV-R-AOR=QP\}}\textsuperscript{42}
\end{enumerate}

This implies that the particle \textit{va-} is taken by the entire pattern, a form with an interrogative particle proper, resulting in an \textit{unexpected} verbal structure and same semantics (Gersamia 2017), which has been treated in linguistics as “compatibility of incompatibles” (Rostovtsev-Popiel 2011): the form \textit{vakomortuo}

\textsuperscript{40} cf. Megrelian, in which the particle \textit{va-} is considered an element of a verbal structure and, according to the morpheme ranking, falls within the rank of the particle \textit{ko-} (Gudava & Gamkrelidze 1981), irrespective of the fact that its (\textit{va-}) grammatical functions have not been well-shaped, as different from those of the particle \textit{ko-} (Gersamia 2017).

\textsuperscript{41} This example is also cited by R. Lacroix (2009: 438, ex. \{1062\}).

\textsuperscript{42} Theoretically, this pattern may also be assumed as \textit{\{NEG=\{NEG=PRV-R-AOR=QP\}}\textsuperscript{42}, this being confirmed by our fieldwork; however, the problem in point needs further research.
encodes that the action has been performed notwithstanding the assumption that it would not be performed. Such examples render an unexpectedly performed action by an actor, that is, by a subject, an action which was not expected to and should not be performed. In such patterns, modality of affirmative, and not of negative, is essential.

2. Conceptual structure of verb root in Laz

The nucleus of the verb root in Laz is a radical morpheme to the right and to the left of which there are representants, that is, prefixal and suffixal morphemes. The root proper is not a morpho-syntactic entity but rather a minimum morpheme, a non-structural element, and differs from the stem which is a divisible, structural, morpho-syntactic entity (cf. Shanidze 1980); In Laz, encoding of meaning is related both to the stem and the root (Nebieridze 1991: 142); however, these meanings differ: the root has a conceptual structure, and meanings, rendered by roots, are concepts which, with respect to the verbs of motion/movement in Kartvelian languages, have the significant general features as

I. Kind of Motion/Manner of Motion
II. Dynamicity and Stativity
III. Subject of Motion/Moving Figure
IV. Volition
V. Tempo of Motion
VI. Aspect and Tense (Kobalava 2015).

A lexical meaning of a stem is configured by representants, functional satellites, located around a root and, within an
individual verb construct, providing for conveying of individual lexical and grammatical meanings.

Radical morphemes of verbs of motion are neutral in terms of individual locative markers of motion (direction of motion, orientation, deixis, reference, place of localization, topology, visualization, etc.); this function is performed by satellites, located around the root, mostly, prefixal morphemes – preverbs. The principal verb form referring to motion/movement, that is, to go/to walk, occurs in Laz as parallel stems being distributed across dialect varieties of Laz (6a), (6b), (6c):

(6a) *xt-im-a /o-xt-im-u* ‘to go, to leave’ (Hopa dialect)

R-THM-MSD / MSD1-R-THM-MSD1

(6b) *ul-u (<vol>) ‘to go, to travel’/ o-l-u ‘to go’

R-MSD1 / MSD1-R-MSD1

(6c) *o-lv-a || o-lv-ap-a ‘to leave’* (Vits., Arhav., Ardash. dialects)

MSD1-R-MSD1 || MSD1-R-THM-MSD1

The verb form is homogenous, that is, common for all dialects:

\[ n-ul-u-n < me-ul-u-n ‘(S/he) goes’ \]

PRV-R-THM-PRS.S3SG

I. Manner of Motion (Talmy 1985) /

Kind of Motion (I. Kobalava).44

Differences among kinds of motion have been essentially conditioned, on the one hand, by the habitat of a subject – land, water, air, and, on the other, by biological features of an organism, relevant to the habitat. This is primarily about motions

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44 The Kartvelian languages, and Laz, among them, evidence diverse classes of motion/movement verbs which, alongside with a neutral semantic component (of motion/movement), contain additional semes refer various manners of subject motion; in Kartvelian linguistics, they are associated with the terms *manner of motion* and *manner verbs* (Gersamia et al. 2016).
per se; specifically, olu / olva[pə] / oxtimu 'to go' is a motion defining the principal kind of human movement or overland movement of animals. This is the feature by means of which the motion, rendered by the roots l-/ xt-, differs from those of referring to the motion in water and in air:

<table>
<thead>
<tr>
<th>Land</th>
<th>Water</th>
<th>Air</th>
</tr>
</thead>
<tbody>
<tr>
<td>o-xt-im-u</td>
<td>o-nčvi[r]-u</td>
<td>o-putx-in-u</td>
</tr>
<tr>
<td>MSD1-R-THM-MSD1</td>
<td>MSD1-R-MSD1</td>
<td>MSD1-R-THM-MSD1</td>
</tr>
</tbody>
</table>

II. Dynamicity and Staticity

Dynamicity and stativity are rather significant features of motion/movement and immobility/position; they are related to universal forms of the physical presence of bodies in space – motion and immobility. The conceptual opposition is lexicalized by means of verb roots referring to the kinds (Talmy: manners) of motion (movement: to go, to swim, to fly) and immobility (position: to stand, to lie, to sit). However, the same roots are neutral in terms of their treatment according to direction, orientation (deixis) and reference, topology of place of motion. All of these features occur beyond the root as satellites – preverbs and adverbs, either included in the stem structure or occurring even outside it.

III. Figure (Talmy 1985) / Subject of Motion (I. Kobalava)

According to L. Talmy's definition, a figure is "the object which is considered as moving or located with respect to another object" (Talmy 2000). I. Kobalava views a figure as a subject of motion, which may be either an animate or inanimate (active vs. inactive) organism, a physical phenomenon. Such an opposition plays a significant role in the semantic organization of the nominal and verbal lexis of Laz as of the language with some features of active typology (Kobalava 2015: 496). An animate or active subject is denoted by substantives whose referents are characterized by
vital activity, whereas subjects, which are devoid of such activity, are considered among lexico-semantic classes referring to inactive nature (Klimov 1974: 83-84; Kortava 2008: 65).

Judging from the aforementioned, the class of animates in Laz incorporates humans, animals, and plants. Among them, same verbs (7a) are mostly used to refer to the motion per se, viz., by humans and animals, that is, animates:

(7a)  \[\text{koc}i / \text{jo}g\text{o}i \text{nulun (V:PRS.S3SG)}\]
     \[\text{A man / dog goes.}\]

(7b)  \[\text{koc}i / \text{jo}g\text{o}i \text{nunkapun (V:PRS.S3SG)}\]
     \[\text{A man / dog runs.}\]

With the said features, humans and animals are opposed to plants, and transfer verbs are used to refer to their horizontal movement: \[\text{o}\text{g}\text{alu} / \text{o}\text{g}\text{malu} / \text{omalu (MSD) }\text{to take (away)}\]; in this case, a plant is devoid of a vitality and moves from the class of animates to that of inanimates:

(8a)  \[\text{n\text{\=a} nimenan} / \text{nime}l\text{an (V:PRS.S3PL)}\]
     \[\text{The tree is taken (away) [inanimate].}\]

(8b)  \[\text{n\text{\=a} mendi}\text{\=ges} / \text{mendi}\text{\=ges (V:AOR.S3PL)}\]
     \[\text{The tree was taken (away) [inanimate].}\]

cf.

(8c)  \[\text{koc}i / \text{jo}g\text{o}i \text{n}\text{\=onu}p\text{\=s (V:PRS.S3PL)}\]
     \[\text{S/he takes (away) a man / dog.}\]

(8d)  \[\text{koc}i / \text{jo}g\text{o}i \text{mendi}\text{\=onu} (V:AOR.S3PL)\]
     \[\text{S/he took (away) a man / dog.}\]

The root, referring to the vertical direction, is related to the corresponding forms of the Georgian root \text{val-/svl-} ‘to go,’ which are common both for animate and inanimate and for living and
nonliving entities: *extimu* ‘to come up hither,’ *ešaxtimu* ‘to come up thither’:

(9)  lazuṭi / puḫišgiari / šuğa *kextu* (V:AOR:S3SG) dixaše.
    ‘Maize / grass / cucumber grew from the earth.’

Plants are not able to move independently; however, they demonstrate other vital activities, manifested, on the one hand, by biologically prolific vital processes (sprouting, nutrition, growth, insemination of cells by opposite sexes), and, on the other, lexically, which is particularly significant from the linguistic point of view (Tsulaia 2018); particularly, for reference to the sprouting and further growth of plants, there are specific words related both to living organisms, at large, and to the specific lexis denoting the vital circle of plants:

*ordu* (MSD) "to grow"

*ğa* ‘a tree’
*bere* ‘a child’
*vogoi* ‘a dog’
*vakeli* ‘a bullock’

\{ *eša-xtim-u/e-xtim-u* (MSD) 'sprouting'
    *pirua* (MSD) 'blossoming'
    *canapa* (MSD) 'bearing fruit'
    *omži[r]-u* (MSD) 'wilting'
    *oxomin-u* (MSD) 'desiccating' = death
\}

In Laz, the semantic category of subject is grammatically encoded by subject and object person and number markers, which occur in one and the same position within the verb stem.
III. Volition (Transfer verbs).

The root provides information about how a motion proceeds: at will by the subject or with other’s help\(^{45}\). Hence, both roots, referring to motion, and the Figure / Subjects of motion are distinct. In the first instance (10), the motion/movement, performed immediately by the subject of motion, is encoded by forms of an intransitive verb:

(10) ñoči  gzas  n-ul-u-n
    man(NOM)  road.DAT  PRV-go-THM-PRS.S3SG(V:INTR)
    ‘A man walks on the road.’

In another instance (11), there is a motion of carrying, performed at will of somebody else and/or by force. Hence, transitive verbs are used, and their distribution within a sentence, their alignment with a subject or a direct object are limited due to their meanings, and differ according to living (11a) / nonliving (11b) subjects and objects:

(11a) ñoči-k  bere  n-i-ĵon-up-s
    Man-ERG  child(NOM)  PRV-APPL-to take-THM-PRS.S3SG(V:TR)
    ‘A man takes (away) [animate] the child.’

(11b) ñočik  ġa  mend-i- ġ-u
    man.ERG  tree(NOM)  PRV-APPL- to bring-AOR.S3SG(V:TR)
    ‘A man took (away) [inanimate] the tree.’

IV. Tempo of Motion

Tempo or pace of motion is not encoded in the verb root referring to motion/movement; neither in Megrelian roots of neutral meaning denote this concept; however, in Megrelian,

\(^{45}\) Here we mean not causative forms, formed by means of affixes of the corresponding functions, but rather lexical causative meanings.
these empty slots are filled by the phonosemantic (synaesthetic) verb stems, referring to motion, which contain a component of pace/ tempo at the lexicalized level of the root (Gersamia et al. 2016: 354-356):

<table>
<thead>
<tr>
<th>To go at a slow pace</th>
<th>To go at a slow pace</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRV-R-THM(-PRS.S3SG)</strong></td>
<td><strong>PRV-R-THM-PRS.S3SG / PRV-R-THM(-PRS.S3SG)</strong></td>
</tr>
<tr>
<td><strong>mi-band+al-u(-n)</strong></td>
<td><strong>me-čum+in-un-s / mi-čving-u(-n)</strong></td>
</tr>
<tr>
<td><strong>mi-sak+al-u(-n)</strong></td>
<td><strong>me-žum+in-un-s / mi-čvirt-u(-n)</strong></td>
</tr>
<tr>
<td><strong>mi-ğaŋ +al-u(-n)</strong></td>
<td><strong>me-ţur+in-un-s / mi-ra’v+al-u(-n)</strong></td>
</tr>
</tbody>
</table>

In Laz, the tempo/pace of motion is encoded by means of the satellites – preverbs, located beyond the stem, and they are associated not only with neutral stems of motion/movement, but also with a new verb stem – to run:

- **mani-mani** ‘quickly’
- **aţele** ‘quickly’
- **usula** ‘slowly’
- **tamo/tamo-tamo** ‘runs / goes / swims / flies / went’

(12a) **mani-mani nun Kaplan.** (Tand. 2013: 410)
'S/he ran rapidly.'

(12b) **mustafa mani-mani niţu muradiša.** (Chik.35.20)
'Mustafa walked rapidly toward Murad.'

(12c) **ašo usula mot mot ulur?** (Chik. 43.13)
'Why are you walking so slowly?'

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(12d) *usula igzalu* dağışa. (Chik. 43.9)
'S/he went slowly toward the forest.'

(12e) *ukule tamo-tamo moxtu*. (Zgh. 41)
'Then s/he came slowly.'

V. Aspect and Tense of Motion

Generally, in the Kartvelian languages, and in Laz, among them, tense distinctions (present, past, future) of the process of motion are related to those of aspect. The phenomenon in question seems to be a relic of the period "when the verb conjugation did not imply alternation according to tenses; conjugation used to encode aspects, that is, kinds of processes" (Chikobava 1948: 77). However, as long as tense is variously encoded in languages with and without aorist (Lyons 1978: 332-333), in the Kartvelian languages as well, the aspectual distinction – perfective/imperfective – between the present and aorist groups was encoded by means of continuity/discontinuity of motion.

In Laz, the principal form of the motion on land *to go* is rendered by a number of verb roots being grammatically distinct. In the Present-Future group forms of Series I, the perfective aspect root *ul-* is used to encode tense:

(13) *ia n-ul-u-n*

PRV-go-THM-PRS.S3SG
'S/he goes.'

It is not retained in the rest of series and screeves. The verb *to go* occurs in three different paradigms within which roots alternate according to series and screeves (for details, see *olu / oxtimu* 'to go').

The temporal and aspectual oppositions of the stems referring to other principal kinds of motion: *oputxu* 'to fly,'
ončviru ‘to swim,’ are based not on root alternations but rather on combinations of grammatical representants, of morphemes included in the stem.

The same principle is in effect in the transitive dynamic verb of transfer noŋaps ‘takes [animate]’ (MSD: o-ŋon-u ‘to take [animate]’) and nimers ‘takes [inanimate]’ (MSD: o-ŋ-u || o-ŋmal-u > || o-mal-u ‘to take [inanimate]’), displaying the animate / inanimate opposition: the root ŋon- refers to the causal meaning of a living figure’s motion, while the root ŋ-/ŋ] mal-animate/inanimate opposition – to that of a nonliving one.

Within the conjugation paradigm, they display some peculiarities which are of a phonetic character and provide a foundation for the emergence of various forms in various dialect varieties (for details, see oŋmalu ‘to take [inanimate]; oŋonu ‘to take [animate]’).

2.1. Verb Roots of Motion withEncoded Spatial Features

Within the class of Laz motion/movement verbs, minor exceptions are made by the stems containing radical information about spatial relationships; however, they do not alter the common picture according to which the encoding of direction, orientation, deixis and reference, topology of place of motion is a semantic function of the satellites occurring either within a verb structure or beyond it in a syntactic construction (on the one hand, directional and locative preverbs, and, on the other, adverbs, adverbials of place, locative or postpositional cases, etc.).

In that minor group of verbs, locational components occur in the verb root proper, and they encode orientated direction or reference.

In examples (14a-b) and (14c), the verb stems occur without a postposition, necessarily implying the movement of two figures consequently, the landmark referent is a forward-going figure (14a-b) (14c):
(14a)  
\[ \text{bere-š} \quad \text{cxen} \quad \text{ixi-ster} \]
boy-GEN  horse(NOM)  kari-PP
\[ \text{putx}+u-rṭ-u, \]
fly-S3SG-AUX:PST(be-S3SG)
'The boy’s horse flew like a wind.'

(14b)  
\[ \text{bad-epe-ti} \quad \text{ixi-ster} \]
old man-PL-PTC  wind-PP
\[ \text{čš}+u-rṭ+es \quad \text{(Duméz. 10.2)} \]
catch up with-AUX:PST(be-S3.PL)
'The old men caught up with like a wind.'

\[ \text{txoz-: me-txoz-in-u (MSD)} \quad \text{‘to follow, to chase’ (Tand. 427)} \]

(14c)  
\[ \text{xo} \quad \text{him} \quad \text{koči-s} \quad \text{a-ntxoz-u} \quad \text{(Kart. II. 222₈)} \]
Hodja(NOM)  that  man-DAT  APPL-chase-AOR.S3SG
'The mullah chased that man.'

Even such verb roots take on some simple and derivational postpositions:

\[ \text{Me-čš -u-n ‘S/he will catch up with [thither].’ (Asat. 360)} \]
\[ \text{mo-u-čš-in-u ‘S/he will catch up with [thither].’ (Asat. 360)} \]
\[ \text{gi-o-čš-u < *ge-o-čš-u ‘S/he caught up with.’ (Asat. 360)} \]
\[ \text{gi-o-txoz-u-n < *ge-o-txoz-u-n ‘S/he chases [runs after].’ (Asat. 97)} \]
\[ \text{ela-txoz-en ‘S/he chases [runs along].’ (Asat. 98)} \]
\[ \text{dolo-txoz-un ‘S/he chases [runs along into].’ (Asat. 98)} \]

The preverbs me, mo- show direction either from or towards the first person, and, thus, they are deictic; dolo- shows the topology of place, ela- – the location beside, ge- refers to the location of a following figure, a landmark of which is a previous figure, and, within a syntactic construction, this is rendered by
means of either a semantically corresponding adverb or an adverbial of place (uŋačxe, geriden ‘behind’) as in (15a) and (15b):

(15a) hem koči-s uŋačxe
    that.PRON:DEM man-DAT behind.ADV
    me-čš-u. (Chik. II. 8.25)
    PRV-catch up with-AOR.S3SG
    ‘S/he caught up with [him/her behind] that man.’

(15b) keto geriden no-txoz-u-ṭ-u (Chik. I. 30.13)
    Keto behind.ADV PRV-chase-THM-IMPF-PSTS3SG
    ‘Keto chased [him/her behind].’

The difference between the meanings of the roots čš-, txoz- is very well demonstrated by syntactic construction (16), presenting a triphasic model of motion denoting a continuous dynamic process; the model contains the phases of beginning, the phase of course and the phase of end. The phase of course is also encoded by the root of oriented direction ṭ/m ṭ/-m ṭ+in [o-m ṭ+in-u ‘to escape’ (Tand. 629)];

(16) i-ᵐṭ-u, a-₄ntxoz-u, va n-a-ᶜš+in-u (Chik. II. 132.27)
    ‘S/he ran, chased, could not catch of with.’

Ph I: Beginning - i-ᵐṭ-u
    FV-run- AOR.S3SG

Ph II: Course - a-₄ntxoz-u
    VF-chase -AOR.S3SG

Ph III: End - va n-a-ᶜš+in-u (<*me-a-ᶜš+-in-u)
    NEG PRV-FV-catch up with-AOR.S3SG

Oriented direction and reference are readily encoded by the semantically opposed roots ḣon - and ćkv-/ čk-; specifically, the agent of the forms, included in the aforementioned roots within the structure of the verb stem, is animate, while the patient is
inanimate in one case (吉林省) and animate (čeľ/-čk-) in another (18). Besides, the root čēv/-čk- implies a telic motion, this being morpho-syntactically encoded within a syntactic construction by means of a locative, viz. allative case form of a substantive (18):

吉林省:  ečč吉林省 -u 'to take sb/sth with one' (Asat. 401)

PRV- take with-AOR.S3SG

(17)  ar  emtumani-s
    one.PRON:INDF  uphill-DAT(ADV)
    k-oč-i-m吉林省 -i... [guruni]
    AFF-PRV-APPL-take  [donkey(NOM)]
    'Take ... [the donkey] uphill with you.'  

čeľ- / čk-:  o-čēv+al-u (MSD) 'to let go' (Tand. 682)

MSD1-let go-MSD1

(18)  lezg-ep-e  no-čk-u  naibi-ša

Lezghian-PL-NOM  PRV-let go-AOR.S3.SG  naib-ALL

'S/he sent Lezghians to the naib [the viceroy].'

(Chik. I. 31.22)

To sum up, the aforementioned roots, as different from those of referring to the principal kinds of motion/movement – to go, to fly, to swim, also contain semantic components which, with principal manner verbs of motion, play the same role as outside satellites of the root and the stem, at large; they are:

- Directed vector;
- Oriented motion;
- Reference (behind, in front of one’s body);
- Telicity;
- Agentive action;
- Agent (animate).
3. A triphasic morpho-syntactic model of motion/movement verbs in Laz

In Laz, neither of grammatical elements (be it an affix or a root), even the most significant for the encoding of motion – the preverb, are capable of encoding of the entire path of movement, the movement from one point to another. Actually, each of them refers to three independent phases of the motion process through time:

1. Course of motion – principal phase
2. Beginning of motion – boundary-related phase
3. End of motion – boundary-related phase

The concepts of Beginning and End of motion make up a logical dichotomy and, in association with the Phase of Course, are considered as parts of motion as an integral whole, well demonstrated in examples (19a-19c):

(19a) Ph. I – Beginning

\[ \text{koči}(k) \quad \text{avl-\text{iše}} \]
\[ \text{man(ERG)} \quad \text{yard-ABL} \]
\[ \text{ko-gama-xt-u} \]
\[ \text{AFF-PRV-go-AOR.S3SG} \]

(19b) Ph. I – Course

\[ i-d-u, \quad i-d-u \quad \text{do} \]
\[ \text{MA:CV- go-AOR.S3SG} \quad \text{and.COMJ} \]

(19c) Ph. III – End

\[ \text{ko-n-a-dgit-u} \]
\[ \text{AFF-PRV-FV-get-AOR.S3SG} \]
\[ \text{ar} \quad \text{daği-s} \]
\[ \text{one.PRON:INDFN} \quad \text{forest-DAT} \]

‘The man left the yard, walked, walked, and got to the forest.’
Examples (19a-19c) display integral syntactic constructions morpho-syntactically rendering the entire path of the movement in space; meanwhile, the three phases are independent and encoded by means of linguistically distinct devices with various and specific functions. According to examples (19a-19c),

(19a) – the meaning of the Phase of Beginning is grammatically encoded by means of the ablative marker -iše, taken on by an adverbial modifier of place, and the dynamic verb root (-xt) takes on the locative preverb gama-denoting a point of departure;

(19b) – the Phase of End is encoded by means of the allative with a dative marker (dağh-s), denoting an adverbial modifier of place, and the stative verb root (-dgit) takes on the preverb (n)46;

(19c) – the Phase of Course is encoded by means of the iteration of the imperfective preverbless verb form (idu), denoting continuous action and properly referring to the duration of motion as a process.

We established the morpho-syntactic markers for each phase of motion/movement, that is, the grammatical devices used for the representation of the semantic concepts of beginning, course and end of motion in space.

Phase of Beginning:

i. Adverbials of place in the function of a locative case, viz. ablative47 answer the question Where from? (ABL).

Within a syntactic construction, adverbials of place are marked by the morpheme -iše, and the 1st and 2nd person pronouns are marked by the morpheme -de (20).

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46 The 3rd person form yielded as a result of the phonological transformation of the preverb me–: ko-n-a-dgit-u< ko-me-a-dgit-u.

47 The fact, that two, opposite meanings of the locative cases – ablative and allative – are rendered by means of a single form, has been repeatedly attested in linguistics literature (Chikobava 1936: 51; Kutscher 2010: 256-257; Kíria et al. 2015: 56).
ii. By means of a certain group of simple, compound and
derived preverbs, or of the prefix -i, taken on by a medio-
active verb form and referring to auto-active (20).

iii. By means of either perfective or imperfective verb
roots/stems of various tenses referring to
motion/movement (20).\(^{48}\)

(20) oxor-iše  \(\|\) čkim-de  gama-xt-u
house-ABL(ADV:LOC)  I pers-ABL  PRV:DEIX-go-AOR.S3SG
[do]  menda-xt-u  \(\|\)  i-gzal-u.\(^{49}\)
[and.CONJ]  PRV:DEIX-go-AOR.S3SG  MA:CV-go-AOR.S3SG
'The man left the house and went away/departed.'

Phase of End:
i. The allative case form of adverbials of place encodes it in the
function of allative and illative, answering the questions: Where? Where to? In Laz, it is marked by various suffixes conventionally
used for a different class of substantives:
a) Suffix -da – in singular and plural with the 1\(^{st}\) and 2\(^{nd}\) person
pronoun (čkim-da ‘towards me,’ skan-da ‘towards you (SG)...');
b) -iša / -ša – with all substantives used as adverbial modifiers,
and with the 3\(^{rd}\) person pronoun, among them (hemu-ša
‘towards him/her’);
g) -ši – a genitive case marker in the function of lative;

\(^{48}\) The Laz verb for to go has a preverb in all tenses. Aspectually, not preverbed
and preverbless forms but rather the ones with various preverbs are opposed,
which, in most cases, undergo root-alternation in the present and aorist: n-ul-u-
n (PRS)- mind-ul-u-n < menda-u-l-u-n (FUT) - menda-xt-u (AOR).

\(^{49}\) In texts, i-gzal-u (CV:MA-R-AOR.S3.SG) alternates in the same meaning;
however, the status of the prefix [i-] is still to be established. According to
traditional grammars, it is a functionless subjective versionizer, having
emerged in medio-active and occurring in Series II; cf. i-cxovra ‘lived,’ i-mep-a
‘reigned,’ besides, Ge. i-ara, Megr i-du ‘have walked;’ however, as long as the
morpheme has not been precisely defined yet, we prefer to deal with its
function and, therefore, qualify it as a vowel formant characteristic to medio-
active verbs.
d) -le – with spatial adverbs (žindo-le(n) ‘upwards, tudendo-le(n) ‘downwards’) and in interrogative pronouns (so-le(n) ‘where to’) (Kutscher 2010: 256-257).

ii. Either by means of certain simple, compound and derived preverbs or by the affirmative ko- (21a): 

iii. By means of perfective aspect roots/stems referring to motion/movement (21a, 21b).

(21a)  koči-k oxor-iša
       man-ERG house-ALL(ADV:LOC)
       ko-me-xt-u
       AFF-PRV:DEIX -go-AOR.S3SG
       ‘The man came home.’

(21b)  kui-s ge-il-u
       pit-DAT:ALL PRV-fall-AOR.S3SG
       ‘S/he got into the pit.’

The Phase of Course is assumed between the boundary-related phases (Beginning and End); Course implies a continuous, dynamic process with a directed vector, denoting orientation/reference, and completed without referring to the beginning and the end. Course or motion per se cannot be encoded by perfective aspectual forms, and, hence, it is rendered only by means of imperfective verb stems; the following are most widely used in Laz:

i. Present imperfective forms of verbs of motion (both per se and transfer).

ii. Aorist forms of perfective roots: idu (22) igzalu, goxtu (23), whose meanings have shifted, and they encode the imperfective aspect (A. Chikobava). This is enhanced by instances of the iteration of the given stems producing a sense of continuity.
Phase of Course:

(22) i-d-u, i-d-u [do konadgitu dağis]
   MA:CV-go-AOR.S3SG
   ‘S/he walked, walked [and reached a forest].’

(23) go-xt-u, go-xt-u ia ĵoği-k [do lašai dvağdu] (Kal. 31.3)
   PRV-go- AOR.S3SG that.ERG go-ERG
   ‘That dog walked, walked [and turned rabid].’

A minimum model for the description of an entire path of motion is the following:

(24) oxori-še dağ-iša
    house-ABL(ADV:LOC) forest-ALL
    n-ul-u-n
    PRV:DEIX -go-THM-PRS.S3SG

In the boundary-related phases, processes, encoded by dynamic verbs of motion, occur as either beginning or ending sections of motion, that is, ordinarily, as processes of entering and leaving a point, being morpho-syntactically rendered by means of the forms of ablative and allative; a verb stem denotes the Phase of Course.

The division of the process of motion into sections is logically feasible; however, it is not grammatically encoded in Laz.50

To sum up, for the sake of encoding of the beginning, course and end of motion, the following are opposed within a morpho-syntactic construction of the Laz verb:

50 For instance, in Megrelian it is possible to encode a meaning of approaching the final stage of motion by means of the prefix tm-, contained in the verb structure and occupying a position following a preverb within a morpho-syntactic string. A morpheme, formerly a particle, emerges in stems, derived from the present and future one; its function is to convey imperfective. The verbs with the prefix tmV/- mV- encode motion in procession and implying the approaching the final point (Kobalava 2010: 242).
1. *Preverbs* (for the beginning, course and end of motion)

2. *Affirmatives* (*ko-*-, menda-, *ge-*-) – for the Phase of End, and the *i*-prefixated form of auto-active – for the Phase of Course

3. The alternation of (translocative and transfer) verb roots is used for the aspectual opposition: *ul-* (PRS) - *xt-* (AOR); the roots for ‘to fly’ and ‘to swim’ are unaltered. The aspectual and temporal opposition of these stems, used for rendering of the phase structure as well, is a function of morpho-syntactic affixes.

4. *Verb aspect and tense*

  4.1. Beginning – by means of either the present imperfective or past perfective verb

  4.2. Course – by means of either present or future imperfective, or past aorist forms with a shade of uninterruptedness, and, therefore, such verbs are iterated within a syntactic construction; iteration serves to represent motion as a process.

  4.3. End – by means of either a past or future perfective form.

In a horizontal area, as different from a vertical one, both various kinds of motion/movement and types of orientation and opportunities of the phase constitution have been extensively applied. The phases are characteristic to both horizontal and vertical motion; however, in a horizontal one, some individual phases are independent, while, in vertical, the Phases of Beginning and End merge with the Phase of Course: a) {Beginning + Course}, b) {Course + End}; the aforementioned is derived from a distinct configuration of motion within a vertical area and is in accord with the conditions of gravity (I. Kobalava). The same grammatical devices are applied for the description of the phase structure of a vertical motion as of that of a horizontal one:
i. In both phases the basic translocative and transfer verb roots are used (ul-/xt- ‘to go’, putx- ‘to fly’, čvir- ‘to swim’; ‘on- ‘to take (sb)’, ǧ- ‘to take (sth)’) (25a, 25b, 26a, 26b, 27).

ii. When there are preverbs, referring to a vertical direction, bent or top-down trajectory, the vector of motion is directed from bottom to top (25a) or top to bottom (25b).

iii. The marginal phases of motion are rendered either by corresponding preverbs or by substantives in a function of an adverbial modifier of place (by pronouns and adverbs, among them) in the forms of ablative (25a) and allative (27), or by means of a dative marker (21b), (25b), (26a), or by adverbials with corresponding meanings (above, below, upward, downward, etc.).

iv. The principles of temporal and aspectual oppositions are the same.

(25a) ũo̲ ʒ̲i̲ ova-šen ye-putx-u
Pigeon(NOM) nest-ABL PRV-fly-AOR.S3SG, 'The pigeon flew up from the nest,
žin-žin ye-putx-u (Kal. 53. 5-6)
upwards.ADV:LOC(RED) RV-fly- AOR.S3SG,
s/he/it flew up and up.'

(25b) ƙ̲i̲x̲i yova-s ge-putx-u (Kal. 123.8)
bird(NOM) nest-DAT PRV-fly-AOR.S3SG
'The bird flew into the nest.'

(26a) ba ǧ̲i̲š kenai-s ask̲i̲li
[garden-GEN corner-DAT]:LOC dog-rose(NOM)
qu-e-xt-u. (Kal. 250.14)
AFF-PRV-go-AOR.S3S
'In corner of the garden, dog-rose sprouted on its own.'
4. Spatial Preverbs in Laz

A preverb is a prefix with an adverbial meaning occurring as a principal device for the encoding of spatial relations in Laz;\(^{51}\) it is taken on by verb roots, denoting motion/immobility, and refers to:

1. motion or state of bodies in space, a specific direction of motion, and, besides, in some cases, a space in which a motion takes place;

2. a place where bodies are located, and not only providing its typological characteristics but also informing about specific disposition, geometry (where, near what, in what, on what, how, etc.) of bodies to a place or to each other.

Thus, within a stem, preverbs are taken on by verb roots referring to motion and location and provide a local picture of the spatial distribution of dynamic and stative processes. Within a

\(^{51}\) We consider only those preverbs which occur in the structures of verbs referring to movement and state. We have neglected the preverbs acquired together with borrowed forms which do not take an active part in derivational processes.
In a morpho-syntactic string, preverbs occupy a stable position (-3) and occur between particles (-4) and personal markers (-2):

<table>
<thead>
<tr>
<th>-4</th>
<th>-3</th>
<th>-2</th>
<th>-1</th>
<th>-0</th>
<th>{...}</th>
</tr>
</thead>
<tbody>
<tr>
<td>[NEG]/MOD</td>
<td>PRV</td>
<td>S/O</td>
<td>FV</td>
<td>R</td>
<td>SUF</td>
</tr>
</tbody>
</table>

Preverbs, included in the verb stem, rarely occur in a phonemic sequence as far as a final vowel of the preverb structure undergoes phonetic transformation (is either altered or dropped) at a function of morphemes as influenced by a vowel of the vowel of a following morpheme (28), (29), resulting in the complication of verb form parsing:

(28)  *ama-u-ʒiṭ-u > am-u-ʒiṭ-u  
    PRV-APPL-to lie/lay-AOR.S3SG

(29)  *ko-eça-i-dg-u > k-eç-i-dg-u  
    AFF-PRV-APPL-to lie/lay-AOR.S3SG

The rules have been established for the morphophonological alterations at a junction of morphemes; they are predominantly about vowels. A consonant, included in a preverb, rarely undergoes any change (Chikobava 1936; Kartozia 2005; Asatiani 2015). Modified preverbs represent a phonemic variant of an original morpheme (preverb) with a complete phonemic structure; such variants frequently occur across dialects.

Preverbs are normally reiterated across conjugation paradigms.
4.1. Structure and groups of preverbs

In Laz, simple, that is, primary preverbs are monosyllabic, and their structures are either V or CV: \{o-, e-, ge-, go-, do-, me-, mo-\} \(^{52}\) + \{a-, da-, še-, ga-\}, \(^{53}\) while so called compound preverbs are formed not by means of a combinations of simple preverbs, as it is true with Georgian (preverb + preverb: a+mo-, še+mo-, ga+mo, ča+mo-, ca+mo..., referring only to an orientated direction), but rather simple preverbs take on adverbial particles, being in effect solely in combination with simple preverbs; they are not entities having either independent grammatical or derivation values.

Hence, as different from Georgian compound preverbs, Laz preverbs are made of functionally distinct elements; therefore, it is more plausible to refer to them not as compound but rather as derived preverbs (I. Kobalava) owing to their structural peculiarities.

Below we compare the structures of Georgian and Megrelian-Laz preverbs:

<table>
<thead>
<tr>
<th>Language</th>
<th>Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Georgian</td>
<td>PRV = PRV_SMPL + PRV_SMPL</td>
</tr>
<tr>
<td>Megrelian/Laz</td>
<td>PRV_DER = PRV_SMPL + PTC:ADV</td>
</tr>
</tbody>
</table>

The system of Laz preverbs includes some compound ones having been constructed in accordance with the rules for Georgian compound preverbs, that is, by means of a combination of two simple ones.\(^{54}\)

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\(^{52}\) Authors of individual publications argue that the Laz ama-, gama-, menda-, oxo- are simple preverbs (see Pazar Laz, 2011: 98-99; Rostovcev-Popien 2016); the prefix structure, having been established for Kartvelian languages, and for Laz, among them (Melikishvili 2009), and a comparative analysis of Georgian and Megrelian preverbs do not allow such a claim.

\(^{53}\) These are the preverbs being either common with either Georgian or Megrelian or being acquired together with borrowed forms.

\(^{54}\) For details, see
The following Laz preverbs have been treated as having a double compound structure: \( o+\text{o-}na \), \( go+\text{a-} na \), \( e+la+na \) (Asatiani 2015), \( go\text{šona} \), \( amo\text{ša} \) (Tandilava 2013). From the list, the following may be considered as tri-partite: \( go\text{šon} \), \( elan \), \( amo\text{ša} \), which are the combinations of the derivative locative preverbs \( go+\text{a-}, e+la- \) and the preverb \( me \); according to the rule, the preverb \( me \) is transformed as \( n- \) is the 3rd person.\(^{55}\) Such preverbs are glossed as follows:

\[
PRV = PRV_{\text{DER}} + PRV_{\text{SMPL}}
\]

\{compound = derived preverb + simple preverb\}

**Table 1. Combinations of derived preverbs in Laz**

<table>
<thead>
<tr>
<th>Compound clusters</th>
<th>Tri-partite clusters</th>
</tr>
</thead>
<tbody>
<tr>
<td>( u\text{k}+na )</td>
<td>( \text{ko}+na/go+na )</td>
</tr>
</tbody>
</table>

\(^{55}\) For a detailed analysis, see a separate section, pp. 117-119

\(^{56}\) A couple of examples may be drawn: \( o+\text{šom}u \) ‘S/he ate [it]’; \( o+\text{šopu} \) ‘S/he caught [her/him/it]’; they mostly occur within the structures of derived preverbs: \( o+\text{šo} \), \( o+\text{xo} \).
Vocalic constituents of simple preverbs, including Laz preverbs, do not undergo any change; in Megrelian, variability of preverbs is based on vowel alternations and makes up a foundation for the multiplicity of preverbs;\textsuperscript{57} in Laz, the structure of preverbs is much more stable, and alterations take place only in a word-final position (for a detailed analysis, see Pazar Laz 2011: 100-101).

In Laz verbs of motion/movement, simple preverbs refer to directions, determining a vector of motion; therefore, they were labeled as directional preverbs, whereas derived preverbs, alongside with a direction, provide information about a place of motion/immobility. This is why they were labeled as locative preverbs (I. Kobalava). Hence, they differ with respect to their functions: simple preverbs refer only to a direction, whereas locative ones – to a place alongside with a direction:

\[
\text{PRV}_{\text{SMPL}} = \text{DIR} \\
\text{PRV}_{\text{DER}} = \text{DIR} + \text{LOC}
\]

However, it is very difficult to precisely define the meanings of locative particles because they combine with various simple preverbs and, accordingly, produce various meanings.

\textsuperscript{57} Based on our observations, in Megrelian, there are rare instances when preverbs, distinct in vowels, differ according to types of direction and orientation: mi₇oxe - mu₇oxe, mi₇axe - mu₇axe, alartu - elartu, ašartu - ešartu...; here, the vowel oppositions encode a change of direction.
4.2. Functions of preverbs\textsuperscript{58}

Similarly to other Kartvelian languages, Laz preverbs are polyfunctional; they have derivational and grammatical functions.

Owing to their derivational function, in combination with verb roots of motion/movement, Laz preverbs

a. derive a number of semantically differing stems,

b. refer to a direction of motion,

c. provide information about deixis\textsuperscript{59} and reference,

d. characterize a place of motion/immobility, that is, describe a topology of landscape,

e. provide visual information.

Owing to their grammatical function, perfective aorist and future forms are derived from imperfective ones (Chikobava 1936; Kartozia 2005; Kiria et al. 2015).\textsuperscript{60}

Analyses of preverbs prove that they are not able to perform all the functions simultaneously; simple preverbs mostly refer to direction, and a vector of motion is established by means of them. A greater number of compound preverbs refer to a location alongside with a direction; therefore, they are locative preverbs.

Laz derived preverbs can be classified into two large semantic groups:

a) the preverbs taken on by dynamic verbs (of motion/movement); within the classification, deictic and non-

\textsuperscript{58} Specific functions of preverbs are established with respect to their meanings revealed in reference to spatial relations. We mean the fact that various preverbs are taken on by verb roots of motion/movement, this enabling to establish their meanings with ultimate preciseness.

\textsuperscript{59} In traditional linguistics, only some issues of person deixis (role deixis) have been discussed (Shanidze 1973; Oniani 2003; Potskhishvili 1985).

\textsuperscript{60} For other functions of preverbs, see Makharoblidze 2016; 2018.
deictic simple and derived preverbs are opposed; b) simple and derived preverbs taken on by stative (positional) verbs and referring to a location of action.

There are three types of directions in space encoded by preverbs:

1. horizontal
2. vertical
3. inclined trajectory

The aforementioned directions are encoded in a more complex way as far as they are established in relation to a relatum which is another thing, either mobile or immobile. In such instances, the direction will be: forward – backward, upward – downward, in passing thitherward – hitherward, beside, around, in relation to a trajectory of motion. The problem in question will discussed in detail within the framework of the semantic categories of deixis and reference.

4.3. Spatial features encoded in the preverb

The Laz preverb is a principal prefix which, in combination with verb roots and stems referring to dynamicity and stativity (in association with other functional elements), is involved in organizing of space, and by means of which we establish spatial relations.

Similarly to other languages, spatial features, encoded in the Laz preverb, in fact describe a direction (landmark, path) of movement of a subject (figure) of motion and its relation with other im/mobile objects in space (person, thing). Linguistic literature provides abounding terms for these two principal features; most of which have emerged from cognitive linguistics: figure - Ground (Talmy 1985), Trajectory - Landmark (Langacker 1987), Object – Orienting point (Plungyan 2002), Referent - Relatum.
Based on the collation of rather diverse and sometimes mutually exclusive views and arguments about the aforementioned spatial semantic categories, below we will provide our interpretations and provisions in line with which we will analyze functions of preverbs.

1. Path (L. Talmy)

A linguistically encoded path refers to a vector of motion which implies connection of an initial location of a mobile body with every following location; practically, this is movement, translocation, and, thus, the value in point is characteristic only of dynamic verbs. Segments of space, in which a figure/trajector is located in certain periods of time, eventually make up a unitary space referred to as a trajectory of movement. A distance between initial and final points of motion is a path taken by a figure.

In Laz, a motion, conveyed by a verb, is performed along horizontal and vertical axes, and a path, conveyed by a preverb, is either horizontal or vertical; however, an inclined trajectory should be considered as a subtype of a vertical path; it is encoded by some Laz preverbs (ela-).

A path is directed; it has a source (beginning) and a target which is realized as an end. Some Laz preverbs (dolo-) refer either to non-targeted motion or to motion with a changing trajectory (see below).

2. Orientation / Reference, Localization

The aforementioned paths may be conveyed in a more complex way, resp. in relation to a relatum, thus drawing a picture of the topological configuration of bodies, either mobile or immobile in space. Hence, a motion, conveyed by dynamic

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61 In linguistic literature, there is no unanimity about the term. Frequently, directionality or direction are considered. In V. Plungyan’s opinion, the latter one better conveys a narrow meaning associated with one parameter of a situation of movement (Plungyan 2002: 73).
verbs (a location in case of stative verbs), is referential in relation with an axis of motion (horizontal, vertical, inclined) of other bodies or of another figure.

Verb orientation (encoded by preverbs) determines a place of localization of bodies, either mobile or immobile, in relation to positions occupied by other bodies, either mobile or immobile, by a landmarks within a spatial universe (I. Kobalava). Essentially the same is implied by reference, conveyed by a preverb, in relation to relatum, dislocated within the space of referents, either mobile or immobile.62

A frame of reference is a system of coordination applied for establishing the location of an object. There are intrinsic, relative and absolute (i.e. extrinsic) frames of reference (Levinson 1996; Levinson 2003; Pederson et al. 1998). Each of them is defined in relation to a type of a relatum. Both man-made artifacts and natural objects and even a human body may be used in the function of a relatum.

An intrinsic frame of reference is a binary spatial relation in which the location of an object is established in relation to a part of another object and is based on anthropocentric coordinates which determine a location and a path in relation to the positions occupied by an egocenter, such as forward – backward, to the right – to the left, upward – downward, beside, etc. (Brown & Levinson 1987).

The absolute frame of reference implies fixed landmarks (earth, water surface; conditionally fixed notions, e.g. sides of the horizon, land boundary, direction of a river flow, etc.) in relation with which a path of motion in space is established (Brown & Levinson 1987).

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62 A frame of reference reflects the interrelationship between language and cognition highlighting how landscape features occur in language use. The problem in question has been a subject of extensive crosslinguistic studies.
A relative frame of reference is a tri-partite system within which the location of an object is conveyed from the perspective of the object, as well as in relation to the position of another object.

V. Plungyan established the types of the verb orientation within the framework of the absolute localization:
- **Subject** (elements of landscape, body parts, artifacts)
- **Gravitational** (upward - downward)\(^{63}\)
- **Anthropocentric** (front and rear sides)
- **Deictic** (being in relation with a deictic center) (Plungyan 2002: 56, 75-82)

Centrifugal, that is, **cislocative** (localization is represented by the deictic center, 'here') and centripetal, that is, **translocative** (localized space outside the deictic center – ‘there’) elements have been identified within the deictic orientation (Plungyan 2002: 81).

Judging from the aforementioned, a landmark / figure organizes space similarly to a living organism, and an area is divided into a number of topological zones, the unity of which presents a meaning of localization (Plungyan 2002: 66).

3. **Deixis**

Deixis is an indication to person, time and/or space, based on which its three types are identified: personal (role) deixis, temporal deixis, and place/spatial deixis.\(^{64}\) Each of them is

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\(^{63}\) Owing to its physical character, these landmarks are more used for describing a path of motion and not final points of a trajectory; however, in this case, it is significant that they are fixed landmarks (Plungyan 2002: 77).

\(^{64}\) Some authors consider deixis even within a typology of frames of reference (Danziger 2003; 2010; Bickel 2001; Burenhult 2008), which is not devoid of sense with respect to the Kartvelian languages, and for Laz, among them. According to J. Lyons, deixis is a source of reference (Lyons 1976: 146-165); referentiality implies deixis as a sub-category, being functionally associated with it a permanent way (Dogonadze 2010: 11, 14)
determined with respect to the principle of egocentrism; in speech, three mutually connected vectors develop from the starting point of ORIGO: “I – here – now.” The world, conceptualized from anthropocentrism, linguistically functions in a fixed way (Bühler 2000: 94; Kozlova 1997).

*Person/role deixis* (‘I’) is established in relation to the first person pronoun, and a speech act is divided based on lexical and grammatical representatives referring to person. *Place/spatial deixis* (‘here’) indicates spatial features, localization of things and their proximal (close to the 1st person) and distal (distanced from the 1st person) meanings. It is linguistically encoded by adverbs (‘here’ – ‘there’) and/or demonstrative pronouns (‘this’ – ‘that’). *Temporal deixis* (‘now’) is encoded either lexically, by means of adverbs of time, or grammatically, by means of aspectual and tense forms.

In linguistics literature, *deixis* has also been considered within the framework of reference/verb orientation (with some linguists, for instance, Danziger 2003; Bickel 2001; Burenhult 2008), thus assuming it as its individual instance. It is essentially a coincidence with the theoretical framework when personal deixis, as one of the functions of the preverb in the Kartvelian languages, is assumed as a verb orientation, when a change of direction to or from a deictic center is conditioned by the preverbs of opposite meanings *mi*- and *mo*- (Shanidze 1980).

4. **Topology and landscape features**

Another information, to be assumed as encoded by the preverb, is about a physical or topological type of Ground. An object may be localized in the same way (for instance, above the ground) but, in order to mark the localization, various markers may be selected which depend on substantial characteristics (size, shape, physical character, etc). In such cases, a language applies a classifying strategy (Plungyan 2002: 65).
Landscape features include a geomorphology of space in which a figure moves: uphill, downhill, obstacle to be overcome by a figure, open or closed area/landscape with either a hard or soft surface, etc.

As different from simple ones, Laz derived preverbs provide information about topological or landscape features of a place; therefore, we refer to them as locative, while to simple ones – as orienting.

In Laz preverbs, encoded spatial categories reveal according to individual kinds:

1. path /trajectory + orientation (vertical and horizontal)
   - vertical trajectory (from below up, from above down);
   - inclined trajectory (from below upwards, from above downwards);
   - horizontal (from outside towards inside, from inside towards outside);
   - circular (around a landmark) or semi-circular.

2. path + deixis/reference (egocentric orientation)
   2.1. personal deixis / figure-referent
       - from the first person;
       - from the second person.
   2.2. subject deixis (anthropocentric and subject referents) ground-referent
       - absolute/extrinsic (fixed landmark);
       - relative/intrinsic (relative landmark)

Verbal spatial categories reveal in a combined way within a preverb; therefore, they can be assumed as models made up of these categories as of simple values; for instance, for dynamic verbs:

I. {path + orientation + subject deixis/referent absolute}
II. { path + orientation + personal deixis/referent variable}
III. {non-targeted motion without a referent}

For stative verbs:

IV. {location + subject deixis/referent}65

Its derived structure (simple preverb + locative particle) complicates the semantic structure of the preverb, and locative and landscape features of space additionally occur in the models of simple preverbs.

I. {path + orientation + subject deixis/reference}:

Absolute or extrinsic reference, as natural grounds such as surface of earth or of water, is encoded in Laz not only by preverbs but also morpho-syntactically, by way of distributing the functions of ablative and allative, specifically, according to whether an action is completed before the surface of the earth/water or from the surface of the earth/water. In case of absolute reference, a direction is only vertical; only a vector of motion undergoes change: from below upwards, from above downwards, each of which is divided into two segments: 1. An action that takes place from the depth of the earth/water till the surface (30a) and an action that begins from the surface (31a); 2. According to the same logic, an action that takes place from above downwards till the surface of the earth/water (30b) and from the surface towards the depth, downwards (31b):

{path + OR : Vert + DEIX / REF : ABS / ground-referent}:

1.1. {vertical trajectory, from above upwards + referent: to the surface of the earth}:

(30a) asçiili k-e-xtu (Kal. 250.14)
    dog-rose AFF-PRV-to go-AOR.S3SG
    ‘The dog-rose grew [lit came up].’

65 These models are discussed inasmuch as they may be associated with dynamic preverbed verbs.
1.2. \{vertical motion, from below upwards + referent: from the surface of the earth\}:

(30b) žin-dunya-ša k-eša-xtes  
upper country-ALL AFF-PRV-to go.AOR.S3PL
'They went up to the upper country.'

2.1. \{vertical motion from above downwards + referent: up to the surface of the earth\}:

(31a) ka-ge-xt-u cxeni-šen  
AFF-PRV-to go-AOR.S3SG horse-ABL
'S/he got down the horse and opened the door.'

(31b) ḱui-s ge-il-u  
pit-DAT PRV-to go-AOR.S3SG
'S/he went into the pit.'

II. \{path + orientation + personal deixis\}

\{path + OR : hor + DEIX:pers / figure-referent\}

2.1. \{horizontal motion + deixis: towards the first person\}:

(32a) čkim-da mo-xt-a-s  
PRON-ALL PRV-to go-CONJ- S3SG
'S/he would come to me.'

In (32a), together with the preverb mo-, a motion, directed to the first person, is the first person pronoun (čkim-da 'from me'), in the allative case form, as different from (32b) in which it is unclear whether the first person referent is physically present in the area, conveyed by an adverbial of place (mezarluğu 'at the cemetery'), as far as the preverb mo- is unable to encode this meaning independently, that is, without a satellite outside the stem (in this case, the allative form of the pronoun):
(32b) mezarluği-s gema-ḳoč-i ko-mo-xt-u (Kal.135.6-7)
cemetery-DAT forest ogre-NOM AFF-PRV-to go-AOR.S3SG
'This forest ogre came to this cemetery.'

2.2. {horizontal motion + deixis: from the first person}:

(33) oxo-iša me-xt-u (Kal. 166. 6-8)
house-ALL PRV-to go-AOR.S3SG)
'When s/he came home.'

III. {path + orientation + non-targeted motion without a referent}
{path: variable vector + OR: hor: along an horizontal axis}
The above-discussed models imply a source and a target. A type of non-targeted and reiterative motion is observable alongside with them; more exactly, it is a movement with a changing vector of motion; for instance, compare (34a) and (35b); the preverb gola- does not encode a referent (34a); therefore, in some instances, it is clarified by another constituent of the syntactic construction (34b):

(34a) peluḳa gol-ul-u-n (Zhg. 162.17)
boat(NOM) PRV-to go-THM-PRS.S3SG
'A boat moves [lit. goes].'

(34b) lazi zuğa ṭiš-i-s
Laz(NOM) on the sea shore-DAT:LOC
gol-ul-u-ṭ-u (Zhg. 85.16)
PRV-to go-THM-IMPF-PST.S3SG
'A Laz walked on the sea shore.'

One of the meanings of the preverb go- should be placed within the same model; (5c) demonstrates that a vector of motion is not determined, a ground is not visible; however, a multiply reiterative action is assumed for the entire perimeter of an area:
Owing to their function, derived preverbs encode locative and landscape features of an area (place), making the semantic structures of derived preverbs much more complicated.

5. Simple / Orienting preverbs

The Laz simple preverbs are: me- / n-, mo-, go-, e-, ge-, do-, o-; however, this does not mean that they are equally taken on by all motion *per se* and transfer roots. The main function of simple preverbs is to denote direction/trajectory (horizontal and vertical) and orientation/reference (along either a horizontal or vertical axis; (non)-deictic); therefore, we refer to them as *orienting* preverbs (I. Kobalava). The aforementioned parameters for each preverb will be diagrammatically represented below.

1. Horizontal trajectory

```
  me- /n-  a ———— b  a= 1st person
  mo-  a ———— b
```

*me-* and *mo-* are deictic preverbs; they are referential to the 1st person towards whom a figure and a subject of motion/movement. *me-* and *mo-* is an opposite motion and denotes leaving the area of the 1st person (*me-*) and entering the area of the 1st person (*mo-*) (a prototypic deictic center). The preverbs *me-* and *mo-* may also be considered within the framework of the proximal and distal categories, if the verbs, taking on the preverbs in question, are considered in terms of distance/proximity with a deictic center.

116
me-:

(35) .baṭum-ɪša  me-v-ɪt-ɪ=ši  (Chik. I, 56.3)  (v-ɪt- < v-ɪd-)
    Batumi-ALL    PRV-S1-to go(IMPF.SBJ)-PM=that
  'One day when I was going to Batumi.'

mo-:

(36)  xoša  ku-mo-xt-u  (Chik II, 130.19)
    mullah(NOM)    AFF-PRV-to go-AOR.S3SG
  'That mullah came.'

The phonetic change me > n has been conditioned by the morphological milieu – a prevocalic position only in the 3rd person (Chikobava 1936: 160; 121-122);

(37)  ţuma ... ko-n-ul-u-n  (Chik II, 144.18)
    brother(NOM)    AFF-PRV-to go-THM-PRS.S3SG
  'My brother goes away.'

As far as a center of deictic motion is the 1st person, a verb form, taking on the preverb mo-, refers to an end of motion, whereas the one, taking on the preverb me-, refers to a beginning of motion;66 however, in the phase structure of motion, meanings of boundary-related phases depend on the root alternation, on their contrast in terms of series. Besides, a past tense verb stem is either dynamic (38) or stative which became dynamic after having taken on a preverb67 (39);

(38)  bee  ko-me-xt-u  (Kal. 41.30)
    boy(NOM)    AFF-PRV-to go-AOR.S3SG
  'The boy came thither.'

---

66 As for an addressee of motion, it is not even implied by a deictic orientation (Benveniste 1974: 50).
67 A preverb has a dynamization function; when dealing with Georgian, W. Boeder notes that "preverbed stative verbs acquire a dynamic meaning" (Boeder 2011: 39; Boeder 1992); this argument can be extended to Laz as well.
(39) aḳani-s ko-n-o-dgit-u [*ko-me-o-dgit-u] (Chik.II, 150.22)
plateau-DAT AFF-PRV-to go-AOR.S3SG
’S/he came up to the plateau.’

The preverbs *me- and mo-* are taken on by a verb root right
in the present tense, and such a form is of imperfective aspect
(generally, making up of an aspectual opposition is not a function
of the verb ‘to go’); in this meaning, present tense forms present
a process of motion as uninterrupted. The verb for ‘to go’ is a
suppletive verb; its roots alternate according to tense and aspect,
and occur differently in combinations with the preverbs *me-*/mo-
in the aorist, both a root and a preverb alternate: menda-xt-u
’S/he went away’ (40), which, as different from me-xtu ‘S/he
came there’ 68 (38), refers to a non-orienting, albeit a deictic
(from the 1st person) motion:

(40) noḡamisa-š oxo-iš-kele menda-xt-u (Kal. 134.12-13)
bride-GEN house-GEN-PP PRV:AFF69 to go-AOR.S3SG
’S/he went towards the bride’s house.’

The verb stem referring to ‘to swim’ occurs without the
preverbs *me-*/mo-: imčvirs / inčvirs ‘S/he swims thither.’ The
verb stem referring to ‘to fly’ takes on only the preverb *mo-; cf.

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68 For a detailed discussion of the problem in question, see the paradigmatic
analysis of the verb for ‘to go.’
69 In the literature, *menda-* is regarded a simple affirmative preverb with some
verbs (Pazar Laz 2011: 98); *menda-* is a preverb which seems to have an
affirmative function when verbs of motion/movement in the future refer either
to an action to be actually completed or, in the aorist, to a completed action; the
preverb *menda-* is taken on by transfer roots right in the present.
Structurally, *menda-* seems to be a complex preverb formed by two simple
preverbs rather than a derived one, because the second element *da-* is not a
m[^i]+da: mida-rtu ‘S/he went away;’ however, the simple form *da-* never occur
with the vowel o either in Megrelian or Laz (cf. Kırıa et al. 2015: 389); it occurs
in stems borrowed from Georgian by the languages of the Zan branch. Its
functional equivalent is *do-.*
Putxups 's/he files thither' - Mo-putxups 's/he files hither' (Asatiani 2012: 136). Only the preverb menda- is suppleted within the stem. It is occurs deictically only in combination with the derived / locative preverbs mekā- - mo̱ka-, mekā-nčviru - mo̱ka-nčviru, mekā-putxun - mo̱ka-putxun (for details see Locative preverbs).

The preverbs me-, mo-, menda- combine with transfer verb roots 'on- / g̱- with the meaning 'to take'; an object/figure of a causative motion is either animate (41) or inanimate (42):

(41) supra
    low table(NOM)
    ko-m-u-ḻ̌-es (<ko-mo-u-ḻ̌-es) (Chik. l. 7.14)
    AFF-PRV-APPL-to bring[inanimate]-AOR.S3PL
    'They brought him/her a low table.'

(42) mamuli... m-u-‘on-i. (Chik. l. 23.4)
    rooster(NOM) PRV-APPL-to bring [animate]-PM:AOR(S2SG)
    'You brought him/her a rooster.'

Besides, they are necessarily taken on by a present tense stem and all imperfective forms, a part of future tense forms, while, in the aorist, they are replaced by the derived preverb menda- (for details see a paradigmatic analysis of verbs of motion). The preverb menda- occurs in the present with transfer roots (43a) (44b).

(43a) alik mend-u-ţi-om-s (<menda-u-ţi-onsms)
    Ali-ERG PRV-APPL- to take [animate]-THM-PRS.S3SG
    'Ali takes [smt(animate)/smb].'

(43b) alik mend-u-ţi-am-s (<menda-u-ţi-ams)
    Ali-ERG PRV-APPL-to take [inanimate]-THM-PRS.S3SG
    'Ali takes [sth (inanimate)].' (Pazar Laz, 2011: 98)
The motion, conveyed by the verb form *go-putxun* (the preverb *go* taken on by the root *putx* 'to fly'), takes place in space, in the vertical distance from the earth, which is due to the manner (G. Talmy) of motion. However, the direction of motion is horizontal and not vertical (Diagram A); in (44), the direction of motion is conveyed by the infinitive, represented by means of ablative and allative, and by the final points (*nǯašen ǯa* 'from a tree to a tree'); in (45), the area is conveyed by the adverb *žin* 'up/above,' for which a person, encoded by a pronoun, is a landmark.

(44)  
\[
\begin{array}{ll}
go-putx-u & \text{kvinč-epe-ti,} \\
\text{PRV-to fly-AOR.S3SG} & \text{bird-PL-PTC} \\
nǯašen ǯa & \text{go-putx-un-an} \quad (\text{Asatiani} 2012:235) \\
\text{tree-ABL} & \text{tree (NOM: ALL)} \quad \text{PRV-to fly-THM-PRS.S3PL} \\
\end{array}
\]

‘The birds flew away; they will fly from one tree to another.’

(45)  
\[
\begin{array}{ll}
\text{čkim} & \text{žin \quad go-putx-u} \quad (\text{Asat.} 2012: 235) \\
\text{PRON:I above.ADV} & \text{PRV-to fly-AOR.S3SG} \\
\end{array}
\]

‘It flew above me.’

The Megrelian preverb *go-* has a similar meaning: *tinepk čqars go-dves xin* Ǯ ‘They put a bridge across the river;’ the preverb *go-* is taken on by a stative verb, has a dynamization function, and refers to joining two points in an horizontal way; in case of transfer roots, a versionizer (applicative) occurs in a verb structure: *i-* for the subjective version, *i-* (1\textsuperscript{st} and 2\textsuperscript{nd} persons) and *u-* (3\textsuperscript{rd} person) for the objective version, encoding a direction of motion as far as it is associated with the meaning of possession:
(46) noğamisa  go-u-yon-u  (<go-u-ğon-u) (Zhg. 76.22)
   bride(NOM)  PRV-APPL-to take-AOR.S3SG
   'S/he took the bride to him/her.'

The preverb go- encodes non-targeted movement with a changing vector of direction; the present tense form is devoid of temporal sense and refers to an action recurrent in time (47);

(47) kata... g-ul-u-n  (<go-ulun) čyoepes  (Chik. II. 96.10)
   people(NOM)  PRV-to go-THM-PRS.S3SG   village-DAT
   'People... go to villages.'

The preverb go- may refer to the entire perimeter of an area (Diagram C) when taken on by roots of both motion per se (48) and transfer motion (49).

(48) ..dunya ko-go-il-i=a  (Zhg. 131.4)
   World(NOM)  AFF-PRV-(O2)-to   go-PM:AOR(S3SG)= DR
   '...s/he went around the world, s/he said.'

(49) zoğa-s
   sea-DAT
   ko-go-m-i-yon-i=DR  (Kip. 64.38)
   AFF-PTV-O1-APPL/OV –to take-PM:AOR(S3SG)= SUB
   'Take me all over the sea, s/he said.'

The preverb go- also encodes motion around a fixed landmark (50) (Diagram C); it is taken on by stative roots making them semantically dynamic (50).

(50) kara ko-go-i-dv-en  (Chik I. 43.29)
   stick(NOM)  AFF-PRV-PASS-to lay-FUT.S3SG
   'A stick will be laid around him/her/it.'

o-

In Laz, the preverb o- is taken on by e limited number of verbs: o-çopu's/he caught,' o-šu 's/he drank,' o-ipSen 'will be
filled,’ o-putxu ‘s/he/it flew away’ (Chikobava 1936: 127; 2008: 138); the only one among them is the verb of manner motion referring to ‘to fly,’ which denotes a motion directed in space and renders distancing with a starting point; a trajectory of motion is not viewed transparently.

The preverb o- is used for deriving of a past or aorist perfective form from a preverbless present and/or even the tenseless form putxun ‘s/he/it flies.’

(51) kuršumi’steri o-putxu (Chik. 92. 6-7)
‘S/he/it flew away like a bullet.’

(52) oda kamkulι futxun (Chik. II. 114. 33)
‘A fly flies in the room.’

2. Vertical trajectory

The trajectory and direction of vertical motion are viewed as a vertical trajectory; direction: from below upwards, from above downwards.

\[ e^{-} \] ye- / ’e- \[70\]

<table>
<thead>
<tr>
<th>Earth surface</th>
<th>A. ↑</th>
<th>B. ↓</th>
</tr>
</thead>
</table>

or some other body

The e/ye / ’e freely alternate within stems of motion in the Hopa-Chkhala variety, while, in Vitse-Arhavi and Pazar Laz, a variant with a high vowel is rare (Asatiani 2015: 195-196).

The preverb e- refers to:

1. Direction from below upwards (Diagram A);

---

\[70\] e>ye is a phonetic process which is characteristic only to Hopa and, infrequently, to Pazar Laz, while, in the Vitse-Arhavi variety, it is rare (Asatiani 2015: 195-197); for phonological changes having occurred at the junction of phonetic variants of the preverb and morphemes, see Asatiani 2015:198-200.
2. Oriented motion, when a landmark is earth surface or some other body: a) motion from the earth surface (53b) or to come up the earth surface... (for instance, of crops) (53a); b) upward motion from another body (53b); cf.

(53a) ʔaskili  k-e-extu  (Kal. 250.14)  
dog rose  AFF-PRV-to go-AOR.S3SG  
'A dog rose [and] came up.'

(53b) ʔəzin-ʔəzin  ye-putx-u  (Kal. 53.5-6)  
up(RED)ADV PRV-to fly-AOR.S3SG  
'It flew up and up.'

(53c) ʔoʔi  ova-šen  ye-putx-u  
pigeon(NOM) nest-ABL PRV-to fly-AOR.S3SG  
'The pigeon flew up from the nest.'

The preverb e- is taken on by verbs stems referring to two kinds of motion – to go and to fly.71 It also conveys direction with roots of transfer meaning: ţe/žd-/oŋ-72 ‘to take sth [inanimate]’ (54a) [oŋ-] ‘to take sth/smb [animate]’ (54b):

(54a) ʔəkəc-e-pe-k  x-epe  ʔuʔi-iša  (Chik II. 77.29)  
man-PL-ERG hand-PL(NOM) ear-GEN  
k-e-i-ʔe-s  AFF-PRV-APPL-to bring [sth]-AOR.S3SG  
'The men brought their hands up to their ears.'

(54b) si  kayaluʔi-ša  
you[SG].PRON:PERS/O2 wall-ALL  
e-ʔi-ʔon-u.  (Kal. 172.30)

---

71 Water surface is a landmark for preverbed forms referring to 'to swim;' within this area, a motion is both horizontal and vertical, this being realized by means of different preverbs.
72 si biša ʔa-e-xdi  (Chik I.55.19) 'You took a stick,' ʔuʔuʔa-e-ʔi-p-u  (Chik. II. 37.26) 'S/he took a jug.'
PRV-O2-APPL-to bring up[animate]-AOR.S3SG
’S/he/it brought you up onto the wall.’

Within the phase structure of verbs with the preverb e-, ablative and allative forms of substantives refer to the beginning and end of motion; cf. (53b) - ova-šen ye-putx-u) and (54d) - ḫayaluği-ša e-g-i-çon-u).

Some examples, retrieved from Laz texts, demonstrate that the preverb e- conveys an opposite direction as well – from above downwards (Diagram B), albeit a verb root is not a verb of movement but rather a bi-personal verb referring to a different kind of motion: ((da)şra (55a), (da)cema) (55b) (Asatiani 2015: 194); direction of motion is also referred to by the adverb žindole ‘from above’ (55a), or a superessive marker in a verb (55b), conveying the end of the phase structure of motion, a surface of a thing.

(55a)  bu[t]ka-ši  žindole  marxva
      leaf.GEN  above.ADV  burning embers
       e-bobğ-am-t  (Chik. II. 62.6)
      PRV-[S1]-to drop-THM-PRS.S1PL
       ‘We will drop burning embers from above the leaf.’

(55b)    bozos  e-b-a-ntx-i  (Zht. 164.6)
       girl-DAT  PRV-S1-APPL : SPRES-to fall-PM:AOR
       ‘I fell upon the girl.’

The semantic components of the Laz preverb e- are the same of those of its Megrelian counterpart e-; however, Diagram B is not appropriate both for Megrelian and for the Hopa-Chkhala variety of Laz.
Diagram types A, B, C, D demonstrate that a direction, modified by the preverb, is not only vertical, although it is main; the direction of motion is *from above downwards*. With this feature, it is contrary to the meaning of the preverb *e*-.

For a motion, which has begun from above, a landmark is either a *surface of a body* (earth, water, or some other body), whereby a process of motion ends (Diagram A) (56a), or an inner part of a body with a surrounded area (Diagram B) (56b), (56c):

(56a) \[cxen\(a\) yei-s\]
\[
\text{horse(NOM) one location-DAT}\\
\text{ka-ge-xt-u}\\
\text{(Kal. 183.31)}\\
\text{AFF-PRV-to go-AOR.S3SG}\\
\text{The horse landed in one country ("location").}\]

(56b) \[\text{\(\acute{k}\)vin\(c\)i yovas ge-putx+u-n}\]
\[
\text{Bird(NOM) nest-DAT PRV-to fly-AOR.S3SG}\\
\text{(Kal. 123.8)}\\
\text{‘The bird flew into the nest.’}\]

(56c) \[ko-ge-m-i-yon-i \text{\(\acute{k}\)ui-s}\]
\[
\text{AFF-PRV-O1-APPL-to bring-PM:AOR}\\
\text{pit-DAT}\\
\text{(Chik. II. 21)}\\
\text{‘You brought me into the pit.’}\]

Sometimes the preverb *ge*- conveys horizontal movement by means of changing a vector of motion which may conventionally have a circular trajectory (Diagram D) and refer to turning (57). It is a function of the preverb *ge*- to convey to this meaning as far
as the Laz verb root is not a verb denoting 'to turn' but the aorist of the verb denoting 'to go' (57):

(57) ɟo-้งoi  ge-xt-u  ᵃyoi-ša   (Kal. 31.5-6)
dog(NOM) PRV-to go-AOR.S3SG village-ALL
'The dog went back into the village.'

The semantic components of two roots txoz-74 and ɕiš-75 referring to motion/movement imply two subjects/figures moving consecutively towards each other; a landmark of the motion is a figure in motion (Diagram C); in case of the root txoz, it exactly reiterates a trajectory of motion: b follows and describes a phase of the duration of motion, while the preverb ge- modifies the direction along the horizontal axis (58):

(58) DTDkvei-s   gi-o-txoz-u (< ge-o-txozu)  (Chik. I. 33.24)
roe-deer-DAT PRV-APPL-to chase-AOR.S3SG
'S/he/it chased the roe-deer.'

ɕiš- may not exactly reiterate the trajectory of a preceding figure; however, the vectors of direction of the two figures coincide (a=b); the preverb ge- denotes direction, the root ɕiš refers to approaching a preceding figure (for details see 1.1. Verbal roots of motion encoded by spatial features).

(59) ICASTkeri  ge-ɕiš-u   (Kip. 2.32)
soldier(NOM) PRV-to catch up-AOR.S3SG
'The soldier caught up with smb/sth.'

\[do-\]
\[A.\] no direction

\[B.\]  

\[C.\]

74 ge-txozinu ‘to chase’ (Tandilava 2013: 94).
75 ge-ɕišinu ‘to catch up’ (Tandilava 2013: 116).
As Diagrams A, B, C demonstrate, the vectors of direction of the preverb *do-* are various; however, the principal one is vertical in verbs of motion: from above downwards. The preverb *do-* is compatible with a principal kind of motion 'to fly':

(60) heko ko-do-putx-u (Chik. II. 40.6)  
    there.ADV AFF-PRV-to fly-AOR.S3SG  
    'It landed there.'

The preverb *do-* is incompatible with the principal verb root *ul-/xt-* referring to motion/movement on land which has been logically expectable; within horizontal space, the preverb *do-* is realized in combination with the root *kt-* ‘to turn,’ implying a shift of the vector of direction (61):

(61) ka-d-i-kt-en  
    AFF-PRV-PASS-to return-AOR.S3PL  
    bići-š oxori-ša  
    boy-GEN house-ALL  
    'They went back to the boy's house.'  
    (Kip. 8.28)

Whenever the root *č[v]ir-* takes on a preverb, motion seems to be deictic referring to a motion from the first person (25):

(62) d-i-n-čir-u (< do-i-n-čir-u) (Marr 1910:212)  
    AFF-PRV-PASS-to swim-AOR.S3.SG  
    'S/he/it swam [away].'

The preverb *do-* is among the few ones in Laz which is taken on by the root *č[v]ir-*. 

127
5.1. A Communicative Act and Construal of Space

In the construal of space, a role of personal deixis is significant, and, for it, the principle of egocentrism has been a point of departure, and, in its linguistic organization, the satellites, being grammatical or lexical representatives for the description of a deictic area, take part: spatial preverbs, personal pronouns, proximal and distal adverbs and pronouns, locative cases. They are associated with problems of direction and orientation in the Kartvelian languages, and in Laz, among them.

The construal of space has been closely associated with a communicative act which involves exchange of information whereby a dichotomy is formed by 'speaking' (first and second persons) and 'non-speaking' (third person) persons, the latter being beyond communication. Hence, space can be conditionally divided into two, of a communicative act (space of first and second persons) and of the rest (Tchanishvili 1992: 413).

The three interconnected vectors {I – here -- now}, departing from the ORIGO of speech, involve the unity of person, space, and time within a single communicative area; in Laz, the interpretation of the scheme with respect to person, time, and space yields in the following representation of their equivalence (Table 2).

Table 2

<table>
<thead>
<tr>
<th>Pers</th>
<th>PERS (PRON)</th>
<th>SP (ADV)</th>
<th>TM (PRON)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>ma 'I'</td>
<td>hak(prox) 'here'</td>
<td>ham oras 'this time'</td>
</tr>
<tr>
<td>II</td>
<td>si 'you[SG]'</td>
<td>hek(dist)</td>
<td>him oras 'that time'</td>
</tr>
<tr>
<td>III</td>
<td>aia 's/he/it'</td>
<td>'there'</td>
<td></td>
</tr>
</tbody>
</table>

Based on Table 2, the person system is more diversified than those of space and time; within a communicative act, on the one hand, there is a universal system [I – here - now] and, on the
other, there is [you[SG]/s/he/it – there – that time], that is, the first person scheme is opposed to the rest – of first and second persons. The three notions, included in the combination, are opposed according to proximal and distal, denoting (non-)proximity to a deictic center/speaker (Levinson 1983:62).

In Laz, proximal/distal relationships with the first person are encoded by means of various linguistic categories of substantives and verbs, being represented by lexical and/or grammatical devices:

1. deictic preverbs (simple mo- – mi-) and all derived clusters involving them
2. deictic adverbs (ak / hak - ek / hek ‘here - there’)
3. deictic demonstrative pronouns (aja / ham - ija / him ‘this - that’)
4. ablative and allative markers (-iše / -iša, -da / -de).

If Table 2 is copied involving these categories, we will receive Table 3:

<table>
<thead>
<tr>
<th>Pers</th>
<th>PERS (PRON)</th>
<th>PRV</th>
<th>LOC case</th>
<th>PRON:DEM</th>
<th>SP (ADV)</th>
<th>TM (PRON)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>ma</td>
<td>mo-</td>
<td>-iša, -da</td>
<td>aya / ham</td>
<td>hak ‘here’</td>
<td>ham oras</td>
</tr>
<tr>
<td>II</td>
<td>si</td>
<td>me-</td>
<td>-iše, -de</td>
<td>iya / him</td>
<td>Hek ‘there’</td>
<td>him oras</td>
</tr>
<tr>
<td>III</td>
<td>aia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

76 Variants across the dialects: Hopa - ak -ek, Vitse-Arhavi, Pazar and Ardeshen - hak / hako /hik / hiko (Kiria et al. 2015: 42).
77 Variants across the dialects: Vitse-Arhavi – haya / hay / ha, hea / heya, Hopa - aya, eya, iya/iya/ya, am/amuk, em/emuk, Pazar - him/himu, ham/hamu/, hem/hemu/emu; however, the following forms occur in Arhavian not infrequently. Besides, the simple variants a and e also occur in Vitse-Arhavian and Hopa (Kiria et al. 2015: 100).
According to Table 3, all categories make up an opposition “far – close;” motion towards the 1st person is egocentric and implies a mobile figure approaching the 1st person, which is encoded in Laz by means of the preverb mo- taken on by the verb, while distancing from the 1st person is encoded by the preverb me-, retaining the principle of a deictic egocenter. The opposition of the vowels a and y/e is promiscuous in lexical and grammatical representatives (Kiria et al. 2015: 100), having been regarded as a marker of proximal and distal in various functional elements in the Kartvelian languages.78

Third person is not a case in point within the context of personal deixis (Benveniste 1974: 261-262), and a deictic orientation is only egocentric (Lyons 1978: 291-292); it implies either entering or leaving an area of the 1st person; however, a communicative situation articulate space in a different way and calls for the inclusion of an addressee of motion/action.

In the construction of sentences with the preverb no-, both the first and second and third persons occur as an addressee. (63) presents a dialogic speech situation in which semantic roles of the actants, connected with the verb to go/come, change; hence, a speaker (subject), moving along a motion vector, causes the preverb mo- to be taken on by the verb stem referring to its motion, whereas an addressee is encoded by an allative form of the 2nd person pronoun:

78 The classifying terms, having been established (mašorebeli and maaxloebeli) in Kartvelian linguistics to refer to the grammemes of the category of orientation, are used proximal and distal in relation to the 1st person. By means of the term orientation, A. Shanidze refers to “a grammatical category which shows a speaker’s relation to a verb-encoded action, based on which it is established whether a speaker assumes it as directed to the positions in space where s/he is located or as moving away. Based on the aforementioned, there are two kinds of orientation: proximal and distal, that is, directed towards a speaker and away from a speaker” (Shanidze 1980: 238).
In (63), the preverb mo- denotes not egocentric deixis but rather presents the translocation of the first, mobile person, its directed motion towards the second person, which is referred to by the second person allative form skan-da ‘towards you[SG],’ that is, this is an area within which the first person moves.

Such a scheme is a systemic characteristic feature of Kartvelian and, in individual languages of the group, occurs essentially in a similar way, with more or less modifications; the situations in Laz and Megrelian are identical (see Tchanishvili 1992: 411-416; Reseck 2015: 5-111), and both are slightly different from Georgian. We mean a deictically opposed pronominal and adverbial tri-partite system differing from the binary one of the languages of the Zan branch (Kiria et al. 2015: 391); by the binary system, we assume what are presented in Table 4 and Table 5: one schematic system, which is for the first person, is opposed to another scheme for two – the second and third persons.

With respect to a communicative act (speaker – listener), the meaning of motion/movement should be considered with a view to the beginning and end phases within a syntactic construction in order to demonstrate where from / to a motion, represented by the preverbs mo- and me-, is directed, how it retains deicticity to an egocenter, whether an addressee / end of motion is visible; an addressee may be controlled by locative cases.

79 The enclitic ya/ia is a focus particle, a quotative particle, used in direct reported speech to quote what somebody else has said (Kiria et al. 2015: 750).
Table 4

<table>
<thead>
<tr>
<th>PRON (PERS)- I / II / III + LOC/ABL</th>
<th>Verb</th>
<th>PRON(PERS)- II / III + LOC/ALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>čkim-de / skan-de / emu-še</td>
<td>me-xt-u</td>
<td>skan-da / emu-ša</td>
</tr>
<tr>
<td>I- ABL / you[SG]-ABL</td>
<td>PRV- to go/come- AOR.S3SG</td>
<td>you[SG]-ALL / s/he/it -ALL</td>
</tr>
<tr>
<td>From me /you[SG] /him/her</td>
<td>came [hither]</td>
<td>to me / you[SG] / him/her</td>
</tr>
</tbody>
</table>

Table 5

<table>
<thead>
<tr>
<th>PRON (PERS)- I / II / III + LOC/ABL</th>
<th>Verb</th>
<th>PRON(PERS)- I / II / III + LOC/ALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>čkim-de / skan-de / emu-še</td>
<td>mo-xt-u</td>
<td>čkim-da / skan-da / emu-ša</td>
</tr>
<tr>
<td>PRON: I- ABL / you[SG]-ABL / s/he-ABL</td>
<td>PRV- to go- AOR.S3SG</td>
<td>PRON: I-ALL / you[SG]-ALL / s/he-ALL</td>
</tr>
<tr>
<td>From me /you[SG] /him/her</td>
<td>came [hither]</td>
<td>to me / you[SG] / him/her</td>
</tr>
</tbody>
</table>

Any combination, occurring in Table 4 and Table 5, can be used to construct a syntactic entity by choosing a starting point/person from the first column, which will be encoded by ablative, while a final point/addressee can be chosen from the third column; the only restriction applies to combination of first and second persons, that is, čkimde - čkimda, skande - kanda cannot be combined within a single sentence. An ergative form of a subject/figure of motion of the monopersonal verb denoting ‘to go/come’ cannot be altered.80

80 For a comprehensive account of similar opportunities in Megrelian, see Reseck (2015: 95-111).
Essentially the same happens with the bipersonal verbs denoting 'to bring [in/animate]'; in (64a) and (64b), the preverbs *me-/mo-* may equally alternate.

(64a) noğa-šen oxori-ša
hamlet-ABL house-ALL
mo-m-i-pong-u / me-m-i-pong-u
PRV-O1-ALL-to bring [animate]-S3SG
'S/he brought me home from the hamlet.'

(64b) noğa-šen oxori-ša
hamlet-ABL house-ALL
mo-v-i-pong-i / me-v-i-pong-i
PRV-S1-ALL- to bring [animate]-S3SG
'I brought her/him home from the hamlet.'

The verbs in (64a) and (64b) differ in their paradigmatic arrangements: the verb in (64a) changes according to object person markers, while the one in (64b) changes according to those of a subject person. In the verb *mo-m-i-pong-u / me-m-i-pong-u*, another person is active performing an action, transfer of the 'ego,' while, in (64b), the verb implies that the 'ego' is active, that it transfers another person. Besides, *mo-m-i-pong-u* may be interpreted as both bi- and trivalent: momipongu emuk ma mamuli "S/he brought me a rooster."

Both from the table (4; 5) and examples (64a; 64b), it is obvious that the equivalence between the deictic center and the orientation has been broken, that is, the principle [I – here - now] is not kept.

If person deixis may be considered either as entering the first person's area or leaving it, with respect to a communicative act, entering or leaving in another person's area may also be
assumed, which is referred to as a speaker and listener’s area (Tchanishvili 1992: 415).

N. Tchanishvili (1992) offers the following hypothesis:

“Persons – speaker and listener – may leave their area and create a new communicative area. Each participant of such a communicative act may have its own permanent area coinciding with that of a communicative act... that is, persons, participating in a communicative act, may have two areas: stable, which belongs to them, and another, variable, which is part of an area corresponding to a communicative act” (pp. 413-414).

A communicative area, in which there is ma ‘I,’ that is, first person, is marked by the proximal adverb ak / hak ‘here,’ by the preverb mo-; however, is the distal adverb ek/hek a marker of an area in which first person is never present or implied?

(65a) ali-k ċkim-da hek
  Ali-ERG PRON:I-ALL there.ADV:DIST
  ko-mo-xt-u
  AFF-PRV:DEIX-to go/come-AOR.S3SG
  ‘Ali came there.’

(65b) ali-k hek
  Ali-ERG there.ADV:DIST
  ko-mo-mi-ğ-u
  AFF-PRV:DEIX-O1-APPL- to bring [inanimate]-AOR.S3SG
  uškii
  apple(NOM)
  ‘Ali brought me an apple there.’
Examples like (65a), (65b), (65c) prove that an area of the first person is much broader within a communicative field than it is implied by egocentric deixis as far as a direction, encoded by the preverb mo-, is included in the distal area which is encoded by the adverb hek ‘there’ (that is, ‘not here’); the first person is not in its own permanent area but rather in a variable one not belonging to it. For the examples like (65a-65c), the main scheme is \{I - there\}. An area, encoded by the adverb hek for the first person, is variable; therefore, permanent and communicative areas of first the person do not correspond to each other because a time of communication and a time of an action, encoded by a verb, do not coincide, this implying that “ego” moves in time and space and, together with “ego,” a communicative area changes so that the first person’s permanent area remains unchanged, still being a landmark of motion, irrespective of the fact that the first person is not there at that specific moment of time (for the Georgian data, see Tchanishvili 1992: 414).

“A mismatch between a time of action and a time of communication may cause a spatial mismatch. This kind of mismatch is linguistically encoded by the breaking of an implicit connection between the categories of proximity and orientation” (Tchanishvili 1992: 414).

This is a case when, on the one hand, time and space of an action, encoded by a verb, and, on the other, time and space of a
sentence, referring to a communicative act, do not coincide; in such instances, a place of action is encoded by means of the category of proximity, by means of an adverb denoting ‘there,’ that is, ‘not here,’ whereas space and time, conveyed by a verb, are encoded by means of the category of orientation which is represented in the verb structure by the preverb mo-.

We can summarize that, in Laz, it is significant to consider a role of a communicative act in the construal of space; a direction of motion, encoded by the preverb mo-, depends on permanent/stable and variable deictic centers. During analysis of the problem in point, combinations of the respective grammatical and lexical categories and their corresponding representatives have been addressed:

1. Grammatical category of person, being formally marked by S and O markers, and, lexically by personal pronouns being further divided into areas of the first person and of the rest (second and third persons).
2. Proximal and distal demonstrative pronouns, which, alongside with pointing to something/somebody specific, act as determinants, refer to proximity and distance of a thing in time and space: ham ieris ‘this place’ – him ieris ‘that place,’ ham oras ‘this time’ – him oras ‘that time.’
3. Proximal and distal adverbs (hak ‘here’ – hek ‘there’) which also juxtapose an area of the first person and that of the rest.
4. Locative preverbs, either the simple me- / mo- or the derived ones, consisting of the ingredients me- / mo- (meka - moka, meça - moça...), taken on by verbs of both motion and position and referring to dynamics or statics of a subject/figure in relation to either a mobile or immobile referent (for details, see Locative Preverbs).
6. Locative Preverbs

Laz locative preverbs derive a number of semantically differing stems; generally, they encode a \textit{direction} and \textit{orientation} of motion by means of combining with roots of motion/movement and characterize a \textit{place} of motion / immobility, that is, provide information about the topology of a landscape.

\textit{Simple} preverbs, included in the structure of a derived one, \textit{specify only a direction while locative particles provide much more information about an action performed in an area of which the basic is to specify the topology of a place}. Preverbs, derived from components including these specificities, may be referred to as \textit{locative preverbs}.

Within a structure of the agglutinating verb stem, a position of locative preverbs has been stable; locative particles occur in combination with simple preverbs as necessary constituents of a common cluster. Meanings, encoded in the particles, can be described by means of adverbials. Accurate establishment of independent meanings of the particles in question seems to be rather provisional.\footnote{cf. Gudava & Gamkrelidze 1981; Ivanishvili & Soselia 2014: 183-192.} Difficulties have been due to the semantic of the particles per se; specifically, one and the same particle occurs having different, sometimes opposite meanings in combination with various preverbs.

For instance, the particle \textit{-la-} combines with preverbs encoding dynamic and stative processes in horizontal and vertical areas; however, in combination with the roots of motion/movement \textit{me+la-} / \textit{mo+la}, it encodes a landmark's (object's) \textit{going into something} horizontally, and, with stative
verbal roots in a same position, it encodes being in an area; however, in a vertical area, the same particle in combination with the preverb *e*, with the dynamic verbs *e+la-*, encodes the direction *from adove downwards*, and a landmark of action is *beside* an object. The same meaning occurs with positional verbs denoting a thing's being *beside* an object.82

Owing to the phonological processes at the junction of morphemes, a vocalic constituent of the preverb is either deleted or modified; a change affects both a vowel at a junction with an other morpheme and an interconsonantal one within a derivative preverb, this being regulated by rules and assimilation and dissimilation of Laz;83 however, such changes and entailed variations do not produce even a nuanced semantic distinctions.

Since simple preverbs, in combination with dynamic stems, encode only a direction of motion and an orientation and a topology are encoded by locative particles, we will establish meanings of locative preverbs based on the semantic analysis of locative particles.

The following sections will discuss the combinability of locative preverbs only with verbal roots of motion/movement (both *per se* and transfer).

82 Semantic differences of this kind, occurring in combinations of the particles with simple preverbs, do not imply that the particles do not occur in one and the same meaning in various combinations.

83 For details on the issue in question, see Asatiani 2015: 291-293.
### 6.1. Adverbial particle [-ʔa]84

PRVSMPL +PTC:ADV(location) : [me+ʔa-] [mo+ʔa-] [e+ʔa-/ʔo-] 85

<table>
<thead>
<tr>
<th>Horizontal trajectory</th>
<th>Vertical trajectory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>me-ʔa</strong>-</td>
<td><strong>mo-ʔa</strong>-</td>
</tr>
<tr>
<td>{TR: hor + REF: over + deix(I &gt;)}</td>
<td>{hor + LOC: area change + deix(I&lt;)}</td>
</tr>
<tr>
<td>{TR: hor + REF: in front/beside + OR: another object}</td>
<td></td>
</tr>
<tr>
<td>{TR: hor + deix (I &gt;) + alternation of two points in an area}</td>
<td></td>
</tr>
<tr>
<td><strong>me-ʔa-mo-ʔa</strong>-</td>
<td></td>
</tr>
<tr>
<td>{hor + path: change + deix (I - I&lt;)}</td>
<td></td>
</tr>
<tr>
<td>{hor + REF: over + deix(1&gt; - 1&lt;)}</td>
<td></td>
</tr>
<tr>
<td><strong>e-ʔa-/e-ʔo-</strong>-</td>
<td></td>
</tr>
<tr>
<td>{TR: hor + REF: behind}</td>
<td>{TR: vert: inclined + path: from below upwards + REF: behind/next}</td>
</tr>
</tbody>
</table>

Among the preverbs combining with stems of motion, an oppositional pair, with respect to a direction and orientation, is

---

84 A vowel, included in a particle, is unstable; it is modified as a result of phonological processes at the function of morphemes.

85 Our analysis is not focused on the preverbs [o+ʔo-] [ge+ʔa-] [go+ʔa], encoding action/motion towards each other or stativity of being together; however, in Laz, they are not taken on by verbal roots referring to motion/movement.
made up by the HOR - [meḳa-] – [moḳa-]; the meaning of vertical, encoded by the particle ḷa-, is very weak.

[me+ḳa-]

It is compatible with all manner roots of motion: ul- 'to go, to walk,' putx- 'to fly,' čvir- 'to swim,' and the transfer root con- 'to take sb.' It encodes horizontal movement in relation to a referent / landmark, specifically, motion over, from beside or from front. meḳa- is a deictic preverb; its opposite meaning is encoded by the preverb moḳa.

[mo+ḳa-]

A deictically opposite direction of the preverb [me+ḳa-] is encoded by [mo+ḳa-], differing from the former with the vocalic element (e/o) of the simple preverb.

A deictic opposition is well illustrated by examples presenting compound verbal stem by means of alternating both preverbs, this also implying motion with a changing vector (66) {hor + path: change + deix (l->l<)}

(66) xoȝa
mullah(NOM)
miḳ-ul-u <muḳ-ul-u  (~meḳa-ul-ulu ~moḳa-ulul)
PRV-to go/to walk-AOR.S3SG–PRV-to go/to walk-AOR.S3SG
'The mullah walked hither and thither.' (Chik. I. 10. 30)

In Example (66), the motion is neutral in terms of reference.

e+ḳa- / e+ ḷa-

The function of the simple preverb [e-] is to specify a direction of a horizontal or vertical motion; the meaning, encoded by the adverbial particle [-ḳa], is associated with either an accurate or approximate reiteration of a trajectory of a moving figure and is oriented to it (67):
The speed of motion is more than that of the first figure (67) which is a semantic component of the root ṣiš- and not of the preverb; cf. ge- ṣišinu 'to catch up with.' The semantics of achieving a goal has been inbuilt into the root ṣiš-; however, the completion of motion is encoded in a perfective form. Its opposite meaning is conveyed by eko-skudu 'to lag behind' in which the semantics of the preverb eko- is unchanged: following, behind of another figure; however, the denotational meaning ('to lag behind') is borne by the root sḳid-.

The verb forms eḳo-zdams 's/he follows' and eḳa-ṣišu / ge-ṣiš-u 's/he caught up with' describe the phases of course and end of a motion/movement within a single horizontal section, being achieved by means of root alternation within this specific verb form, whereas the preverb encodes locations of two figures with respect to each other.

A verb with the preverb eko- may also encode a figure's motion in a vertical direction (3):

(68) oyoreši morderis berepek mḳas koẓiduman [...]'
   'Children put a big pumpkin on their waists [...]'
inčviraman do var dvaškvera.
   swim in the river and do not drown.'
In this example, the semantic component ‘a figure’s location behind/next to the first one’ of the preverb eḵa- / eko- has been retained.

6.2. Adverbial particle [-a]

The preverbs, containing the element ca-, encode the same meaning as those for ‘forward’ and ‘under’ (Chikobava 2008/1: 130); it combines only with a handful of roots (cf. Asatiani 2015: 224). It mostly occurs with the stems referring to ‘to jump’: kaḵ, 142
cxonṭ, their roots predominantly referring to motion on the spot; after taking on a preverb, motion is directed both in a horizontal (from inside outwards, showing a landmark of motion) (69) and a vertical (without showing a landmark); e.g. (70):

{hor: DIR: forward = straight ahead + OR: deix(I<)}:

(69) kalivi-šen geri ko-meč-i-kaṭ-u. (Kip. 37.20)
tent-ABL again AFF-PRV-APPL-to jump-AOR.S3SG
‘S/he jumped out again from the tent [forward].’

{vert: DIR: from above downwards+ OR: deix(I<)}:

(70) nja-šen meču-kaṭ-u. (Zgh. 95.27)
tree-ABL AFF-PRV-to jump-AOR.S3SG
‘S/he jumped down from the tree.’ (< meča-u-kaṭ-un)

[mo+ça-]
{hor: DIR: from inside outwards + forward = in the direction of motion+deix(I<)}

(71) ṭaxṭavani-ši tudendo ko-meška-xt-u...
couch-GEN under.ADV:LOC AFF-PRV-to go-AOR.S3SG
moš-u-kaṭ-u-s... (Kip. 84.29)
MSD [PRV-APPL-to jump-AOR.S3SG]-DAT
‘S/he went down under the couch... when jumped out...’

Sentence (71) is a complex syntactic construction rendering a figure’s motion in two opposite directions: the verb ko-meška-xt-u (71) conveys a directions of a subject’s motion towards a landmark (ṭaxṭavani ‘a couch’) from outside inwards, being encoded by the preverb meška, while a location is specified by the adverb tudendo ‘under;’ thus, a landmark of motion is an object under which, in an empty area, and inwards which a motion takes place. The verb in (71) refers a motion opposite to the
figure from an area of the same type. In this case, the preverbs me+ška- and mo+ça- are deictically opposite, this being conditioned by the simple components me- and mo-; they specify a direction of motion; the adverbial particles -ška and -ça encode a location in space or a topology of a place; a manner of motion is referred to by various roots ('to enter,' 'to jump').

The mo+ça- also renders an ascending motion {vert: DIR: from below upwards+ fast motion}: moça-dginu 'S/he got up,' moço-kaṱhu 'to spring up.'

The meaning of the preverb eça- implies both horizontal and vertical movement. Its denotation may be rendered by adverbs for forward, from below upwards; same adverbs specify a position with respect to a referent: location from from the front, from below.

{vert: DIR: from below upwards+OR:ABS}

(72) bere  eç-u-kaṱ-u
child(NOM) PRV-APPL-to jump-AOR.S3SG
do da-ntx-u (Zgh. 18.16)
and(CONJ) PRV-to fall-AOR.S3SG
'The child jumped up and fell.'

{hor: DIR: ahead= in the direction of motion + OR: figure 1}

A verb, containing the preverb eça-, necessarily implies two figures' motion in a sequence; {Figure 1} is a landmark for {Figure 2} which precedes {Figure 1} during motion (73)86:

{Figure 1 → Figure 2}

---

86 cf. The preverb eška- when, of figures moving one after another, the former is a landmark.

144
(73) ar emtumanis
    one(NOM) uphill.ADV:LOC
    k-oçi-i-mığıon-i ... 
    AFF-PRV-APPL-to put in the lead-PM(MOD:IMP)(S2SG)... [guruni] (Chik. II. 8.30)
    [donkey(NOM)]
    'On one uphill, put [a donkey] on the leas.'

[ge+ça] || [go+ça] ||[ko+ço]

In combinations with verbal roots referring to movement in a horizontal area, the meanings of the preverbs [eça-] and [geça- || goça- || koço-] coincide based on elicited contexts; they encode an action in a horizontal area going on in front of something or preceding towards an object's either front or lower part, lower side.

{vert: sheer + DIR: from above downwards+ OR:ABS}

During a vertical motion, when a direction is from above downwards, a landmark is absolute, and a preverb encodes a beginning of motion and not its end:

(74) bere... psḵala-s ge-xe-t-u (Chik. II. 72.8)
    boy(NOM) staircase-DAT PRV-to sit-IMPF-S3SG
    do geçu-kaṗ-u.
    and PRV- to jump-AOR.S3SG
    'The boy was sitting on the staircase and jumped down.'
### 6.3. Adverbial particle [-la] / [lo-]

**PRV\_SMPL**: PTC:ADV(location):

- [me+la-]
- [mo+la-]
- [do-lo]
- [e+la-]
- [ge+la-]
- [go+la]

<table>
<thead>
<tr>
<th>Horizontal trajectory</th>
<th>Vertical trajectory</th>
</tr>
</thead>
<tbody>
<tr>
<td>dolo-</td>
<td></td>
</tr>
<tr>
<td>(vert + TR: sheer + DIR: from above downwards + LOC: into a closed area, towards depth / end point + visual)</td>
<td></td>
</tr>
<tr>
<td>ela-/ola-</td>
<td>ela-/ola-</td>
</tr>
<tr>
<td>(hor)</td>
<td>(Vert: DIR: from below upwards + Figure [1+x] + OR: another figure + REF/LOC: beside, together/accompanyment)</td>
</tr>
<tr>
<td>(hor + OR: DEIX + Figure [1+x] + OR: another figure + REF/LOC: beside, together/accompanyment)</td>
<td></td>
</tr>
<tr>
<td>[go+la-]</td>
<td>gela-</td>
</tr>
<tr>
<td>(TR: no specific direction + iterative movement)</td>
<td></td>
</tr>
<tr>
<td>(FM - {DIR: no direction + OR: no specific landmark})</td>
<td></td>
</tr>
<tr>
<td>(hor + TR: by overcoming an obstacle + DIR: from outside inwards)</td>
<td></td>
</tr>
<tr>
<td>(hor + no direction or changing direction + OR/REF: along a landmark)</td>
<td></td>
</tr>
<tr>
<td>(hor + DIR: forward / in the direction of motion + OR: figure 1 + REF: beside + speed of motion)</td>
<td></td>
</tr>
</tbody>
</table>
[me+la-] / [mo+la-]

[me+la-] and [mo+la-] almost do not seem to have been compatible with verbal roots referring to motion/movement (‘to go,’ ‘to swim,’ ‘to fly,’ ‘to take sb/sth’).

*mola-ǧmalu* ‘to take sth hither from a special location, motion towards a speaker;’ *molo-lva* ‘to come hither from a special location towards a speaker.’ As different from the *mo-*, the preverb *mola-* implies that a motion starts from a specific point / location towards a speaker (Pazar Laz, 2011:107).

The preverbs *mola- / mela-* are taken on by stative verbal roots: *mela- / mola-xen* ‘S/he sits inside,’ *mela- / mola-dgin* ‘S/he stand inside,’ *mela- / mola-ʒin* ‘It is placed inside,’ *mola-ʃins* ‘S/he lies or sleeps inside;’ attachment of a thematic marker onto stative verbs in the Presents is a rule transferring verbs to a class of motion (except roots of movement).

[do+lo-]87

{vert + TR: sheer + DIR: from above downwards + LOC: inwards a closed area, towards depth / end point + OR: ABS + visual}88

(75a) *mzo-ǧa-s dolo-xt-u* (Chik. I. 34.26)

sea-DAT PRV-go-AOR.S3SG

‘S/he went into the sea.’

(75b) *kui-s dolo-pxt-u* (respon.)

pit-DAT PRV-to fly into-AOR.S3SG

‘It flew down into the pit.’

The preverb *dolo-* is taken on by transfer verbs, as well as by roots of motion/movement implying spatial relations: *škv- ‘to

---

87 The preverb *dolo-* does not occur in Megrelian; its semantic equivalents are: *(d)ino-* ‘vertical, downwards into depth,’ *mila-* (only for stative verbs) ‘inwards, into horizontal depth,’ *mino-* ‘horizontal, from outside inwards.’

88 ‘deep, narrow, closed space’ (Pazar Laz 2011: 104).
send,' nê (onçu 'to get sth down'); in all instances, the preverb dolo- implies a vertical direction in a closed area, into some depth, towards an end point; a part of an area, encoded by the preverb dolo-, is located below, within a range of human vision.

[e+la-] / [o+la-]
{hor} - horizontal motion in one direction, without reference, essentially differing from the meaning of the same preverb in Megrelian.

(76) xoša [...]     gza-s
    mullah(NOM) road-DAT
    el-ul-u-t-u=škulce (Chik. II. 45. 8)
    PRV-go-THM-IMPF- PST.S3SG=PP(after)
    'When the mullah was walking on the road.'

{hor + OR:DEIX + Figure [1+x] + OR: another figure + REF/LOC: beside, together/concomitance}

In combination with the verbal root kät- ('to join'), the preverb ela- also encodes accompaniment of two or more figures, their motion/movement towards a single objective with the same trajectory, that is, one moving figure is referential to another moving figure (77); it is a function of the preverb ela- to encode a 'beside' location.

(77) kaplani=ti     bere-s     k-ela-škat-u (Zhg. 40.13)
    tiger(NOM)=FOC boy-DATAFF-PRV-to go-AOR.S3SG
    do i-gzal-es.
    and PASS-to depart-AOR.S3PL
    'The tiger accompanied the boy and they left.'

For a detailed analysis of the preverb ela- in Megrelian and Laz, see Gersamia & Akhalaia 2017.
A direction encoded by the preverb *ela-* is vertical while the trajectory of motion is only sheer; example (78) demonstrates the occurrence of two figures among which one moves in a vertical way and another figure is its landmark.

\[
\text{Vert: DIR: from below upwards+ Figure [1+x] + OR: another figure+ REF/LOC: beside, together/ accompaniment}
\]

\[(78) \text{čkun biči } k-ele-m-a-rd-es.
we(S1PL) boy(NOM) AFF-PRV- O1-APPL- to grow-AOR.S3PL
'Our boy has grown up.' (Zhg. 28.20)
\]

\[\text{[ge+la-]}
In the vertical trajectory, it encodes an opposite direction of the preverb *ela-*: from above downwards, and a sheer landscape is observable in contexts (79).

\[
\text{Vert: TR: sheer + from above downwards + LSCP: downhill/sheer area}
\]

\[(79) lumži-ši maxo-šen txīrnali-ša
evening-GEN Makho-ABL Tkhirnali-ALL
gela-pt-are.
PRV-to go-AUX(MOD:EVID)
'In the evening I appeared to come from Makho to Tkhirnali.'
\]

\[(80a) him kui-s
that(DAT) pit-DAT
ko-gele-g-i-yon-a ...
AFF-PRV- to get into-O2-APPL-to take sb into-FUT.S3SG
'I will take you into that pit...'
\]
(80b)  jevaš-jevaš
slowly
ko-dele-m-i-yon-i.
AFF-PRV-01-APPL-to take sb into-PM(MOD:IMP)
'S/he took me into slowly.'

(80c)  ko-ge-m-i-jon-i
AFF-PRV-O1-APPL-to take sb into-PM(MOD:IMP)
ḳuy-s  (Chik. II. 99.18)
pit-DAT
'Take me into the pit.'

In example (80), the three preverbs, taken on by the root ǧvan- , encode a direction of motion: from above downwards; only two (80a) and (80b.) of them provide information about the topology of space: a form with the preverb gela- encodes a motion in a sheer area, while that with the preverb dolo- encodes a motion in a deep and circumscribed area (cf. Asatiani 2015: 250).90

{TR: non-vert/ sheer + DIR: from below upwards}

(81)  gemti  gel-il-u
downhill(ADV:LOC)  PRV-to go-AOR.S3SG
'S/he went downhill.'  [Zhg. 153.3]

---

90 Comparison with Megrelian demonstrates that, in Laz, the meaning of the particle -la is blurred; therefore, it is difficult to perceive a sharp difference between the preverbs gela- and ge- or ela- and e-. For instance, in Megrelian, the trajectory of the sunrise and the sunset is a circumference, a crooked line which is associated with, on the one hand, a landscape type and, on the other, visualization, human perception of a phenomenon: bžak elartu /elelu 'The sun rose' - bžak galartu /alelu 'The sun set,' whereas in Laz the trajectory of the sun's motion is only vertical, sheer: mžora iextu 'The sun rose' - mžora gextu 'The sun set.' The phenomenon in point has been encoded in linguistically various ways (preverbs and verbal roots) in highland dialect varieties of Georgian (G. Tsotsanidze).
[go+la-]

A motion, encoded by this preverb, is predominantly horizontal; however, it is one of the essential types of motion with no direction and landmark; motion in an area with no specific starting and end points; in addition, it is recursive owing to which it has a meaning of a recurrent motion.

{TR: no direction + recurrent motion}

(82) peluka \( gol-ul-u-n \) (Zgh. 162.17)

\( \text{boat(NOM) PRV-to go-THM-PRS.S3SG} \)

'A boat sails.'

It implies that a meaning of motion is generalized: it is reiterated in space and time. Therefore, the preverb in question encodes fictitious motion during which a figure does not move actually, rather, in human consciousness, it is perceived as movable. In Laz, referents for such meanings are time, celestial bodies (sun, moon), landscape types (sea wave, river, road, slope, etc.) (83a-c).

FM - {DIR: no direction + OR: no specific landmark}

(83a) Ar \( saatis \) var \( gola-xtu \) (Chik. II. 44.38)

'An hour has not passed.'

(83b) škit \( cana \) gol-ilu (Zgh. 138.8)

'Seven years passed.'

(83c) xopa-bužağiš tis ar \( gza \) gul-ilaps (Chik. I. 46.33)

'There is (goes) one road over Hopa and Bujag.'

---

91 Fictitious (Talmy 1996) or metaphoric motion when a figure of motion is not an object that is actually able to move.
They let one man after another into the door.

'S/he walked on the sea shore.'

Completion of a motion of figures moving side by side, in a parallel way, this being caused by a moving figure's speed; cf. preverb [goçu-].

'S/he outran the oxen.'
6.4. Adverbial particle [-ša]

PRV_SMP + PTC: ADV(location):
[me+ša-] [mo+ša-] [e+ša-] [ge+ša-] [go+ša]

<table>
<thead>
<tr>
<th>Horizontal</th>
<th>Vertical</th>
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</thead>
<tbody>
<tr>
<td>meša-</td>
<td>eša-</td>
</tr>
<tr>
<td>(hor: DIR: from outside inwards + deix (I &gt;) + SP: an area between two narrow points)</td>
<td></td>
</tr>
<tr>
<td>(hor: DIR: from outside inwards + deix (I &gt;) + OR: under/from b h+SP: semi-closed area)</td>
<td></td>
</tr>
<tr>
<td>moša-</td>
<td>moša-</td>
</tr>
<tr>
<td>(hor: DIR: from inside outwards + deix (towards 1st person) + SP: from a closed area)</td>
<td></td>
</tr>
<tr>
<td>(hor: DIR: from inside outwards + motion from the center)</td>
<td></td>
</tr>
<tr>
<td>goša / koška-</td>
<td>goša / koška-</td>
</tr>
<tr>
<td>(hor: DIR: inwards + LSCP: in the middle of a split (into two) area)</td>
<td></td>
</tr>
<tr>
<td>(hor: DIR: from inside outwards + motion from the center)</td>
<td></td>
</tr>
<tr>
<td>(vert: DIR: from below upwards + OR:ABS-to earth surface)</td>
<td></td>
</tr>
<tr>
<td>(vert: DIR: from below upwards + OR:ABS-from earth surface)</td>
<td></td>
</tr>
<tr>
<td>geša- / eška-</td>
<td>geša- / eška-</td>
</tr>
<tr>
<td>(vert: DIR: from above downwards + SP: circumscribed area)</td>
<td></td>
</tr>
</tbody>
</table>

Four preverbs make up oppositional pairs in terms of direction and orientation among the ones combining with stems of motion:

---

92 Phonetic variants alternating across dialects.
HOR - meša- – moša- - deictically opposed pair;  
VERT - eša- – geša- – in a vertical area, an orientation is absolute, a center of motion is the earth surface. During a motion from below upwards or from above downwards, an area is divided into two sections: 1. Motion from the depth of the earth to its surface and motion from the earth surface upwards; 2. Motion from above to the earth surface and from the earth surface to its depth. 

[me+ša-] || [me+ška] 

As different from Hopan-Chkhalan and Vitse-Arkapian varieties, in Pazar-Ardeshenia, instead of the monophoneme ş, the clusters šk-/šḳ- occur: mešḳa-/meška-, ešḳa-/eška. The meaning of the preverb does not change and its forms are only cross-dialect phonetic variants. 

Motion is only horizontal: (87) (88) (89). The preverb also has an implication about a landscape; the topology of location, encoded by the locative particle -ša, is associated with a closed, circumscribed area, its diverse variants. 

{hor: DIR: from outside inwards + deix (I >) + SP: an area between two narrow points} 

(87) ḳajluği-s meša-g-i-şon-u (Chik. I. 35.9)  
rock-DAT PRV-O2-APPL-to take sb-AOR.S3SG  
’S/he took you into rocks.’

{hor: DIR: from outside inwards + deix (I >) + OR: under/from beneath+ SP: semi-closed area} 

(88) ḳervedis tude meš-il-u (Zgh.19.9)  
tent-DAT under.ADV:LOC PRV-to go-AOR.S3SG  
’S/he went down under the bed.’
(89) doloxe guda-ša
inside.ADV:LOC leather sucksack-ALL
ko-meška-xt-u (Chik. II. 137.17)
AFF-PRV-to go-AOR.S3SG
‘S/he went into the leather rucksack.’

The preverbs moša/moška are deictically opposed to the meša-, this being caused by the vocalic elements of the simple preverb. The locative particle ša- encodes a closed or circumscribed area:

(90) iaši̠ki̠ go-nck-u=i,
box(NOM) PRV-to open-AOR.S3SG=that,
padišahi ko-moši̠-jon-u. (Zhg. 78.12)
padishah(NOM) AFF-PRV-to take sb out of sth-AOR.S3SG
‘When s/he opened the box, s/he took the padishah out of it.’

The motion, encoded by the preverb eša-, which goes on vertically, implies its division into two sections towards a landmark: a motion with a vertical trajectory to get up to a land surface from the depth of earth (91) and from the earth surface (92). This is a type of an absolute orientation. A motion may be performed in a vertical way in an area between two points or sections.

(91) vert: DIR: from below upwards + OR: ABS: from the depth to a land surface
A motion begins in a closed depth and its end point is on an earth surface. {vert: DIR: from below upwards + OR:ABS: from a surface of earth upwards}

The Laz preverb eša- encodes sheer motion.

It encodes the vertically opposite direction of the preverb eša-: geša-xtu 's/he arrived; s/h left for' (Asatiani 2012: 385).

a) motion between two points or sections of an area; a non-deictic type. {hor: DIR: inside + LSCP: in the middle of an area divided into two}

'In one cemetery, there was (went) a road /in the middle.'
b) motion performed from a center of a circumscribed area, from inside outwards (94).
{hor: DIR: from inside outwards + motion from a center}

(94) guiši mkii
heart-GEN flour(NOM)
ka-goša-i-ǧ-i.
AFF-PRV-APPL-to take sth out-PM:AOR(S2SG)

kva-ši kena-ẹpe-s (Chik. I. 139.5)
stone-GEN edge-PL-DAT
'Take middle flour from the edges of the stone [millstone].'

6.5. Adverbial particle [-ža]

PRVSMPL + PRVSMPL
[me+ža-] [mo+ža-]

<table>
<thead>
<tr>
<th>Horizontal</th>
<th>Vertical</th>
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</thead>
<tbody>
<tr>
<td>meža, meya-&gt; mea- &gt; mera-</td>
<td>moža-</td>
</tr>
<tr>
<td>(hor: on, above OR +</td>
<td>{vert:DIR: from below</td>
</tr>
<tr>
<td>deix (l &gt;)}</td>
<td>upwards +OR: surface of an</td>
</tr>
<tr>
<td></td>
<td>object)</td>
</tr>
<tr>
<td>-ža / -ya / -a</td>
<td>'g'eža/o-</td>
</tr>
<tr>
<td>{hor: on, above OR +</td>
<td>{vert:DIR: from above</td>
</tr>
<tr>
<td>deix (l &gt;)}</td>
<td>downwards +OR: surface of an</td>
</tr>
<tr>
<td></td>
<td>object)</td>
</tr>
</tbody>
</table>

A. Chikobava believes that -ža originates from y: me+ya- > me+ža- (Chikobava 1936: 28). Iotized forms occur in Vitse-Arkabian and Pazar-Ardeshenian texts. Their combinability with verbal roots referring to motion has been limited.
All variants of the preverb encode transfer from one area to another, transposition by means of overcoming an obstacle. A motion takes place on the upper part of a landmark, on its surface.

(95a) sirti-s mež-ıu.  (Tandilava 2013: 451)
mountain-DAT PRV-to go-AOR.S3SG
’S/he went over the mountain.’

(95b) badi... čkai-s ko-meja-xt-u.  (Zhg. 53.40)
old man(NOM) water-DAT AFF-PRV-to go-AOR.S3SG
‘The old man crossed the river.’

[mo+ža]
{vert:DIR: from below upwards + OR: surface of an object+ deix (l <)}

(95) [...] ar zori mužu-cxonṭ-u=ki  (Chik. II. 191.33)
one(NOM) strong(ADV) PRV-to jump-AOR.S3SG=PTC
’S/he once jumped upon it.’

meža- - moža- are deictically opposed preverbs when they combine with the following roots: cxonṭ ‘to jump,’ ṭkom- ‘to throw,’ ul- ‘to go’: meža-cxonṭu ‘to jump over thither’ - moža-cxonṭu ‘to jump over hither,’ možaṭkomaleri ‘thrown over here’ - mežaṭkomaleri ‘thrown over there’ (Tandilava 2013: 452); mežadveri ‘placed aside thither’ (ibid. p. 451) - možadveri ‘placed aside hither’ (ibid. p. 516); ma mežavulu ‘I will walk over thither’ - me možavulu ‘I will walk over hither’ (respon.).

[‘g’e+ža/o]
{vert:DIR: from below upwards + OR: surface of an object}
‘g’ežodveren ‘They will lay,’ ‘g’ežadvapa ‘to put sth on,’
‘g’ežampinapa ‘to spread sth on,’ ‘g’ežarčapa ‘to spread,’
‘g’ežaxunapa ‘to sit down on sth’... (Tandilava 2013: 106, 254-255).
When he poured water on.'

6.6. Adverbial particle [-na]

\[
\begin{array}{c|c}
\text{Horizontal} & \\
\hline
\text{me-} & \text{go-} \\
\text{-na} & \text{-ne} \\
\hline
\end{array}
\]

\begin{itemize}
\item \text{me-na}: \{\text{hor: from outside inwards + deix (from 1}\text{st} \text{person) + transfer from one area to another}\}
\item \text{go-na}: \{\text{hor – no landmark}\}
\end{itemize}

I. Asatiani identifies -na as the second element which, in her opinion, is an original version of the -ne: \text{me-na} > \text{me-ne} (Asatiani 2015: 280); its combination with verbs of motion has been limited. It has been considered an equivalent of the Georgian \text{gada-} ‘to overcome’: \text{meneboškvat} ‘Let’s let it go over’ (Kiria et al. 2015: 380). The Megrelian preverb \text{mi+no-} has the same meaning: \text{mini-vočkvat} ‘Let’s let it go into another area.’

\{(\text{hor: from outside inwards + deix (from 1}\text{st} \text{person) + transfer from one area to another}) \text{ mene-b-o-škv-a-t} \}

Let’s let it go into Arslan’s orchard.’

\[
\begin{array}{c|c}
\text{arslan-ş} & \text{baxče-şa} \\
\text{Arslan-GEN} & \text{orchard-ALL} \\
\text{PRV-S1-APPL} & \text{to let in-S1-SBJ-PL} \\
\text{Chik. II. 122.5} & \\
\end{array}
\]
It generally combines with a limited number of verbs and the quantity of roots of motion/movement has been scarce: *gona-xtimap* 'to pass' (Tandilava 2013: 154), *gono-jone* 'to be taken sb' (op. cit.: 157), *gona-rču* 'to rush' (op. cit.: 154), *goni-ğu* 's/he took over sth'; a motion takes place is one direction with no landmark. {hor – no landmark}

(98) ar saati ko-gona-xt-u (Kart. l 146.17)  
    one(NOM) hour(NOM) AFF-PRV-to go-AOR.S3SG  
    'An hour passed.'

7. Complex Clusters of Preverbs

Alongside with simple and locative preverbs, in Laz, there are complex constructions formed by combinations of simple preverbs as it is in Georgian where, as different from Megrelian-Laz, complex clusters of preverbs follow a distinct combination rule. Compound preverbs are very few in Laz; only the components of direction and deixis (resp. personal deixis) are established as a result of their componential analysis.

<table>
<thead>
<tr>
<th></th>
<th>Horizontal</th>
<th>Vertical</th>
</tr>
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<tbody>
<tr>
<td>me[n]+da</td>
<td>{hor: DIR +1deix (from 1st person)}</td>
<td></td>
</tr>
<tr>
<td>a+ma</td>
<td>ama-</td>
<td>ama-</td>
</tr>
<tr>
<td></td>
<td>{hor :DIR: from outside inwards}</td>
<td>{vert: DIR: from below upwards}</td>
</tr>
<tr>
<td>ga+ma</td>
<td>gama-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>{hor : DIR: from inside outwards}</td>
<td></td>
</tr>
</tbody>
</table>

*93 All of the preverbs, discussed in the present section, are considered as compound by A. Chikobava: a-ma-, ga-ma-, o-xo-, o-ço-, me-da- (Chikobava 1936: 118; 2008: 129) / men-da- (Chikobava 1936: 123 / 2008: 134)"
The preverbs *menda- / meda-* are cross-dialect variants; the nasal sonorant seems to have been developed; cf. the Megrelian equivalent *mida-*. It actively combines with verbal roots of motion/movement, both with those of *per se* (99) and transfer verbal roots (100), specifying only a direction, distancing in space from the 1st person:

\{hor: DIR + deix (from 1st person)\}

(99) oxori-ša  *menda*-xt-u.  (Chik. II. 5.32)  
    home-ALL  PRV-to go-AOR.S3SG  
    ‘S/he went home.’

(100) dağistani-ša  *menda*-v-i-qon-a-t.  (Chik. I. 30.7)  
    Daghestan-ALL  PRV-S1-APPL-to go-SBJ-1SPL  
    ‘Let’s take her/him to Daghestan.’

Its second component *da-* does not occur as an independent preverb in Laz (cf. Laz *do-*). Therefore, some scholars treat it as a simple preverb unable to encode spatial relations, being considered rather of an affirmative function (Lacroix 2011: 436-437; Pazar Laz 2011: 42, 98-99, 103); the preverb *menda-* never occurs in the Present.

I believe that, on the one hand, the phonetic structure, established for morphemes in the Kartvelian languages (Melikishvili 2009), and, on the other, analyses of the Megrelian and Georgian data (*mi+da-, ga+da*), represent the preverb *men-da-* as a compound entity, supporting A. Chikobava’s opinion (1936: 123).94

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94 It is noteworthy that the Georgian preverb *ga-da-* has been constructed as different from all the rest.
The preverbs *ama-* and *gama-* are deictically opposite and, whereas the former encodes the direction from outside inwards, the latter encodes the direction from from inside outwards.

[a+ma]  {hor: DIR: from outside inwards}  

(101) čxomi  ama-xt-u  mosa-s.  (Chik. I. 33.6)  
fish(NOM)  PRV-to go-S3SG net-DAT  
‘Fish went into the net.’  

[ga+ma]  / [ga+mo]  
{hor: DIR: from inside outwards}  

(103) sanduḡi-še  ar  bozo  
chest-ABL  one(NOM)  girl(NOM)  
gam-ul-u-n.  (Kip. 63.37)  
PRV-to go/come-THM-PRS.S3SG  
‘A girl comes out of the chest.’  

A part of the preverbs, having been treated as ‘a double compound’ (Asatiani 2015: 303) in the scholarly literature, seems to be problematic. I mean the preverbs attested in combination with some verbal roots of motion/movement whose construction does not follow the structuring rule of Laz locative.
preverbs; moreover, they do not have a common structuring principle as far as a junction of constituent sequential elements is conceived of as various linguistic phenomena. As a result of the analysis, it has been established that.

1. The auslaut vowel -a of so called ‘double compound’ preverbs occurs only with masdars, whereas, in finite forms, a post-preverbal vowel prefix is a versionizer and occurs as various markers in accordance with the semantics of possession and destination.

2. The prefixal constituent of the circumfix {o-...-u} is a masdar marker; it also occurs in a sequence with a preverb. In a finite form, its position is occupied by the affirmative marker ko- / ka-.

3. The sequence okona- was parsed into two rows: ko+ns and uku-n- < *uku+me-95 which can also be deemed to one and the same meaning.

[ko+na-] / [ko+n-]

In Laz, the sequence in question combines with several roots: -ul-/xt- 'to go,' kt- 'to turn,' -š- 'to take sth,' -nšn- 'to catch up with,' -š- 'to stay,' o-kona-nšn-u 'to retreat,' o-kona-l-u 'to retreat, to step back,' o-kona-mal-u 'to take sth back' (Tandilava 2013: 614), o-kona-skid-u 'to stay back,' o-kona-ktim-u 'to return, to turn back' (Tandilava 2013: 615). The circumfix {o-...-u} is a masdar marker; therefore, here kona- is a preverb whose final vowel a- is deleted when combined with finite forms since it is followed by a functional vowel prefix.

ko+na- is a preverb derived by means of combination of locative particles96 whose meanings corresponds to that of the

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Megrelian preverb ქона- / ქино- / ქuno-, encoding either a rear position of an object or its return from that position to a starting point: ქین-ირთუ / ქონ-ირთუ (ქono-irtu) ’s/he turned back;’ the Laz ქონ-ა- seems to have the same meaning in examples (104), (105):

(104) mtuti na b-ზირ-ა -
    bear(NOM) that S1-to see-SBJ
    ar ქo-ქ(on-əb-l-i. (Tandilava 2013: 614)
    one AFF-PRV-APPL-S1-to go-PM:AOR
    ’When I saw the bear, I stepped back at once.’

(105) nosi-შა ko-mo-xt-u
    reason-ALL AFF-PRV-to come-AOR.S3SG
    do ქa-ქuni-ǧ-u. (Tandilava 2013: 614)
    and(CONJ) AFF-PRV-to take sth-AOR.S3SG
    ’S/he realized it and took it back.’

[uku-n-] || [uku+n-] < [*uku+me-]

A. Chikobava treats the sequence უქუ- as a preverb (Chikobava 1936: 128 / 2008: 136); the preverb (უქინ- / უქუ-) encodes a return to a starting point, a turn to a starting point of motion in (106a). Its meaning is an equivalent of that of the Old Georgian preverb უქუ- (უქუ-იკca), and it may also be assumed to be the same in terms of the inventory: უქუ-  <  უქა- in the 3rd person; cf. (106 b): the process მe- > ნ- is characteristic of the 3rd person.97

(106a) uქu-نى-ი-kt-u
    PRV-PRV-APPL -to turn-AOR.S3SG
    do oxoi-შა i-gzal-u (Kart. I. 108.18)
    and home-ALL PASS-to go-AOR.S3SG
    ’S/he turned and went home.’

96 cf. the Megrelian preverb ქი-ნო- || ქა-ნო-: PTC:ADV-PTC:ADV-PP.
97 For the forms, illustrating the თe- > ნ- process, and corresponding examples of the კt-, see Asatiani (2012: 248).
Based on my observations, the root *kt-* after the *<me-* > *n-* transformation in the 3rd person, normally retains a preverb, and the fossilized form is capable of re-taking on several preverbs: *ge-* (107a) (107b), *uku-* (3a), *ela-*:

(107a) ǯo+n-i-kt-e-n (*<ge+o+n-i-kten*)  
PRV-PASS-to destroy-PM-FUT.S3SG  
‘It will collapse.’

cf. 2nd person form:

(107b) ǯo-g-i-kt-a-s-ere  
PRV-O2-PASS-to destroy-SBJ-S3SG-AUX(MOD:EVID)  
‘It appeared that s/he was destroying [it].’

It is quite possible to deem the Laz preverbs *ukun-* and *kon-* , the Old Georgian preposition *uku-* , as well as the Megrelian adverbs *kino-/kuno-* and preverbs *kono-x / kino-x* ‘in the past,’ *uka-x-a-le* ‘rear side, behind’ to one and the same constituent components as far as both the phonetic inventory and the semantics of the combining elements seem to be identical.

8. Different Instances of Combinations of Preverbs

In the present section, I will discuss the types of preverbs not pertaining to groups of either derived (locative) or compound preverbs as far as their rule of combinability does not comply with any of them.
'Double compound' may be used as a tentative label for the following preverbs: \(e+la-n- < *e+la-me\), \(go+\circlo-+n- < *go+\circlo-me\); their structure may be viewed as a sequence of locative and simple preverbs: \{PRV:LOC: (PRV\_SMPL+PTC\_loc) + PRV\_SMPL\}, while \(go+no+\text{ša}- < go+\text{ša}-no\) – is a formed having yielded as a result of the metathesis of the prefixal part of the past participle marker, the circumfix \{no- -e\} in the locative preverb \(go\text{ša}-\); the prefixal part \(no\)- of the past participle marker splits the locative preverb. As for the process \(a+mo+\text{ša}- < ka-mo+\text{ša}\), it becomes unarguable owing to the deletion of the consonantal constituent of the affirmative, being illustrated by examples abounding in texts; its structure is: \{AFF-PRV\_loc\}.\[go+\text{čo-na}\]

\(go\text{čo-na-ğapa} / go\text{čo-na-ğu}\) ‘to take away sth from sb’ (Tandilava 2013: 180); \(go\text{čo-na-xtimapa} / go\text{čo-na-xtimu}\), ‘to leave, to relinquish’ (Tandilava 2013: 181); examples mostly feature 2\textsuperscript{nd} person forms with the semantics of the imperative.\[108\] ma va \(go\text{čo-na-v-ul-u},\)
\(I(\text{NOM}) \ not(\text{NEG}) \ PRV-S1\_to \ go\_THM-(FUT.S3SG),\)
\(si \ go\text{čo-na-xt-i!}\) (Chik. I. 74. 26-27)
\(\text{thou(\text{NOM})} \ PRV\_to \ go\_PM(MOD:\text{IMP})(S2SG)\)
‘I will not leave you; you leave me!’
\[e+la-n-\]

\(elin\text{-ikten}\) - It is a blend of of the preverbs occuring the forms \(n\text{-ikten}\) (‘to turn into’ (Asatiani 2012: 248)), attested in the Laz variety spoken in Sarpi, and \(el\text{-ikten}\) (‘s/he will turn back’ (Asatiani 2012: 248)). The phonetic process \(n\- < \text{me}\-\) is a phenomenon characteristic of the 3\textsuperscript{rd} person (cf. 1\textsuperscript{st} person form \(me-m\text{-i-ktu} \ ‘to reach out’\)); the preverb \(ela\-\) has retained a locative function in (109).
A structural peculiarity evolves when a prefixal part of the past participle circumfix no- -e is inserted into the locative preverb go+ša-.

Its original structure is

This is confirmed by the parallel occurrence of the forms gonoša-ĝ-e  || gošona-ĝ-e. The forms, attested in A. Tandilava's dictionary, are past participles derived from stative verb roots (Tandilava 2013: 158):

98 The sequence gonoš- without the final vowel a is treated as a compound preverb (see Tandilava 2013: 158). A final vowel at a morpheme junction may be either transformed or deleted in the vicinity of an other functional element, this being in accordance with the common rule in effect in Laz.
The meaning of the preverb goša- does not alter even in such a construction.

\[ a + mo + ša ] \rightarrow [ k a - mo + ša ]

(110) žur altuni-k a-moša-xt-u
two(NOM) gold-GEN AFF-PRV-to jump-AOR
kva-š tude. (Kip. 16)
stone-GEN under(ADV:LOC)
‘Two gold coins appeared under the stone.’

Irrespective of the fact that (110) is an illustration of the occurrence of the sequence amoša-, it cannot be assumed as ‘a double compound’ preverb as far as a) it is the only example and b) quite a number of examples of the combination ka-moša (AFF-PRVloc) have been evidenced in texts:

(111) ar lira para
one(NOM) Lira(NOM) money(NOM)
ka-moša-xt-u
AFF-PRV-to go-AOR.S3SG
‘One Lira money went out (appeared).’ (Chik. II. 419.19)

A trajectory, encoded by the preverb moša-, is horizontal; notably, it is used to encode a direction of wind motion as well:
9. Locative Preverbs and Unified Integrated Processes of Dynamicity and Stativity

In Laz, a considerable part of locative preverbs has been of shared use for dynamic/motion and stative/position verbs; such preverbs are also capable, by means of attaching to position verbal roots, of presenting stativity in dynamicity, that is, of transforming stative forms into dynamic ones. In such circumstances, a preverb is unchanged, and semantic componenta of the locative particle, included in a locative preverb, have been retained irrespective of change of a verb structure. Owing to their function to specify a vector and a direction of motion, simple preverbs, as structural constituents of a locative preverb, do not demonstrate such properties.

Table 6

<table>
<thead>
<tr>
<th>DIN / motion</th>
<th>ST / position</th>
<th>ST / position &gt; DIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRV-R-AOR.S3SG</td>
<td>PRV-R-THM-PRS.S3SG</td>
<td>PRV-R-AOR.S3SG</td>
</tr>
<tr>
<td>xt-ela-xt-u</td>
<td>ela-dg-i-n⁹⁹</td>
<td>ela-dg-u/k-ela-dg+it-u</td>
</tr>
<tr>
<td>gela-xt-u</td>
<td>gela-dg-e-n</td>
<td>gela-dg-u/gela-dg+it-u</td>
</tr>
<tr>
<td>dolo-xt-u</td>
<td>dolo-dg-i-n</td>
<td>dolo-dg-u/olo-dg+it-u</td>
</tr>
<tr>
<td>meša-xt-u</td>
<td>meša-dg-i-n</td>
<td>meša-dg-u</td>
</tr>
<tr>
<td>goça-xt-u</td>
<td>goça-dg-i-n</td>
<td>goça-dg+it-u.FUT</td>
</tr>
</tbody>
</table>

⁹⁹ For the segmentation of verbs of the type in question, see Kiria et al. (2015: 599-600).
When stative and dynamic verbal roots have common preverbs, they provide a certain description of semantic components: a topology of place, a landscape; semantic components within a set are identical and, in case of stativity, are represented with no direction. In order to clarify the aforementioned, I will present an example in which one and the same preverb combines with both motion/movement and position basic verbal roots:

[dolo-]
DIN: {VR: motion +TR: vert + TR: sheer + DIR: from above downwards + inside a closed area, towards the depth / end point + visual}

(113) div dolo-xt-u-škule,
      ogre(NOM) PRV-to go.AOR.S3SG-PP,
      u-ç-u = ki [...] (Duméz. 36,71)
      APPL-to say-AOR.S3SG = that ...
   ’When the ogre went in then, he said [...]’

ST: {VR:position + IN (vert)+ closed area + inwards + visual}

(114a) hak mu
      here(ADV:LOC) what(NOM)
      dolo-x-e-n iaškš-s? (Zhg. 78.9)
      PRV-to sit-ST-PRS.S3SG box-DAT
   ’What is sitting here in(side) the box?’

(114b) mčxuri ko-dolo-ʒi-n (Kip. 30.22)
      sheep (inside) AFF-PRV-to lay-PRS.S3SG
   ’A sheep is laid inside.’

ST>DIN – is represented as both intransitive {V:INTR} (115a)
(115b) (115c) (115d) and intransitive {V:TR} (116a) (116b) verb forms.

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all the verbs (a. b. c.) in (115) imply that stativity, being referred to by the verbal root (\textit{dg-} ‘to stand,’ \textit{xed-} ‘to sit,’ \textit{n\text{"}{\textit{jr}}-} ‘to lie’), is an outcome of a certain action being encoded by an entire verbal structure of medio-passive (115a), (115b) and passive (115c), (115d), whereas the preverb \textit{dolo-} encodes a direction of motion and a topology of place.

(115a) cxeni \textit{\text{"}{\textit{k}}ai-s}
\begin{itemize}
  \item horse(NOM)
  \item water(DAT)
\end{itemize}
\textit{ko-dolo-dgit-u} (Zhg. 134.13)
\begin{itemize}
  \item AFF-PRV-to stand-AOR.S3SG (DIN)
\end{itemize}
'A horse stood into water.'

(115b) [\text{"u\text{"}{\textit{t}}a \text{"}{\textit{k}}uri-s]...
\begin{itemize}
  \item [small(NOM) pit-DAT]
  \item ko-dolo-xed-u (Zhg. 128 13)
  \item AFF-PRV-to sit-AOR.S3SG
\end{itemize}
'S/he/it sat down into [a small pit].'

(115c) [ha ya\text{"}{\textit{sh}}ki-s]... padi\text{"}{\textit{shai}}
\begin{itemize}
  \item this(DAT) box-DAT padishah(NOM)
  \item ko-dol-i-n\text{"}{\textit{jr}}-u (Zhg. 77.34)
  \item AFF-PRV-PASS1-to lie-PASS1(AOR.S3SG)
\end{itemize}
'The padishah lay down into [this box...].'

(115d) he \text{"}{\textit{q}}uis \textit{dolo-m-i-l-u}
\begin{itemize}
  \item that(ERG) pit-DAT PRV-O1-PASS-to fall-AOR.S3.SG
  \item ǯamu\text{"}{\textit{sh}} (Chik. II. 57.9)
  \item buffalo(NOM)
\end{itemize}
'My buffalo fell into that pit.'

A tri-personal verb with an active morpho-syntactic construction implies an active figure (grammatical subject) (4 a. b. c.); a subject, while influencing an object, performs an action conveyed by a verb. A stem with a dynamic meaning is formed
based on a stative verbal root (*to stand, to lie, to sit*, etc.) by means of change of a verb pattern:

\[
\{V: TR\} -
\]

(116a)  
\[
\text{čuṭa} \quad \text{čurki} \quad \text{ko-dolo-dg-u} \quad \text{(Chik. II.9.12)}
\]
small(NOM) pot(NOM) AFF-PRV-to put-AOR.S3SG
'S/he put a small pot into.'

(116b)  
\[
\text{germa} \quad \text{koči-k ciptina...}
\]
forrest(NOM) man-ERG Tsiputina(NOM)...
\[
\text{guda-s ko-dolo-xun-u.} \quad \text{(Tand. 2013:216)}
\]
shoulder-bag -DAT AFF-PRV-to put into-AOR.S3SG
'The forest ogre put Tsiputina into a shoulder-bag.'

When dealing with similar cases for Megrelian preverbs and when accounting for the integration of stativity and dynamicity, I. Kobalava concludes that generally "*stativity is marked whereby there is a beginning or an end of a dynamic verb, that is, in boundary-related phases. A course has no stativity*" (Kobalava 2015). This is why one and the same preverb occurs in stative (positional) and dynamic (motion) verbal stems. Thus, stativity is where a dynamic process either begins or ends. To conclude, a transfer (*to transpose sb/sth, to put sb/sth aside, to sit down aside, to lay sb/sth*) implies change of a figure’s stable location, to dynamicize a body which is in a stative state, to put it into operation, to set in motion. In this case, preverbs are unchanged and occur with same semantic components; only a verb structure is different.

There are 22 preverbs which are common for dynamicity and stativity, for verbs of motion and position. 11 preverbs are used with dynamic verbs, verbs of motion. A couple of preverbs are beyond this pattern as far as they do not combine with either motion or position verbal roots. (see Appendices: Table 1).
10. Type of Spatial Localization

A Laz preverb takes an active part in the linguistic encoding of space. Localization implies a part of the structured area which is circumscribed for a figure’s motion/movement or specifying its position in a stative way.

The table below lists preverbs, Latin indices of their localization\textsuperscript{100} and spatial features of a figure’s motion/location for dynamic (motion/movement) and stative (position) verbs.

Table 2 represents spatial features of locative preverbs taken on by verbal roots of motion and position, by dynamic and stative stems.

11. Direction of Motion: horizontal, vertical, inclined

A vector of a motion encoded by a preverb is directed in space either vertically or horizontally in a linear way. In certain cases, motion takes place along an inclined trajectory; however, a different from Megrelian, the said meaning is mitigated in Laz. Therefore, along an inclined trajectory, information is provided by spatial adverbs or adverbials of place also implying a type of landscape: \textit{uphill, downhill, mountain, hill}, etc.

Owing to the polysemantic character of Laz preverbs, sometimes one and the same preverb occurs as an encoder of different directions which is very well viewed in contexts.\textsuperscript{101}

\textsuperscript{100} For Latin abbreviations, see Plungyan 2002.
\textsuperscript{101} This is due to this peculiarity that Laz preverbs differ from those of Megrelian because Megrelian, as the most agglutinating among the Kartvelian languages, maintains the principle of a single morpheme and its correspondence with a single function; in case of preverbs, the language retains the pattern: evidently, this is why there are much more preverbs in Megrelian than in Laz.
Therefore, one and the same preverbs are repeated in the table below.

Simple preverbs encode only a direction in both simple and compound and locative combinations; additional shades about subject reference and/or orientation, type of a landscape, topology of a place, etc. are encoded by adverbial particles.

It is by means of preverbs that horizontal and vertical zones are very well represented in detail.

1. Vertical direction
   1. inclined trajectory

A. from below upwards

<table>
<thead>
<tr>
<th>Preverb</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>e- (/je-/ ’e-)</td>
<td>From below upwards</td>
</tr>
<tr>
<td>ama-</td>
<td>From below upwards + inwards</td>
</tr>
<tr>
<td>eka-/eko</td>
<td>Motion from below upwards</td>
</tr>
<tr>
<td>ela-</td>
<td>1. From below upwards, with no relation to another object</td>
</tr>
<tr>
<td></td>
<td>2. From below upwards, related to another figure</td>
</tr>
<tr>
<td>eša-/eška-</td>
<td>From below upwards to the earth surface and from the earth surface</td>
</tr>
<tr>
<td>moša-/moška-</td>
<td>From below upwards from a closed area</td>
</tr>
<tr>
<td>eša-</td>
<td>From below (from the earth surface) upwards</td>
</tr>
<tr>
<td>moša-</td>
<td>From above upwards, sharp ascending motion</td>
</tr>
<tr>
<td>moža-</td>
<td>Motion from below upwards towards the surface of an object</td>
</tr>
</tbody>
</table>
B. from above downwards

ge-/ğa- 1. Motion from above downwards, oriented to the earth surface, to a specific point of an area
2. From above downwards from the earth surface into the depth or just into a circumscribed area

do- From above downwards towards the earth surface, onto a wide perimeter of an area

go- / goğa- From above downwards towards the earth surface

koço- From above downwards deix(1<)

meça- From above downwards, circumscribed area

goşa- / goşka- From above downwards, inside a closed or semi-closed area

geda/o From above downwards on a surface of an object, onto

dolo- From above downwards, inclined landscape

II. Inclined trajectory

gela- From above downwards, inclined landscape

A. Deictic (Person deixis)

me- Deictic, From 1st person or his/her area

mo- Deictic, towards 1st person or an area where s/he is

menda- Motion from an area of 1st person

go- Motion towards another person, 1st person is not involved in communication

gocona- Motion from an area of 1st person

gona- Horizontal deixis without deixis
Locative preverbs, including the simple ones me- and mo-, may also be assumed as deictic when the 1st person is a landmark of motion, a movement takes place towards the 1st person or an area where s/he is, or, conversely, from the 1st person or his/her area.

subject deixis

A. from outside inwards

ama- Motion from outside inwards, not
distinguishing a type of an area
mene-/mena- From outside inwards, not indicating a type of
an area
meša- / meška- Motion from outside inwards between two
points of an area
gola-/gela- Motion from inside outwards

B. from inside outwards

moša- /moška- From inside outwards, from a closed area
goša- / goška- From inside outwards, motion from a center
moća- From inside outwards + forward (straight
head)
gama- From inside outwards

C. forward

meća- Motion/movement in front of deix(1>)/
moća- an immobile referent deix(1<)/
eća-, Motion/movement in front of a mobile
geća- / goća- referent, straight direction
koćo-
D. backward

ge- Motion/movement behind a mobile referent
eką-/eko- Motion/movement behind an immobile referent
moką- Deictic (deix(1<) motion behind a referent

E. from above / through overcoming an obstacle

meką- Motion/movement above a referent,
meža || me(j)a > deix (1 >)
mea > mera || mere

F. beside

meką- Motion/movement beside a referent (to pass by)
ela- / ola Motion/movement beside a referent (to pass by/to go by)

G. around / circular motion / change of direction

go- Motion around towards a circumference of a figure
kona- / uku-na Motion backwards, to go backwards, reverse motion, change of direction, to turn, to turn back
elan- To turn back, circular motion, change of direction
gocona- To turn back (to leave, to abandon)

H. Motion with no goal / Iterated motion

gola-/gela- No direction + Iterated motion
go- Motion with no direction on an entire perimeter of an area
Laz spatial adverbs are notional lexical items making up rather numerous and semantically diverse groups. They play a significant role in linguistic representation of spatial structures determining in which circumstances and with what features an action, conveyed by a verb, proceeds (I. Kobalava).

Laz adverbs are satellites outside a verb stem; in sentences, they occur as adverbial modifiers and convey space-related information. In terms of the function in question, Laz spatial adverbs convey:

- direction of movement;
- place of localization of bodies;

Both meanings are realized in association with either a mobile or immobile landmarks /relata located in an area;
- rarely, it provides a typological characteristics of a place.

Hence, the function of an adverb is to establish:

1. **location of a figure** when it is immobile (such adverbs answer the questions: so? / sod? / som? / nak? / somer? / saḳala?\(^\text{102}\) 'Where?')

2. **beginning of action, point of departure** (they answer the same questions as verbs of motion do in Phase 1: sokele? solen? solešen? solendo / solendon? / namḳele / nakele? 'Where from?').

3. **orientation towards the final point of motion, either to determine a target point or convey terminativity, approaching that point** (question: sole / sola? 'Where to?' sosā? / sosāris? / someiša? / naḳon? 'Up to where?').

\(^{102}\) som yeis? < som yeris? 'At what place?' – a location is also specified by means of the question.
It is true that similar (in terms of their shape) adverbs are used in the same function, although with essential different combinations and a distinct approach.

Cross-linguistic representation of adverbs seems to have been conditioned by a strategy based on geographical, cultural and/or other factors, their application in individual languages for determining a direction of action and a place of localization when selecting a principle of orientation (Kobalava 2020: 72; Kobalava & Gersamia 2020: 110).

1. Structure of spatial adverbs and rules of combinability of stems

In terms of their form, two large groups of adverbs have been identified in the Kartvelian languages and in Laz, among them: basic and derived, among which paternal varieties have been distinguished (Gabunia 1993: 68; Memishishi 2015: 501; Kiria et al. 2015: 693). We identify two levels of analysis and use of adverbs: diachronic, aimed at establishing the origin of construction elements of adverbs and rules of combinability, and synchronic, within which adverbs occur as indivisible, solid entities, also able to take on inflectional morphemes.

In Laz, adverbs occur as three different patterns:
1. Simple, that is, primary, basic patterns;
2. Derived - patterns formed by means of case markers, particles, postpositions, preverbs and other affixes;
3. Compound – by means of various types of reduplication.\(^{103}\)

\(^{103}\) For the classifications, see also Marr 1910; Martirosov 1946; Lomaia 2006; Kiria et al. 2015.
1. **Simple structure of adverbs**

*Simple adverbs* are indivisible; they belong to the ancient lexical layer of the language and, in terms of their shape, have cognates in sister Kartvelian languages, whereas, within Laz, they are associated with pronouns (particularly, deictic), preverbs and postpositions (Kiria et al. 2015: 693).\(^{104}\)

The number of simple adverbs in Laz is limited: ži / žin 'upwards,' tude 'downwards, under, beneath.'\(^{105}\) Simple adverbs are the ones with deictic vowels / a- and e- of opposite meanings\(^{106}\) [h]a-k-o – [h]e-k-o 'hither' – 'thither' and [h]a-š-o – [h]e-š-o 'hither' – 'thither';\(^{107}\) the phonemes /k/ and /š/, identified as basic inventories\(^{108}\) (Chikobava 1939: 194; Topuria 1941: 194; Memishishi 2014: 10; Kiria et al. 2015: 114), are entities reconstructed for the period of the Georgian-Zan unity (Chikobava 1938: 255, 226; Fähnrich & Sarjveladze 2000: 482, 415).

Roots, borrowed from Turkish, should be considered as simple, that is, basic mend[r]a 'far,' oğine / ogine (onde) 'forward' (Tandilava 2013: 671), ge(r)i / ğeri (geri) 'backward' (Tandilava 2013: 107), yani 'beside' (Tandilava 2013: 325), yakini (yaka) 'near' (Tandilava 2013: 328), eṭrafi / eṭrafoni (Etraf)

\(^{104}\) They are subdivided into two groups: adverbs similar postpositions and preverbs (Martirosov 1964) and adverbs with vowel prefixes (Pochkhua 1958: 80, 84); see also Kiria et al. (2015: 694).

\(^{105}\) It is assumed to be a simple adverb; see Kiziria (1982: 72); Lomaia (2006: 29).

\(^{106}\) For the term, see Pochkhua (1958: 84).

\(^{107}\) The meanings of the adverbs of manner ase – ise 'this way' – 'that way' are secondary (Lomaia 2006: 44).

\(^{108}\) Derived adverbs having pronominal stems occur with the vowels: [h]-a-m-kele 'over here', [h]-e-m-kele / e-n-kele 'over there', me-le 'on the other side', mo-le 'on this side'; the opposition of the preverbs me-/mo- manifests deixis (see Appendices: Table III).
‘around’ (Tandilava 2013: 256), ortaluǧ (Tr. ortalik) ‘surrounding’ (Tandilava 2013: 651).

2. Derived structure of adverbs

Diachronically, derived adverbs are structurally divisible entities and present sequentially combined units of functional-semantic elements with spatial features, which, at the present stage of the development of the language, are associated with a notion of an adverb as an entirety (Kobalava & Gersamia 2020: 110).

Thus, a derived adverb is an entity made up of sequentially combined various elements; each element of a sequence encodes a specific semantic component, and their sum, more exactly, entirety is associated with an adverb's general meaning.

In Laz, adverbial combinations involve derivational and inflectional morphemes: functionally different particles, case markers, certain postpositions and preverbs with or without a basic inventory, sometimes with a repetition of elements with identical functions within a sequence, possibly owing to desemantization of a preceding element.

Derivational suffixes with a radical inventory:

- le - n - mti / - mte
- do / - de - x / - xe

The derivators occur either independently or sequentially in combining an adverb; a sequence is assumed to be stable notwithstanding a couple of exceptions: the position of the elements -le and -do are unstable and -le-n-do and -do-le may be equally assumed (see Appendices: Table III).

Meanings of derivators specify types of spatial relations (see Section 1.2)

1. Derivational suffixes without a radical inventory combine by means of a sequence of derivational elements, without a
simple adverbial stem; a sequence incorporates locative adverbial particles, sometimes even a simple preverb is added (see Appendices: Table III).

2. Compounding / Reduplication


b) compounding of adverbs with opposite meanings: *ek-ak* ‘here and there’, *[h]ekole-[h]akole* ‘thither and hither’, *ašo-ešo* ‘hither and thither’, *žin-tude* ‘upwards and downwards’, *žile-cāle* ‘above and below’, *doloxe-gale* ‘inside and outside’, *žinole-tudole* ‘upwards and downwards’, *mele-mole* ‘on this side and on that side’...

c) reduplication of preverbs: *me ḳa-mo ḳa* ‘thither and hither’ (resp. In the meaning of Ge. *gada-, gadmo-*)

1.1. Meaning and function of adverbial derivators

- *-le* is a common derivator for Megrelian and Laz adverbs, their functions being also similar; in Megrelian, its position is stable within the combination of adverbial derivators and it occurs only following the *do* whenever the latter appears: *žido-le* ‘upwards, above’, *tudo-le* ‘downwards, below’. The situation in Laz is different (see above). In Megrelian, the function of the derivator *-le* is to encode a point which is defined in relation to an anthropocenter, from a location occupied by it: *žimole ciovrens* ‘s/he lives above’, *žimole meurs* ‘s/he goes upwards’, *žimole eńortu* ‘s/he went up upwards’; for an opposite direction,
Megrelian uses the form *tudole* ‘downwards, below’. Notably, a either horizontal or inclined and a vertical trajectory is assumed (cf. *ži / žido‘above’- *tudo‘below’).

Essentially, the derivator -le seems to perform the same function in Laz; it denotes either a direction or a side from a location, a point occupied by either an ego-center or another object; a type of location where a figure is situated or where it is heading to (e.g. upwards - downwards, there - here, inside – outside, etc.) is specified by a root and/or other derivators included in a combination of an adverb. Analyses of examples demonstrate that, in adverbs of direction, the principal function of the -le is to determine a target point where a motion is directed to; with respect to this function, it is an equivalent of the Georgian postposition –ken and the Megrelian-Laz allative marker -ša. In locative adverbs, the function of the derivator -ve has been desemanticized (ga-le ‘outer side/outside’, čox-le ‘front side’, okačxele ‘rear side’...).

Similarly to the -le, the derivator -do is rather productive occurring in a number of adverbs (see Appendices: Table III); in a combination of an adverb, its position is unstable and, as it has been stated in linguistic studies, “the -do predominantly occurs in adverbs of direction” (Gabunia 1993: 65); componental analyses of adverbs demonstrate that the function of the derivator -do essentially coincides with that of the -le, encoding a side from a location, a point occupied either by an ego-center or by another object, although, in some instances, it encodes a point of...
departure, thus manifesting semantic identity with the Georgian postposition -dan (ablative case) and with case forms marked by the -še in Megrelian-Laz.

Analyses of contexts have shown that the meaning, encoded by the postposition -ken, is actualized in both -le and -do; their unstable positions in sequences within combinations of adverbs may be conceived as being due to this sameness of functions.

-de – this desinence occurs in adverbs borrowed from Turkish; forms with and without the suffix -de do not differ with respect to their meaning: oğine / ağınde (Tr. onde ‘ahead’, ge(r)i / ge(r)ide (Tr. geri) / gerinde ‘behind’. The only instance when it is taken on by a Laz root is galen-de\(^{111}\) ‘from outside,’ being considered to be a variant of -do (cf. galen-do), more exactly, to be of common origin (Gabunia 1993: 66).

-n – the derivator occur in the position following either -le or do- in a combination of adverbial elements: -le-n, -do-n; in some combinations, they occur jointly: ži-le-n-do-n ‘from above’, ži-n-do-le-n ‘from above’. I believe that the -n should be also identified in the position following the ablative marker -še in sequences wherever it occurs: hekole-še-n ‘from there’, mele-še-n ‘from that side’, žin-še-n ‘from above’. It has been correctly stated that that the -n “is taken by all forms encoding ablativity, thus

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\(^{111}\) Laz tude, Megrelian tudo ‘down, below’ are assumed to be simple adverbs; their structure seems to be transparent, and its contrast with forms with the derivator -do (ži-do ‘up, above’, šxva-do ‘elsewhere’) allows for its identification; however, as different from the other two, the semantics of the element tu- is unclear. As for the lement -do, it hardly seems to be related to the preverb do-; neither its position (preverbal inventory occur in the anlaut of adverbs) nor its semantics (cf. žido-do ‘upwards’, šxva-do ‘elsewhere’) provide for such an association (cf. Gabunia 1993: 65).
emphasizing its semantics” (Gabunia 1993: 67). The function of the derivator is rather transparent in the position following the marker -še (cf. Gabunia 1993: 67).

The derivator -x / -xe occurs only in some Laz adverbs (ω-x-le 'ahead', dolo-xe 'inside', ukač-xe 'behind'); it is much more productive in Megrelian (Gabunia 1993: 66; Kartozia et al. 2010: 291-292; Kiria et al. 2015: 700); in terms of its origin, the Megrelian -x is a postposition,\(^{113}\) being taken on by an allative case form and being functionally equivalent to the Georgian postposition -mde: ŋura-ša-x 'till the death', 'ude-ša-x 'till the house' (Gabunia 1993: 67). Adverbs too demonstrate the semantics of allative.

-mte / -mti occurs only in a couple of adverbs: e-mti 'upwards/uphill', ge-mti 'downwards/downhill'. The prefixes are preverbs encoding directions either from below upwards or from above downwards in a vertical area. A derivator's function seems to be either adverbialization (upwards, downwards) or substantivization (uphill, downhill).

To summarize, the derivators' functions are distributed in the following way:

- -le - starting point (cf. Ge. -ken);
- -do/de - starting point (cf. Ge. -ken);
- - point of departure (cf. Ge. -dan)
- -n - ablative, starting point (cf. Ge. -dan);

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\(^{112}\) cf. Chikobava, 2008/1, 89; the desinences -na and –n in Georgian and Zan, respectively, in forms of the 1\(^{st}\) and 2\(^{nd}\) person pronouns are determinative elements also occurring in Georgian postpositions and adverbs. In A. Martiros' view, historically, it has been a deictic particle with a locative meaning (Martiros 1964: 86).

\(^{113}\) It is assumed to be an Abkhazian loan (Lomtadze 1943: 974; Gudava 1947: 188-189).
-x/-xe - allative, target point (cf. Ge. -mde).

The derivators occur in locative adverbs as well in case of simple combinations (gale, ćoxle..) or when there is a semantic shift (see examples (166), (167), (168).

1.2. Inflectional suffixes of adverbs

In Laz, an adverb takes on case markers and both native and borrowed postpositions; they are suffixal morphemes some of which may be assumed as inflections only with respect to their origin as far as they have already been understood as derivators. The scope of use of inflectional markers is restricted and only a couple of markers are assumed: locative – allative and ablative case markers and postpositions.¹¹⁴

1. Original case markers:

a) Dative case: žga-s / mžga-s ‘ashore’, ška-s ‘in the middle’, orta-s ‘in the middle’, xolo-s ‘near’, yapi-s ‘near, beside’, yakini-s/ yakîn-s ‘near’. Adverbs take on the dative case marker -s which has a function of adverbialization; it converts a substantive into a class of adverbs enabling it to act as an adverbial modifier in a sentence. Synchronically, the originally inflectional suffix -s is a derivator encoding a location in case of stativity.


¹¹⁴ Laz does not abound in postpositions. They are not taken on by a dative case form. Therefore, a dative case form is generally used to encode a spatial location, specifically, a place, a location both in adverbs and substantives.

¹¹⁵ Generally, in the declension system of Laz, adverbial has been considered an unproductive case and is attested with few substantives: dido ‘very much’, mûvešot ‘formerly’, artot ‘together’, lazurot ‘in Laz’, etc. (Kiria et al. 2015: 34).
word-final -\textit{o}\textsuperscript{116} occurs in parallel with the nominative suffix \textit{-i}, and its function is to indicate a direction (cf. Ge. postposition \textit{\textbar{ken}}), which is similar to a function of the adverbial case in Old Georgian when instrumental and adverbial case forms encoded starting and end points of motion (\textit{ganvida kartlit ‘s/he left Kartli’ - mivida kartlad ‘s/he came to Kartli’}), and deictic suffixes encode distance with the 1st person, near or far; as different from Old Georgian, location is not differentiated in Laz, that is, starting and end points are not distinguished.\textsuperscript{117}

1.3. **Synchronically used case markers and postpositions**

Synchronically used elements, which can be segmented with respect to their functions and in relation to other linguistic entities, are morphemes and/or postpositions of locative cases: allative and ablative, their main function being to encode starting and end points of a motion conveyed by a verb. Both cases are secondary in terms of formation and are based on genitive forms.\textsuperscript{118} A case marker is taken on by either a stem or a stem-like, combined entity.

\textbf{a) adverbs with the ablative marker \textit{-še(n)}}

\textbf{ADV\_SMPL/DER-ABL:}


\textsuperscript{117} cf. H. Vogt’s conclusion about Old Georgian: “The basic meaning of dative is to encode an orientation to a certain point... The meaning of adverbia should be a motion towards a certain place, a motion viewed in its development... Dative is a punctual case and adverbial is a linear one” (Vogt 1968: 281).

\textsuperscript{118} In recent scholarly literature, the genitive marker is incorporated into a stem the vowels \textit{-a} and \textit{-e} are considered ablative and allative markers (Kiria et al. 2015: 56); according to another approach, the vowels \textit{-a} and \textit{-e} are viewed as postpositions (Asatiani 2011: 18; Makharobidze & Gersamia 2020).

b) adverbs with the allative case marker -ša

ADV_SMPL/DER-ALL:


The paucity of such adverbs in Laz has been conceived of with respect to the established fact that, in its various dialects, the function of the adverbial case is performed by allative (Chikobava 1936: 51; Kiria et al. 2015: 55).

Some of the postpositions, taken on by adverbs of place, are native Laz: -ḳala / -ḳale / -ḳele equivalent of Ge. postposition -ḳen (Tandilava 2013: 367), others are borrowed either from Turkish (-ḳadar: Tr. Kadar equivalent of Ge. postposition -mde) or Georgian (we mean the postposition -ši in dative).

The adverbs taking on the postposition –ḳele / -ḳala / -ḳale are (see Table 1): žin-ḳele ‘upwards’; žilendo-ḳele-ši ‘in the upper side’ (Lomaia 2003: 11), čaneldo-ḳele ‘downwards’, čalendo-ḳele-ši ‘in the lower side’.


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119 cf. –ḳala ‘postposition -tan’ (Tandilava 2013: 353) which is also taken on by substantives and encodes comitativity/accompaniment of a figure in an area.

120 For details, see Lomaia 2003: 11; Lomaia 2006: 57-58.
In the system of Laz adverbs, there are a couple of postpositions in the final position of which the sequence \(-ši/ > -y\) occurs; it is taken on by an adjective of provenance, possession derived from a simple preverb by means of the adjectivizer suffix \(-on::121\ ek-on-i \ (/a’(sb/sth) of this area’: \(-ak-ona-ši > / ak-
\ona-y ‘here, in this area’, ek-ona-ši > / ek-ona-y\)\)
\(122\) ‘there, in that area’; there is similar example: \(žilendo\-kele-ši\) (Lomaia 2003: 11) in which the \(-ši\) occurs after derivators encoding spatial relations.

The function of the element \(-ši\) is not to encode possessivity; this is to say that its meaning does not coincide with the function of genitive; its function is an equivalent of that of the Georgian postposition \(-ši\) taken on by a dative form and referring to location,\(123\) this implying that the \(-ši\) is not a Laz genitive marker, coinciding in terms of its phonemic inventory, but rather the Georgian postposition \(-ši\) of the dative case, having probably occurred as the Laz-Georgian code-mixing.\(124\)

On the other hand, although rarely, Laz evidences instances where dative marker is taken on by adverbs of time and space following their adjectivization; e.g. \(žini-s\) upper-DAT:

(117) ia ŋaltashi \(žini-s\) emti iapartanušeni duliciganapan

\(\text{Chik. 149.25}\)

‘It will be knocked into the basket upwards in order to widen it.’

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121 cf. Kiria et al. 2015: 114.
122 \(-ši > yī > i\) – through iotation of the š and then through dissimilative deletion of the vowel i.
124 The Laz functional equivalent of the Georgian postposition \(-ši\) is the dative marker \(-s\); in a Georgian-speaker’s worldview, the morpheme \(-s\) does not seem to be associated with encoding spatial location, and semantic perception of the rest of the derivators is either blurred or does not exist. The aforementioned should be a reason why the postposition \(-ši\) was adopted in the Laz adverbs.
A Laz adverb, more exactly, its combined sequence, frequently incorporates homofunctional elements, this being conditioned by the desemantization of a preceding derivator thus generating new homofunctional derivators: mendra-še-n-do-n ‘from far away’, hek-še-n-do-n ‘from over there’, hak-to-n (< hak-do-n) ‘here’, hek-to-n (< hek-do-n) ‘there’. Generally, semantic roles of homofunctional morphemes (and respective categories) increase rightwards, that is, a following morpheme occurs in a stronger way.

Laz-speakers use a number of adverbs borrowed from Turkish. Their borrowability is based on the following constraints: a) a borrowed form takes on a Laz derivator encoding a spatial relation: mend[ra] ‘far’ - mendra-le, mendra-še, mendra-še-n-do-n ‘from far away’; yani ‘beside’ - yani-ša ‘beside’, ‘near’, yani-ša ‘beside’, ‘nearby’, yani-še ‘aside, from nearby’, yanin-e ‘near, beside sb/sth’, yakini-s / yakini-ša ‘near’, yakini-ša ‘till nearby’ ...; b) a native Laz adverbs takes on a postposition borrowed from Turkish (e.g. -kadar ‘till’).

2. Semantic components of spatial adverbs

Meanings of adverbs are determined by those of constituting derivators; semantic components, encoded in sequential elements, convey spatial relations by means of various features.

Laz adverbs define a location of a body in relation to some external (either mobile or immobile) landmark (relatum). Types of absolutive and relative landmarks are preferred in their linguistic representation. For the former case, the systems of coordinates used fixed landmarks, whereas the former is based

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Continents or otherwise fixed systems are meant (Levinson 2003: 31). Geomorphological formations may be assumed to be such:
on anthropocentric coordinates conveying a location in relation to a position occupied by an egocenter, such as: ahead – behind, to the right – to the left, upwards – downwards, beside. In locative adverbs, we also identity a type of intrinsic orientation, according to which a location of a body is determined by means of a relatum’s intrinsic ‘façade-relatedness’, front, back, right, and left sides of an object as features of the object itself (Fillmore 1997; Klein 2009).

Thus, with respect to their relation to a landmark, Laz adverbs make up semantic groups of oriented and independent (that is, with no landmark) forms, of which the former distinguishes between the following opposition pairs: deictic – non-deictic, proximal – distal; as for independent adverbs, there are no oppositions.

To summarize, in terms of the linguistic representation of spatial relations, Laz adverbs make up three groups:

- locative (deictic and without deixis),
- ablative (with an orienting component), and
- topological.

The first one conveys location ‘stativity to a certain landmark (deictic) or without it (no deixis); the second one shows direction / dynamicity, also including an orienting component; and the

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mountains, seas; celestial bodies are also used, but man-made facilities: buildings, bridges, etc.; this is due to the fact that their localizations can be accessed from various sides (I. Kobalava).

126 cf. Pochkhua 1958: 84. We believe that B. Pochkhua’s classification of locative and vowel prefixal ones is based on different linguistic data. Therefore, we prefer to place the vowel prefixal one, which underlines a structure of an adverb implying a deictic one, into the types of locative and lative adverbs according to which elements combine in the rightmost part of an adverb.
third one is totally devoid of an orienting component and provide only a topological characteristics of a place.

Grammatical analyses of adverbs imply their characterization according to horizontal and vertical areas either in relation to a landmark or without it, this being due to physical features of motion (dynamicity) and immobility (stativity) and specific properties occurring in their linguistic representation.

2.1. Locative adverbs

2.1.1. Horizontal area

In Laz, a location of a figure in a horizontal area is encoded either independently or in relation to a landmark; therefore, it is either deictic (in a broad sense) or independent. By deictic we mean personal and object deixis; the meaning of the former is determined in relation to a position occupied by an ego-center, while that of the latter is established in relation to façades of bodies either mobile or immobile in an area. Independent adverbs are devoid of relationships with any kinds of landmarks.

Hence, among locative adverbs, there are constrastive types with respect to the in/occurrence of a landmark:

1. oriented: a) ego-centric, b) façade-related;
2. independent.


1. Oriented adverbs:

   a) ego-centric locative adverbs when a location is determined in relation to the 1st person with respect to its in/occurrence in an area; distal and proximal adverbs also pertain to the sub-group.
here - there

A place of localization in a deictic area is denoted by a pair of simple adverbs [h]ak - [h]ek 'here – there';

[h]ak – a place where the speaker is at the moment of speaking, or an area which is assumed by the speaker in a possible place of his/her presence. [h]ak 'there', that is, 'not here' – a place where the speaker is not present.

(118) ak noğamesas var mekvalenya. (Kal. 70.27)
The bride will not be able to come here'.

(119) ek mi ni mextu...(Kal. 43.16)
'Who came there'.

Derived forms occur simultaneously (without change of meaning): ak-on-a-ši > / ak-on-a-y 'here, hereby' - ek-on-a-ši > / ek-on-a-y 'there, thereby'; texts and their translations make it clear that the element -ši, taken on by a noun of provenance (ak-on / ak-on-i 'of this area', ek-on-i 'of that area') derived by means of the -on, is not a genitive marker but rather the Georgian postposition encoding provenance.

near - far

An object’s distance and proximity is established in relation to the 1st person or an area occupied by it, which, together the adverb xolos 'near' (common with Megrelian), also uses oppositions pairs borrowed from Turkish: proximal area - yanis 'near, besides', yakini / yaḳini 'near', distal area - mendra 'far'; the latter is a visually inaccessible area, as different from the former ones.

(120) mendra varen, xolos ren. (Tandilava 2013: 885)
'It is not far, it is near.'

(121) selami komeču do ek yanis kodoxedu. (Kal. 191.3)
'He greeted him and sat down nearby.'
(122) *da ǧiši yakinis dodgimeri tu...*

žur kvaš oxori. (Chik. II. 428.15)

'Near the forest, two stone houses stood.'

**on that side - on this side**

The deictically opposed *mele* 'on that side' – *mole* 'on this side' are also locative; these are two locations between which an area, an obstacle is assumed; the deictically opposed constituent preverbs *me-* and *mo-* demonstrate semantic equivalence with the Georgian adverbs *ak* 'here' and *ik* 'there'. *mele* – *ak* – area of the 1st person, *mole* – *ik* – area where the 1st person is not assumed.

(123) *ǧališ mele sarpulepe, mole makrialurepe*. (Chik. II. 21.31)

'On that side of the river, there are natives of Sarpi, on this side, there are natives of Makriali.'

With their meanings, the adverbs, taking on the drivator -*do*, *molendo* 'on this side' (Tandilava 2013: 508) and *melendo* 'on that side' are among locative adverbs:

(124) *ṭabiği žur toči kuğun:...*

ar *melendo*, ar *molendo*. (Chik. II. 344.5-6)

'The tanner has two ropes:

one on that side and another on this side.'

b) façade-related locative adverbs the position of which is determined not only in relation to an ego-center (1st person, among others), but also to other mobile or immobile landmarks; such adverbs are *intrinsic*. In this case, the geometry of figures is determined in relation to a human (it is anthropocentric), but the area itself is described in analogy with the arrangement of body parts. The principle in question has to do with figures the constructions of which allows for the identification of respective human body parts such as: *front, rear, lateral, right, left* sides. These are the locations in relation to parts of the façade.

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ahead - behind

Front and back positions are determined in relation to a façade of an object (person, among others), a body part, its rear and front sides. In terms of the meanings in question, Laz presents parallelisms of native and borrowed adverbs: ṭoξle ‘ahead’ - ṭuŋvačxe’behind, following’; ṭogine / ogine ‘ahead’ - ge(r)i / ṭerii / geide ‘behind’.

(125) mažua geide do ma – ṭoξle. (Kal. 75.75)
’The second one was behind and I was ahead.’

(126) čxeni sumeneči adimi ṭogine moxtu. (Chik. II. 287.9)
’The horse arrived sixty steps ahead.’

(127) ṭuŋvačxe gza ..va enya (Kart. II. 81, 21)
’There is no road behind.’

beside

In Laz, the location ‘beside sb/sth’ is denoted by two adverbs: mʒgas ‘beside, in the corner’ and yanis / yandis, yanda / yandan ‘beside, near’ – this is an area in the immediate vicinity of the relatum (128) (129). Therefore, it is also considered as a proximal area (130); which side specifically it is, right or left, is distinguished in relation to an anthropo-center in which these side are established intrinsic entities (intrinsic orientation).

(128) dereši yanis ar di di ǯame koren. (Tandilava 2013: 603)
’By the river, there is a big mosque.’

(129) ati doxedun yandan. (Kart. I. 69.39)
’S/he too will sit down beside.’

(130) ṭeṭeli xuvarda mʒgas eladgitu. (Kip. 43)
’The naked lover was standing in the corner.’
in the middle

The adverbs mškas, ortas, having been derived by means of the dative marker -s, refer to a location between two sections or points, although it is not visible whether it is a center.\(^{127}\) ortas - (< Tr. *orta*) 'in the middle' (Tandilava 2013: 651); the dative marker -s has a derivational function, converting a substantive into an adverb.

(131) žindolen mškas gamaqonei xikas dilikunapţes. (Kal. 82.18)
 ‘They wore a garment, taken in at the waist, inside.’

(132) eκule ortas kagočkip... (Kal. 103.16)
 ‘Then you will open it in the middle...’

around

In Laz, an entire perimeter of an area is encoded by means of the Turkish borrowings etrafi-s (< Tr. *etrafi*) 'around' (Tandilava 2013: 256), ortaluği (< Tr. *ortalık*) 'around' (Tandilava 2013: 651).

(133) laşardel mşi oxoiş eţrafis quaps. (Chik. I. 128.18)
 ‘Around whose house does a male jackal howl?’

(134) ortaluğiş gobil do maţiu bazai. (Chik. II. 297.3)
 ‘I roamed the surroundings but could not find a bazaar.’

2. **Independent adverbs** are devoid of relations of any type, that is, they denote a location without relation to something in a part of an area. The number of such adverbs is limited in Laz.

inside - outside

The opposition pair doloxe ‘inside’ – gale ‘outside’ refer to a figure’s location in relation to a circumscribed area: doloxe – a figure’s location in a circumscribed, limited area; gale ‘outside’ – location in a free, irrelevant area.

\(^{127}\) cf. the Megrelian škabania ‘in the middle, in the center.’
The adverbs have been derived as a result of combinations of the preverbs (dolo-, ga-) and derivators (-x / -xe, -le) and of widening of their meanings: 1. The semantics of the preverb dolo- is widened, thus denoting both vertical and horizontal areas; cf. (110d) and (126b), whereas the derivator -x / -xe encodes a final point or location, stativity. 2. The adverb ga-le is a cognate of Ge. gare128 and Megr. gale, in which the ga- is a Georgian preverb, and the -le is a desemanticized derivator encoding direction; it does not encode a vector of direction. Therefore, the adverbs in question are stative/locative.

In some instances, the more complicated structure of the adverbs doloxe and gale do not show a spatial semantic difference and denote either internal or external location, either internal or external perimeter (136), (137), (138); the ablative marker -še encodes not a starting point but rather a perimeter (138); in (137), a direction (around) of the figure’s motion is specified by the simple preverb go-, whereas a location (where?) of the motion – the adverb galendon ‘from outside’.

(136) doloxendo-ti žur ƙarfi kogeču. (Zhg. 137.18)
‘He hammered two nails from inside too.’

(137) ganeldon msiği go-kirs. (Chan. 115.20)
‘It is surrounded by ivies from outside.’

(138) gale-še didi ƙæpe kono ƙapţu mağara (Asat. 198.10)
‘He used to lean big trees on the den.’

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2.1.2 Vertical area

In Laz, a vertical area is conveyed as linguistically encoded two areas being determined in relation to absolute, façade-related and anthropocentric landmarks; the first one implies fixed landmarks (earth surface, road, rock, mountain, sea, etc.), the second one – façades of objects, and the third one – humans.

An area, adjoining the said landmarks from above, is encoded by the locative adverbs: ži-n / ži-do / ži-do-le ‘up, above’; an area, located below oriented surfaces, is encoded by the adverbs: tudo/e / tudo/e-le’down, below.’

**surface, top of an object**

1. Object, façade-related orientation is based on internal features of objects and, thus, is intrinsic; in Laz, this kind of area is encoded by the simple žin and compound locative adverbs žindole (140), žindolen (141), denoting a) surface of an object, b) top of an object – its upper part, side.

(139) inž xče manda póli mutumelan. (Kal. 84.10)
   'They will put a white calico on [sb/sth].'

(140) žindole komobapan. (Kal. 151. 28)
   'They will pour it on [sth].'

(141) žindolen monka mutu gyodumenan. (Kal. 151. 6)
   'They will put on something heavy on it.'

2. A surface of absolute relatives, that is, of fixed landmarks, or an area defined from the surface.

(142a) delfina mzoğaš žin išulun. (Kal. 91.17)
   'The dolphin comes up to the sea surface.'

(142b) kayluğış žin vorţi. (Kal. 169.13)
   'I was on top of the rock.'
below, down

The location *tude* 'below, down, beneath' within which two types of orientation are also distinguished: 1. object, façade-related orientation which is intrinsic as well, conveyed by means of the simple adverb *tude* and denoting a) a lower part, side of an object, with the meaning 'beneath', (143), b) a lower part of an object, its bottom (144).

(143) lazuṭ... bageniši *tude* kokobobŋamt. (Chik. II. 269.36)
  'We will pour maize under the granary.'

(144) ṇaš *tude* kodoxedes. (Kal. 268. 13)
  'They sat down under the tree.'

2. Surface of absolute relatives, that is, of fixed landmarks, or an area defined from the surface.

(146) šuaḳiš mosa mzoغاš *tude* gyonŋonapan. (Kal. 87.7)
  'They will sink the plaice-net in the bottom of the sea.'

2.2. Adverbs of direction

Adverbs of direction or orientation are derivational structural entities denoting:
- a direction to a location, and answer the question *sola?* 'Where to?'
- final, target point of motion; they answer the questions *so?* 'Where? (= 'Where to?')
  129 *soša? / sošakis? / someiša? / naḳon?* 'Where to? Up to where?'

129 cf. for instance, Russian: *S/he sits at home* and *S/he goes home.* are distinguished by means of two different questions: *gde? and kuda?* In Georgian too, an answer to the questions *sad?* and *sait?* can rarely be specified by means of the postposition –*ḳen*. *sad aris* 'Where is s/he' / *sad midis* 'Where does s/he go' - *saxiši* 'Home', *saiṯ-ḳen* *sait-ḳen midis* -

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Generally, motion is viewed as a section between two points A and B, this being reflected in the structure of a preverbal verb in Laz, and an adverb is able to establish locations between the two points. Adverbs of direction occur in two phases of an incessant chain of the phase structure of motion: 1. Where a motion starts, that is, a starting point, and 2. Where a motion proceeds to, that is, a target landmark. In Laz, the meanings in question are conveyed by derivators, locative case markers and a couple of postpositions (-ḳale, -ḳadar); thus, for both meanings, we have:

- adverbs with different derivators;
- adverbs with locative case markers; starting point - allative marker -iš-e; target point - ablative marker -iš-a.

Here we incorporate postpositional adverbs as well.

Adverbs of direction make up a more diverse group both structurally and semantically, this being due to derivational opportunities in adverbs. Detailed information where specifically a body is, or where from and where to it moves, can be conveyed

\(\text{ṣaxlis-ḳen}\) (cf. Kaladze 2008: 215). In Georgian, when combined with verbs of motion, words, expressing adverbial modifiers of place, do not necessarily take on a postposition as far as the function of direction is performed by a preverb; cf. ści mi-dis - ści-is-ḳen mi-dis 'S/he goes home'; normally, the former denotes arrival at a point of location (cf. ści aris 'S/he is at home'), and the latter - a target point of motion; however, perception of such a differentiation is no longer in effect in the language. The similar one is the following: zevit a-vida / mağla a-vida 'S/he went up' – the language does not make a strict distinction between them semantically; ści adis 'Where is s/he ascending?' and not *sait adis. zevit – mağla is a location, while the postposition encodes a direction.
in Laz by means of substantives of pertaining meanings, occurring in sentences as *adverbial modifiers*, and by means of locative case forms as well.

### 2.2.1. Starting and target points

Whenever Laz adverbs take on the ablative marker -iše and the allative marker -iša, they encode starting and target points, where a motion begins and where it proceeds. Essentially, the same functions seem to have been present with the derivators -le, -do, -n, being included in an adverbial stem and showing where from a process, conveyed by a dynamic verb, starts and where it proceeds to, or where an object, aligned to a stative verb, is located.

The derivational potential of adverbs demonstrates that they are capable of conveying a *starting point, a landmark of motion/movement – target point and location – final / terminal point*; if we present them as an incessant phase, we will receive the following diagram:

<table>
<thead>
<tr>
<th>Starting point</th>
<th>-&gt;</th>
<th>Procession to target</th>
<th>-&gt;</th>
<th>Final point</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where from</td>
<td>-&gt;</td>
<td>Where to</td>
<td>--</td>
<td>Up to where</td>
</tr>
<tr>
<td>From there</td>
<td>--</td>
<td>Thither</td>
<td>--</td>
<td>Till there</td>
</tr>
<tr>
<td>From here</td>
<td>--</td>
<td>Hither</td>
<td>--</td>
<td>Till here</td>
</tr>
</tbody>
</table>

If a starting point is encoded by an ablative marker, the following two do not differ in terms of their form and one of them takes on an allative marker. Word-final derivators of adverbs seem to be functionally loaded: -le, -do, -n and -x. Among them, only the derivator-x (etymologically, a postposition) has a function to encode a final point; in other cases, functions cannot be established unambiguously owing to a rather diverse context; meanings, seemingly transparent for a horizontal area, change for a vertical one.
Irrespective of the diversity of derivational patterns, all adverbs are not capable of taking on a locative case marker. Therefore, sometimes there are morphological restrictions for one and the same stem in terms of denoting opposite directions or of both points.

a) horizontal area

hither - thither

\[|išo / [h]ešo 'thither' - ašo / [h]ašo 'hither'\]
\[\text{ADV:DEIX-[I path]} - \text{ADV:DEIX [+ I path]}\]

\([h]ašo 'hither' - [h]išo 'thither'\] is a deictic direction, encoding entering the speaker’s area and leaving it. An adverb does not have a more complex structure, does not take on derivators and case markers; its meaning is rather general in terms of spatial relations; a location is specified by another constituent:

(147) \(\text{hašo ĉxindi-ša konulu. (Kart. II. 110. 9)}\)

'S/he brought it hither to his/her nose.'

(148) \(\text{ašo ĉalendo vidaminon... (Chan. 49.28)}\)

'I have to go hither downwards.'

\([h]ako-le 'this way' - [h]e/(i)ko-le 'that way'\]
\([h]akolen-do - [h](e/i)kolen-do\]
\[\text{ADV:DEIX-[I path]-DER:DIR(\text{:to})} - \text{ADV:DEIX+[ I path]-DER:DIR(\text{:to})}\]

\([h]alo-le 'this way' - [h]eko-le /[h]iko-le 'that way'\] are a deictically opposed pair having emerged as a result of the combination of a locative adverb and derivators encoding direction. Orientation towards a location is the principal property, function of such adverbs.

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‘S/he went this way, s/he went that way
but s/he could not find the road.’

The area [h]akolen-do ‘this way’ – [h]ekolen-do / [h]ikolen-do
‘that way’ is defined in relation to a deictic center. ‘This way’
(150) is an area proximal to the speaker; ‘that way’ – not to the
speaker; cf. akolendo / hakolendo ‘this way’ (Tandilava 2013: 38,909), and not ‘here’.

(150) arteğik akolendo çincups,
mažurani - ekolendo. (Kal. 260. 27, 28)
‘One tugs him/her hard hither, another — thither.’

The function of adverbs, derived by means of the -do, is to
denote both target and starting points (see below).

**from here – from there**

| [h]akol-n   | [h]ekole-n   |
| [h]akolen-do | [h]e(/i)kolen-do |
| [h]akolendo-n | [h]ekolendo-n |
| ADV:DEIX[-I path]-DER:DIR(:from) | - |
| ADV:DEIX[+ I path]-DER:DIR(:from) | - |
| [h]akole-še | [h]ekole-še |
| ADV:DEIX[-I path]-ABL | ADV:DEIX[+ I path]-ABL |

A context helps us observe similar functions of the derivator
-n and the ablative marker -še. (151a) and (151b) illustrate that
their function is to encode a point of departure of motion /
action. In (151a), it is rather saliently exemplified by the phrase
akolen-n rize-ša ‘from here till Rize’, in (151b), by placing the
deictic pronoun čkim-da ‘till me’ (with the allative marker -da)
and the adverb ekolen-n (with the derivator -n in the function
of ablative) within a single context.
(151a) \textit{hakole-n} \textit{rize-ša...}  \\
Adv:DEIX[-I path]-DER:ABL \hspace{1cm} \text{Rize-ALL}  \\
bileti muço yiçopineny. (Kal. 139.20)  \\
'How much is a ticket from here to Rize?'

(151b) si ak mzoğs čkim-da va amagales  \\
edo ʒoğoistvi lali ekolen. (Kal. 248. 31-33)  \\
'You cannot come here to me into the sea, and bark like a dog from there.'

Contexts also make it clear that there is no semantic difference between structurally more complex adverbs \textit{[h]akolendo-n} 'this way' - \textit{[h]ekolendo-n} 'that way'; the structure becomes complicated, although the word-final \textit{-n} is retained.

(152) \textit{hakolendon} bimṭit. (Kip. 32)  \\
'We escaped from here (=from this side').

In (153), the derivator \textit{-n} occurs after the ablative marker \textit{-še}, thus confirming the functional identity of the two morphemes.

(153) \textit{hekole-še-n} var ičkine mu peri. (Chik. II. 323.12)  \\
'From there, one cannot see what kind it is'.

A starting point is denoted by the adverbs \textit{hakolendo} 'from here', \textit{hikolendo} 'from there', without the \textit{-n}:

(154) ma \textit{hakolendo} bulur,  \\
\hspace{1cm} ma \textit{hikolendo} mobulur. (Chik. II. 347.26)  \\
'I am going hither, I am coming from there.'

\textbf{till here – till there}  \\
\textit{[h]ak-ša} 'till here' - \textit{[h]ek-ša} 'till there'  \\
\textit{[h]akole-ša} 'till here' - \textit{[h]ekole-ša} 'till there'  \\
Adv:DEIX[-I path]-ALL \hspace{-0.9cm} - \hspace{0.1cm} Adv:DEIX[+ I path]-ALL
The deictically opposite directions \textit{[h]ak-\textipa{ša} 'till here'} - \textit{[h]ek-\textipa{ša} 'thill there'} are denoted by simple adverbs. The -\textipa{ša} encodes only a target point. Its variants are \textit{ak-\textipa{ša-\textipa{\textg}}a / ak-\textipa{ča-\textipa{\textg}}a 'till here'} (Tandilava 2013: 39).

(155) \textit{ak-\textipa{ča-\textipa{\textg}}a moxtomei koči mo guitker.} (Kart. I. 36.4)
'Do not return as you have come till here'.

(156) daha \textit{ekole-\textipa{ša} giṯonatia.} (Chik. I. 62. 11)
'We will take you farther.'

\textbf{from close by - till close by}
\textit{xolos-\textipa{še}, yani-\textipa{še}, yakini-\textipa{še} - yakini-\textipa{ša}, yani-\textipa{ša}, xolo-\textipa{ša}}
close:PRX-ABL - close:PRX –ALL
\textit{yakini-\textipa{še}-n}
close:PRX-ABL-DER:DIR (:from)

Locative adverbs, denoting a proximal area, take on only either the ablative marker -\textipa{še} /-\textipa{še}-n or the allative marker -\textipa{ša}, encoding either distance from a certain point or approaching it. The Laz-Megrelian \textit{xolos-s 'near'}, \textit{xolo-\textipa{ša} 'till close by'}, \textit{xolo-\textipa{še} 'from close by'} are attested simultaneously with Turkish borrowings:

(157) \textit{mendoyones mčxurit ar ġališi xolo-\textipa{ša}.} (Zhg. 114.20)
'They took a sheep close to the river.'

(158a) \textit{yani-\textipa{še} elikten do kočırips si \textipa{ʒ}a.} (Kip. 9)
'S/he will turn aside and show the son-in-law.'

(158b) \textit{germa kočik... idu kuši yani-\textipa{ša}.} (Tand. 2013: 502)
'The forest ogre went till close by a pit'.

(159a) \textit{memont'kobun do yakini-\textipa{še}-n}
\textipa{tʃobaše mo\textipa{ç}edu.} [respon.]
'S/he sneaked up to me and
was watching me stealthily from close by'.

\textbf{205}
(159b) bičik xoš bozo yakini-ša va nixolams. (Tand. 2013: 506)
'The boy does not let the girl come close to him.'

**from afar - till far away**

mendra-le, mendrašendo-n, mendralešendo-n(i)

<table>
<thead>
<tr>
<th>far-DER:DIR(:from)</th>
</tr>
</thead>
<tbody>
<tr>
<td>mendra-še</td>
</tr>
<tr>
<td>far-ABL</td>
</tr>
</tbody>
</table>

In the adverb mendra-le (Tandilava 2013: 444), the meaning of the derivator -le is a functional equivalent of the -n and the ablative marker -še in (160) and (161). All forms encode only a point of departure; in (162), there is an allative marker encoding a target point of a motion conveyed by a verb.

(160) divik mendraše ko žiru. (Zhg. 109.16)
'The ogre saw it from afar'.

(161) ma mendrašendon bičini. (Zhg. 106.35)
'I recognized him/her from afar'.

(162) entepe mendraša igzales. (Chik. II. 420.16)
'These ones went far away'.

**from outside - till outside**

galen-do / galen-de, galendo-n | gale-ša

| outside -DER:DIR(:from) | outside- ALL |

The derivators -do / -de, -n, taken on by the adverb denoting an open area, encode a starting point from this area (163), (164), and the function of the marker -ša is to encode a direction towards the area (165); cf. (166) in which the locative adverb gale 'outside' describes a type of an area at large and not a direction towards the area; this is up a preverb of the aligned verb.

(163) kočik gyari ipxorṭaškule, galendo var yu ğems. (Zhg. 49.2)
'A man does not listen to from outside while eating.'
(164) galendon em vaxis ar =image miqitu. (Chik. I. 10.5)

‘In that moment only one man would walk outside.’

(165) gamaxtu gale-ša. (Zhg. 19.10)

‘S/he came outside.’

(166) gale ko-gama-xt'-u. (Kip. 56.27)

ADV:LOC AFF-PRV-go-AOR.S3SG

‘S/he came out.’

from the other side - to the other side

melendo-n - melen-do

other side-DER:DIR(:from) - other side-DER:DIR(:to)

mele-še-n

other side-ABL-DER:DIR

Adverbs of direction, derived by means of derivators taken on by the locative adverb mele ‘on the other side’, are the following: melendo ‘to the other side’, melendo-n ‘from the other side’ (Tandilava 2013: 437). (167) illustrates a junction of homofunctional morphemes; the derivator -n encodes only a starting point, the locative adverb denotes a location, a side in relation to a landmark. Notably, within melen-do, the derivator -do encodes a direction and not a starting point, as it was the case with above-analyzed adverbs (168).

(167) melešen komoçkides. (Zhg.17.35)

‘They looked back at him/her from the other side.’

(168) ma melendo na vidati, var minon. (Zhg. 160.27)

‘I do not want to go to the other side!’

An orientated location is conveyed by melen-kale ‘to the other side’ in which -kala / -kale is a cognate of the Georgian postposition -ken (cf. Tandilava 2013: 437).
from behind - backwards

\( u\text{kvačx}\text{-do} - u\text{kvačx}\text{-le} \)

behind-DER:DIR(:from) - behind-DER:DIR(:to)

The adverb, derived by means of the \(-do\), denotes a starting point, and the one, derived by means of the \(-le\), denotes a direction, a target, which is specified by means of a stem of the locative adverb: \( u\text{kvačx} \) 'behind'; cf. (127); \( u\text{kvačx}\text{ele} \) 'backwards' (Tandilava 2013: 764); cf. (169) and (170):

(169) amukti, mgeiti, \( u\text{kvačx\text{endo}} \) mexteen. (Chik. II, 466.31)

‘Both s/he and the wolf came there from behind.’

(170) meťkoču gurunepe do \( u\text{kvačx}\text{ele} \) diktu. (Zgh. 115. 5)

‘S/he kicked donkeys out and came back.’

to the right – to the left

\( sa\text{ģi-ke}\text{le} - soli-ke\text{le} \)

right- PP:DIR(:to) – left-PP:DIR(:to)

Reference to the locations in point depends on a position occupied by an ego-center: in Laz, \( mar\text{ʒgvani} - mar\text{ʒvani} \) 'right, to the right', \( k\text{varčx}\text{vani} - k\text{varčx}\text{vani} \) 'left, to the left' (Tandilava 2013: 369-370) are substantives; the Laz for 'left' is \( k\text{vaza} \) as well (Tandilava 2013: 369), \( k\text{vazali} \) (respon.). A target point is denoted by the Turkish loans \( sa\text{ģi} (<sag) \) 'right' and \( soli (<sol) \) 'left' taking on the postposition \(-ke\text{le} \) and the postposition \(-ke\text{le} \) and the postposition \(-ke\text{le} \) yielding in the adverbs \( sa\text{ģi-ke\text{le}} \) 'to the right' and \( soli-ke\text{le} \) 'to the left'.

(171) soli-ke\text{le} mkule gza en... sa\text{ģi-ke\text{le}} mendra ienia. (Kal. 227.4-5)

‘To the left, there is a short route... to the right, it is far.’
from the right – from the left

marčvani-ša – kvarčxvani-ša
right-ABL – left-ABL
kvazali-še-n, soli-še-n – saği-še-n
right-ABL-DER:DIR(:from) – left-ABL-DER:DIR(:from)

The adverbs marčvaniša 'from the right' and kvarčxaniša 'from the left' denote a starting point of action/motion and functionally are allatives. The same function is performed by the adverbs derived by means of -n: kvazališen – resp. solišen, sağišen.

(172) oxorţa elaxuneri marčvani-ša va giočku. (Zhg. 106.27)
‘When you are sitting beside a woman, do not start from the right.’

(173) kvarčxani-ša giočku xeši goçamales. (Zhg. 106.28)
‘S/he started shaking hands from the left.’

(174) noţamisa sağišen giočkamdu. (Zhg. 106.24)
‘The fiancé was beginning from the right.’

The analyzed data demonstrate that, among the spatial adverbs denoting direction, the most productive are derivational patterns encoding a point of departure; this kind of productivity is not the case with adverbs denoting a target point; they mostly occur in combination with the ablative marker.

from inside

doloxen-do, doloxendo-n doloxe-še
inside-DER:DIR(:from) inside-ABL(:from)

Adverbs, derived from doloxe, do not have counterparts denoting direction; the derivators -do and -n are functional equivalents of the ablative marker -še. The postposition -xe / -x,
included in the structure of the adverb *dolo-xe*, has a meaning of a terminal point, this should have prevented from taking on either another derivator or the allative marker.

A motion/action, started from a closed area, is denoted by all the adverbs; a type of an area is encoded by means of an adverbial stem which is derivational as well: *dolo*xe 'inside'; a starting point is encoded both by the derivators -do and -n (175), (176), adverbs in combination with the ablative marker (177).

(175) *doloxendon* ar bere gamaxtu. (Chan.19.21)

'A child came out from inside.'

(176) diǯoxu *doloxendo oxorǯak*. (Kal. 199.21)

'The woman called from inside.'

(177) mezare *doloxeše* bozomotak iʧurs-či. (Chik. II. 93.10-11)

'The girl says from the cemetery.'

b) Vertical area

A vertical area occurs as having two directions: from above downwards, that is, towards a lower area, and from below / from a lower area upwards. Locative cases encode a direction / a target point and a starting location of a figure's motion / a stem of an adverb denotes a location and the derivators (-le, -do, -n) of locative cases or having functionally the same value encode a direction. If an orientation is *absolute*, directions will be counted from fixed landmarks, from solid geomorphological entities. If it is *anthropocentric* or thematic, directions will be established according to a position occupied by either an *ego-center* or a *specific object*, vertically upwards or downwards.

As a result of locative adverbs' taking on some derivators, an area is widened semantically and adverbs denote directions: the word-final derivators of the forms źindo-le, źindole-n, źilen-do,
žilendo-n 'from above' encode a starting point, similarly to the žin-še-n with the ablative marker; a starting point is on the vertical axis of the system of coordinates. On the same axis, a target towards a final point is encoded by the žin-ša 'till above' with the allative marker.

**from above/downwards - till above/upwards /up**

<table>
<thead>
<tr>
<th>žindo-le, žinindole-n, žilendo-n</th>
<th>žin-še-n    - žin-ša</th>
</tr>
</thead>
<tbody>
<tr>
<td>above-DER:DIR(:from)</td>
<td>above-ABL-DER:DIR(:from) - above-ALL</td>
</tr>
</tbody>
</table>

žilen-do
above-DER:DIR(:from/to)

(178) žindo-le na muiṭas, sipteri važiras. (Kal. 97.11)
‘S/he would be able to see the the sparrow-hawk that is flying from above.’

(179) ġormotik... čkimda, žin-ša, šuiten moxtitia. (Kal. 122. 23)
‘God said: Come up to me as your souls.’

(180) mskibus žindole-n doğaptes xorbali. (Kal. 259.23)
‘They poured wheat onto the mill from above.’

The function of an adverb, derived by -do, is to denote both a starting and target points. In (181a) and (181b), the derivator seems to encode a starting point, and in (181a-d) – a target point.

(181a) žilen-do dido mu-i-zd-i. (Kal. 89.14)
ADV-DER:ABL PRV-APLL-R-PM:AOR(S2SG)
‘Pull harder from above.’

(181b) aia gza, si na ʒiop...
žilen-do mu-i-ṭ-u. (Kal. 76.15)
ADV-DER:ABL PRV-PASS-R-PM:AOR(S2SG)
‘The road you see was coming from above.’
(181c) žilen-do idi-na, ginze gza en. (Kal. 167.31)
‘If you go upwards, it is a long way.’

žin-kale ‘upwards’, in which -kale / -kele are postpositions, is too an oriented adverb determining a figure’s location upwards, in relation to the landmark: žilendo-kele-ši ‘in the upper area.’

_**from below/from a lower are – till below/till a lower area**_

<table>
<thead>
<tr>
<th>below/e-le</th>
<th>tudendo-n</th>
<th>tudeš-e</th>
<th>tudeš-a</th>
</tr>
</thead>
<tbody>
<tr>
<td>below- DER:DIR(from)</td>
<td>below-ABL - below-ALL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tudende-kala/-kele</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>below-PP:DIR(from)</td>
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</tbody>
</table>

The lowest point on the vertical axis of the system of coordinates is denoted by tude ‘below’, and various adverbs tudele / tudele (182), tudendon (183), derived by means of various derivators, denote departure from the location or a direction towards it; the same function is performed by tude-še ‘from below, from a lower area’ (184) and tude-ša ‘till below, till a lower area’ (221a).

(182) tudele kita’mes-ki. (Kip. Chan. 26.14)
‘They would ask from below that…’

(183) xorbalı... tudendon dibčeši. (Kal. 259.23)
‘Wheat was pouring from below.’

(184) ...sum bere-ti serentiš tudeše
čàpamožiney mendaxtes. (Duméz. 200.33)
‘The three sons left the granary with pickaxes on the shoulders.’

(185a) nòkepe žin diškašen tudeša. (Chik. II. 550.23)
‘Threads are stretched above from the firewood till below.’

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A landmark for the direction *tudeša* is a solid geomorphological entity. Therefore, the orientation is absolute; (185b) – up to the earth surface, (185c) – from the earth / water surface towards the bottom.

(185b) *entepek komoxtes kayluğşi tudeša*. (Kal. 170. 15)
‘They came up to the foot of the rock.’

(185c) *ezoğ ťs kvas* kagionşapat *tudeša*. (Kal. 90. 11)
‘They would move the stone till the bottom of the sea.’

The form *tuden-kale/a*, in which -*kale / -kala* is a postposition, also denotes the direction ‘towards a lower area.’

**downwards - till below**

<table>
<thead>
<tr>
<th>cale-le</th>
<th>čaleša-kadar, čалendo-kele</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV-DER:DIR(PRV-DER:DIR)(:to)</td>
<td>below-PP:DIR(:to)</td>
</tr>
<tr>
<td>čalen-do, čалendo-n</td>
<td>čale-ša</td>
</tr>
<tr>
<td>below-DER:DIR(:to)</td>
<td>below-ALL</td>
</tr>
</tbody>
</table>

In the area *cale* ‘below (downwards)’ (Tandilava 2013: 850), a direction is denoted by an oriented adverbs (186). The same occurs with the derivative adverbs *caленdo* and *caленdon*; the derivators -*do* and -*n* encode a target area in (187) and (188).

(186) *gzaš cale metškočia*. (Kal. 111. 32)
‘Throw it away below the road.’

(187) *čalen-do* na niňu, gzas kogebdgiti. (Kal. 168. 5)
‘I set off on [that] way going downwards.’

(188) *čалendo-n* ida. (Kal. 167. 34)
‘You would go downwards.’
In the patterns çaleša-ḳadar, çalendo-ḳele ‘downwards, in the lower area,’ the function of the postpositions -ḳadar, -ḳale is to encode an oriented direction.

(189) çaleša-ḳadar gelapti. (Chik. I. 57.25)
‘I got till below.’

(190) oxori çu do çalendo-ḳele kogelakodu. (Zhg. 49)
‘S/he dismantled the house and built it in the lower area.’

Taking on the postpositions of identical functions seems to be caused by the desemantization of derivators of the same function; its bright illustration is çalendo-ḳele-ši ‘in the lower area’ being essentially more locative due to the postposition -ši borrowed from Georgian.

**upwards - downwards**

\*e-mti - ge-mti\*

ADV= PRV:VRT-DER

\*emti ‘upwards’ and gemti ‘downwards’ are adverbs of opposite direction on a mutually opposite vertical which, alongside with a direction, provide a topological characteristics of a place. This is not a sheer but rather an inclined trajectory, a sloping area. Therefore, the aforementioned adverbs are used with respect to only an upper area of the earth.

(191) helvaqonu ġalis emti. (Kal. 202.15)
‘S/he went up the river.’

(192) ebiši-ši ti gemti mekideri... (Zhg. 161.27)
‘When I was ascending with my head bending down...’

\*emti and gemti are adverbs; however, they also occur as nouns (228), (229), whereas there are nouns, referring to a place, derived from adverbial stems: emtumani ‘uphill’, getumani

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‘downhill.’ Both nouns and adverbs imply topological characteristics of a place, while adverbs refer to a direction in addition.

(193) *yemti* gemaɣen duzi. (Kal. 283.5)  
‘An uphill will become a plain for me.’

(194) *hakole* *gemti* ren. (Chik. II. 2.14)  
‘There is a downhill over here.’

3. **Reduplicated spatial adverbs**

Structurally, reduplicated spatial adverbs contain ones either denoting a single direction or a double opposition. The latter ones make up an opposition both each other (hither/thither) and a distal deictic center, with the speaker (hither / close - thither / far).

Reduplicated adverbs refer both to *multiple locations* and to *direction*; hence, some of them are locative and others have an oriented direction. Oriented stems encode either a single vector of direction in case of reduplicated identical stems or a direction with a changing vector in case of repetition of adverbial stems.

**a) Horizontal area**

*Locative:*


*Opposite location:* *doloxe-gale* ‘inside-outside’, *çoxle-uḳvačxe* ‘ahead-behind’, *mele-mole* ‘on that side-on this side’, etc.

*Directional:*


If reduplicants have one and the same direction, a reduplicated adverb denotes a gradual decrease of distance in an area (195), and, if reduplicants convey opposite directions, an area widens and is oriented towards a single center (196), (197).

(195) tìlk ṝoxle-oxle nifu. (Chik. II. 441.13)
‘The fox went ahead-ahead.’

(196) hekole-hakole kogudgites. (Chik. II. 292.25)
‘They stood by his/her both sides.’

(197) guiqonap ešo-aši. (Asat. 218. 133,1)
‘They carry sb/sth all around.’

b) Vertical area

In Laz, a vertical area occurs as a linguistically encoded two areas being established in relation to absolute landmarks - water, earth surface, and other solid geomorphological entities.

a) When reduplicated, even certain adverbial locative roots refer to an alteration, repetition of precision locations, decrease of distance to a landmark; directed from above downwards: tude-tude ‘downwards-downwards’, cale-cale ‘downwards-downwards’, etc.; directed from below upwards: žin-žin ‘upwards-upwards’, žile-žile ‘upwards-upwards’, etc.

(198) žin-žin goxti, ḱvinčiši psua ničane. (Chik. II. 386.1)
‘Go up and up, sprout a bird’s wings.’

b) Reduplicated adverbs, formed as a result of combinations of stems of opposite meanings, refer to starting and target/final points of motion, alteration of a vector of motion between them:
žin-tude 'above-below', žile-çale 'above-below', žindole-tudele 'upwards-downwards', emti-gemti 'up-down'.

(199) žile-çale mot ikte. (Kart. I. 204.8)

'Why are you moving up and down.'

An adverb encodes boundary-related locations within a phase of motion; however, reduplication implies motion with change of direction. An initial element of reduplicated stems refers to an upper point of the vertical axis towards which a motion is initially oriented.

4. **Spatial adverbs of the pronominal origin**

In Laz, spatial relations are also represented in adverbs of pronominal origin. **Interrogative, indefinite** and **relative** pronouns are used in this function. The base of derivational patterns are the demonstrative pronouns [h]am 'this' and [h]em 'that' and the interrogative pronoun so 'where'; derivators, forming spatial adverbs, are also reiterated in adverbs of pronominal origin:

1) Spatial adverbs with a root of a demonstrative pronoun, with the postposition -ḳele, encoding an oriented direction, and with the derivator -do, encoding a starting point of a motion in an area.

[ham]-do ‘from here’
PRON:DEIX-DER

[h]am-ḳele 'hither, over here'
PRON:DEIX-PP:DIR

(200) ham-ḳele lazik xo ŝis ḳudeli kvatu. (Zhg. 31.2)

‘Over here a Laz man cut off his bull’s tail.’

Opposite direction: [h]em-ḳele / en-ḳele ‘thither, over there’.
2) Interrogative, relative and indefinite pronouns, derived from the interrogative so-, nak ‘where,’ in the meaning of spatial adverbs and in the function of an adverbial modifier.

Derived structures are combinations of interrogative pronouns, particles, derivators and locative case markers; derivators have the same meanings as with adverbs.

**Locative adverbs:**

<table>
<thead>
<tr>
<th>Starting point</th>
<th>Target point</th>
<th>Terminal point</th>
</tr>
</thead>
<tbody>
<tr>
<td>so-ti ‘somewhere’</td>
<td>PRON-PTC:FOC</td>
<td>so-ša</td>
</tr>
<tr>
<td>do(n)txani ‘somewhere’, ‘where’</td>
<td>PRON-LOC</td>
<td>‘where till’</td>
</tr>
<tr>
<td>sotxanion ‘somewhere’</td>
<td>PRON-LOC</td>
<td>‘where till’</td>
</tr>
<tr>
<td>soti-le ‘from nowhere’</td>
<td>PRON-DER:DIR(:from)</td>
<td>‘nowhere’</td>
</tr>
<tr>
<td>‘from somewhere’</td>
<td>PRON-DER:DIR(:from)</td>
<td>‘nowhere’</td>
</tr>
<tr>
<td>sotxanion</td>
<td>PRON-PP:DIR</td>
<td>‘where till’</td>
</tr>
<tr>
<td>so-ti</td>
<td>PRON-DER:DIR</td>
<td>‘where till’</td>
</tr>
<tr>
<td>‘somewhere’</td>
<td>PRON-PP</td>
<td>‘where till’</td>
</tr>
<tr>
<td>do(n)txani ‘somewhere’, ‘where’</td>
<td>PRON-DER:DIR</td>
<td>‘where till’</td>
</tr>
<tr>
<td>sotile-n ‘from somewhere’</td>
<td>PRON-DER:DIR</td>
<td>‘nowhere’</td>
</tr>
<tr>
<td>‘from somewhere’</td>
<td>PRON-DER:DIR</td>
<td>‘nowhere’</td>
</tr>
<tr>
<td>so-ti</td>
<td>PRON-DER</td>
<td>‘nowhere’</td>
</tr>
<tr>
<td>‘somewhere’</td>
<td>PRON-DER:DIR</td>
<td>‘nowhere’</td>
</tr>
<tr>
<td>so-ša-kis ‘where till’</td>
<td>PRON-PP</td>
<td>‘where till’</td>
</tr>
<tr>
<td>so-ša ‘where to’</td>
<td>PRON-PP</td>
<td>‘where till’</td>
</tr>
<tr>
<td>nam-кеle ‘where to’</td>
<td>PRON-DER-PTC</td>
<td>‘where till’</td>
</tr>
<tr>
<td>nako-na ‘where till’</td>
<td>PRON-DER</td>
<td>‘where till’</td>
</tr>
<tr>
<td>nake-le ‘where till’</td>
<td>PRON-DER</td>
<td>‘where till’</td>
</tr>
<tr>
<td>soti-le ‘from nowhere’</td>
<td>PRON-DER:DIR</td>
<td>‘nowhere’</td>
</tr>
<tr>
<td>‘from somewhere’</td>
<td>PRON-DER:DIR</td>
<td>‘nowhere’</td>
</tr>
<tr>
<td>sotxanion</td>
<td>PRON-PP:DIR</td>
<td>‘where till’</td>
</tr>
<tr>
<td>so-ti</td>
<td>PRON-DER:DIR</td>
<td>‘where till’</td>
</tr>
<tr>
<td>‘somewhere’</td>
<td>PRON-DER:DIR</td>
<td>‘where till’</td>
</tr>
<tr>
<td>do(n)txani ‘somewhere’, ‘where’</td>
<td>PRON-DER:DIR</td>
<td>‘where till’</td>
</tr>
<tr>
<td>sotile-n ‘from somewhere’</td>
<td>PRON-DER:DIR</td>
<td>‘nowhere’</td>
</tr>
<tr>
<td>‘from somewhere’</td>
<td>PRON-DER:DIR</td>
<td>‘nowhere’</td>
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<tr>
<td>so-ti</td>
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<td>‘nowhere’</td>
</tr>
<tr>
<td>‘somewhere’</td>
<td>PRON-DER:DIR</td>
<td>‘nowhere’</td>
</tr>
<tr>
<td>so-ša-kis ‘where till’</td>
<td>PRON-PP</td>
<td>‘where till’</td>
</tr>
<tr>
<td>so-ša ‘where to’</td>
<td>PRON-PP</td>
<td>‘where till’</td>
</tr>
<tr>
<td>nam-кеle ‘where to’</td>
<td>PRON-DER-PTC</td>
<td>‘where till’</td>
</tr>
<tr>
<td>nako-na ‘where till’</td>
<td>PRON-DER</td>
<td>‘where till’</td>
</tr>
<tr>
<td>nake-le ‘where till’</td>
<td>PRON-DER</td>
<td>‘where till’</td>
</tr>
<tr>
<td>sole-n</td>
<td>where from</td>
<td></td>
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<tr>
<td>--------</td>
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<td></td>
</tr>
<tr>
<td>PRON-DER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>solen-do</td>
<td>where from</td>
<td></td>
</tr>
<tr>
<td>PRON- DER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>solendo-n</td>
<td>where from</td>
<td></td>
</tr>
<tr>
<td>PRON- DER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sole-še-n</td>
<td>where from</td>
<td></td>
</tr>
<tr>
<td>PRON- ALL</td>
<td></td>
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</tr>
</tbody>
</table>

**Conclusion**

In Megrelian and Laz, spatial adverbs, as notional linguistic items, denote: 1. Direction of bodies’ motion/movement in an area (dynamics); 2. Place of objects’ localization (stativity). With respect to their formal properties, three patterns are identified: a) primary (occurring as a stem), b) derived – by means of syntactic case markers, particles, derivators, locative case markers, c) compound, reduplicated structure.

Formal structures of adverbs reflect their semantic structures; for instance, derived adverbs are sequences of functional elements, being associated with representation diverse structures of semantic components: direction and area, localization, starting, target and terminal points, arrangement of objects in an area, topology of place, widening-narrowing of an area, visualization, reference-orientation.

130 "nāk? nākōn? (<nāk on) ‘where, where to’, nakele? ‘where from’. The stem nāk seems to have come into being as a result of the amalgamation of the pronominal root na ‘what’ and the adverb hako/ako ‘here’" (Kiria et al. 2015: 725).
The following regularities have been established for derived adverbs:

1. Derived adverbs are linguistic entities generated as a result of sequential combinations of various functional elements;
2. A sequence of elements may not include a simple, that is a basic adverb;
3. Position of elements in combinations is not always stable;
4. A word-final derivator carries a functional element;
5. Emergence of every functionally identical new derivator to the right of an adverbial stem is caused by the desemantization of a preceding one having the function;
6. Desemantization may also affect ablative and allative markers in combinations, taking on derivational suffixes in the same function.
7. Lexical meanings are carried by: a single simple adverbs, derivators combining with a simple adverb, or a unity of combined elements (derivators, particles, etc.) without combining with a simple adverb;
8. Derivators are diachronic entities of the language.
9. Derivators encode locations of actions – starting or final points or directions to the locations.
10. Starting points in most cases are encoded by derivators, while final points are encoded an allative marker.
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**Abbreviations of texts**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aia</td>
<td>Supplement of the Newspaper <em>Agdgoma</em>, No 1, 1996.</td>
</tr>
<tr>
<td>Mem.</td>
<td>Memishishi, O. <em>Laz Texts Recorded in the Village of Sarpi</em>, deposited at the archive of the Institute of Linguistics (examples are cited according to Gabunia 1993).</td>
</tr>
<tr>
<td>Respon.</td>
<td>Data from the linguistic expeditions undertaken in Georgia and Turkey in 2013-2017.</td>
</tr>
</tbody>
</table>
Dictionaries


Table I – Laz adverbs and their spatial semantic components

<table>
<thead>
<tr>
<th>Preverb</th>
<th>Stativity</th>
<th>Dynamicity</th>
<th>Preverb</th>
<th>Stativity</th>
<th>Dynamicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>o-</td>
<td>----------</td>
<td>HOR</td>
<td>ge / jf-</td>
<td>LOC: on a definite point</td>
<td>VRT From above downwards</td>
</tr>
<tr>
<td>go-</td>
<td>LOC Around</td>
<td>HOR , Path: 1. In one direction, 2. Change of direction 3. around 4. Peripheral part of an area</td>
<td>do-</td>
<td>LOC: above sth, on a wide surface</td>
<td>VRT From above downwards, on a wide surface</td>
</tr>
<tr>
<td>ama</td>
<td>1. Inside, 2. between two points</td>
<td>HOR From outside inwards</td>
<td>menda-</td>
<td>-----</td>
<td>HOR deix (I&gt;)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VRT From below upwards + inwards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mo-</td>
<td>LOC Next to an object, tied up to an extreme point</td>
<td>HOR Deix (I&lt;)</td>
<td>gama</td>
<td>------</td>
<td>HOR From inside outwards, SP: closed</td>
</tr>
<tr>
<td><strong>mene</strong></td>
<td>------</td>
<td><strong>HOR</strong></td>
<td>From outside inwards, deix (I &gt;) transfer from one area into another</td>
<td><strong>gona-</strong></td>
<td>------</td>
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<td>-----------</td>
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<td>-------------------------------------------------</td>
<td>---------</td>
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</tr>
<tr>
<td><strong>mola-</strong></td>
<td>mela- / mola-</td>
<td><strong>LOC:</strong> inside, <strong>SP:</strong> circumscribed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>meša- / meška-</strong></td>
<td></td>
<td>LOC: under+inside, <strong>SP:</strong> 1. circumscribed 2. between two points</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>moša- / moška-</strong></td>
<td></td>
<td>LOC: inside, <strong>SP:</strong> 1. closed /</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>meška-/ miš-</strong></td>
<td>Deix(I &gt;): thither; <strong>REF:</strong> beside</td>
<td><strong>HOR:</strong> Deix(I&gt;): thither; <strong>REF:</strong> 1. forward/beside; alternation between two points of an area. 2: over an immobile referent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>meka-/ miš-</strong></td>
<td>Deix(I &gt;): thither; <strong>REF:</strong> beside</td>
<td><strong>HOR:</strong> Deix(I&gt;): thither; <strong>REF:</strong> 1. forward/beside; alternation between two points of an area. 2: over an immobile referent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>moša- / moška-</strong></td>
<td><strong>LOC:</strong> inside, <strong>SP:</strong> 1. closed /</td>
<td><strong>HOR</strong></td>
<td>From inside outwards,</td>
<td><strong>moko-</strong></td>
<td>deix(I&lt;): hither; <strong>REF:</strong> behind</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

*Figure [1+x] OR: another figure **REF/LOC:** beside, together/accompaniment*
<table>
<thead>
<tr>
<th>Deix(1&lt;)</th>
<th>SP: from a closed area</th>
<th>VRT: from below upwards + from inside outwards, deix(1&lt;)</th>
<th>SP: from a closed area, OR: ABS</th>
<th>REF: behind / beside; alternation between two points of an area. 2. above an immobile referent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>gela- / ġela-</strong></td>
<td>LOC: Above sth, wide surface + lateral peripheral part</td>
<td>VRT: sheer, from above downwards, LSCP: downhill/inclined area</td>
<td>eša-/eška</td>
<td>VRT: from below upwards OR:ABS 1. till the earth surface 2. from the earth surface</td>
</tr>
<tr>
<td><strong>eša- / ġa-</strong></td>
<td>REF: behind</td>
<td>HOR: REF: behind; VRT: sheer, Path: from below upwards</td>
<td>gola-/gela-</td>
<td>LOC: 1. on a wide surface over sth 2. Location between two points 3. OR: - upwards/above (visual)</td>
</tr>
<tr>
<td><strong>eška- / ġeška-</strong></td>
<td>REF: behind</td>
<td>HOR: 1. TR: by overcoming obstacles + DIR: from outside inwards, thither, 2. forward / in the direction of motion OR: figure 1 REF: beside, speed of motion 3. change of direction, OR: along a landmark 4. no direction, iterated motion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>goša-/goška-</td>
<td>LOC: 1. in the middle, 2. Between two points</td>
<td>HOR 1. inside/in the middle SP: between an area divided into two; 2. from inside outwards; from the center</td>
<td>-meša-</td>
<td>HOR forward/straight ahead OR: deix(I&lt;)/figure 1</td>
</tr>
<tr>
<td></td>
<td>VRT From above downwards SP: circumscribed area, OR: below, end point of an area (visual)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dolo</td>
<td>LOC: inside, SP: circumscribed area, OR: below, end point of an area (visual)</td>
<td>VRT: sheer from above downwards, SP: circumscribed area, OR: inside, downwards towards the depth/end point (visual)</td>
<td>-eça-</td>
<td>HOR thither forward/straight ahead OR: figure 1 3. VRT from below upwards OR: ABS</td>
</tr>
<tr>
<td>moša-</td>
<td>HOR deix(I&lt;) DIR: from inside outwards + forward</td>
<td>-geža/o-</td>
<td></td>
<td>VRT From above downwards, OR: surface of an object/Onto</td>
</tr>
<tr>
<td>Verb</td>
<td>Location</td>
<td>Orientation</td>
<td>Hand Movement</td>
<td>Position</td>
</tr>
<tr>
<td>------</td>
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<td>----------</td>
</tr>
<tr>
<td>meža- / me(j)a / mea/ mera/ mer</td>
<td>LOC Surface of an object/ Onto</td>
<td>HOR From above, (to overcome an obstacle) deix (I &gt;)</td>
<td>geːa-</td>
<td>LOC Under</td>
</tr>
<tr>
<td>ḳona-, ṫu-k-</td>
<td>--------</td>
<td>HOR: Change of direction / turn of direction, retreat.</td>
<td>moža- / mo(j)a-</td>
<td>LOC Surface of an object/ onto</td>
</tr>
<tr>
<td>goča</td>
<td>LOC: 1. below 2. forward</td>
<td>HOR forward/straight ahead OR: figure1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRV</td>
<td>LOC</td>
<td>SPACE</td>
<td>ST (LOC) / DIN (path)</td>
<td>DEIX/OR</td>
</tr>
<tr>
<td>-----</td>
<td>-----</td>
<td>-------</td>
<td>-----------------------</td>
<td>---------</td>
</tr>
<tr>
<td>dolo-</td>
<td>IN</td>
<td>‘inside a landmark (in a box)’</td>
<td>below, downwards</td>
<td>VRT</td>
</tr>
<tr>
<td>meša-1/meška</td>
<td>INTER</td>
<td>‘between two points, parts of an area’</td>
<td>between</td>
<td>HOR, VRT</td>
</tr>
<tr>
<td>eša-/eška-</td>
<td>INTER+ SUPER</td>
<td>‘between two points, parts of an area from above’</td>
<td>between a narrow area</td>
<td>HOR</td>
</tr>
<tr>
<td>ama-1</td>
<td>INTER</td>
<td>‘between two points, parts of an area’</td>
<td>from inside (DIN)</td>
<td>OR:ABS</td>
</tr>
<tr>
<td>mela-</td>
<td>INTER</td>
<td>‘between two points, parts of an area’</td>
<td>inside + towards</td>
<td>VRT</td>
</tr>
<tr>
<td>gama-, mola-</td>
<td>INTER</td>
<td>‘between two points, parts of an area from above’</td>
<td>inside + from</td>
<td>HOR</td>
</tr>
<tr>
<td>meša-2/meška-</td>
<td>INTER</td>
<td>‘between two points, parts of an area’</td>
<td>from the middle (DIN)</td>
<td>Deix [I&lt;]</td>
</tr>
<tr>
<td>moša-/moška-</td>
<td>INTER</td>
<td>‘between two points, parts of an area from above’</td>
<td>from the middle (DIN)</td>
<td>Deix [I&lt;]</td>
</tr>
<tr>
<td>goša-</td>
<td>INTER</td>
<td>‘between two points, parts of an area from above’</td>
<td>from the middle (DIN)</td>
<td>Deix [I&lt;]</td>
</tr>
<tr>
<td>geša-</td>
<td>INTER+ SUPER</td>
<td>‘between two points, parts of an area from above’</td>
<td>between + from above</td>
<td>VRT</td>
</tr>
<tr>
<td>gela-1</td>
<td>APUD + PART</td>
<td>‘onto a landmark in a lateral peripheral part’</td>
<td>beside + from above</td>
<td>VRT</td>
</tr>
<tr>
<td>meka&lt;sup&gt;-1&lt;/sup&gt;</td>
<td>APUD</td>
<td>'beside a landmark'</td>
<td>beside</td>
<td>OR: OBJ</td>
</tr>
<tr>
<td>----------------</td>
<td>------</td>
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<td>--------</td>
<td>---------</td>
</tr>
<tr>
<td>moka&lt;sup&gt;-1&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ela-</td>
<td></td>
<td></td>
<td>beside, inside</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HOR, VRT</td>
<td></td>
</tr>
<tr>
<td>e&lt;sup&gt;ga&lt;/sup&gt;-&lt;sup&gt;1&lt;/sup&gt;</td>
<td>ANTE</td>
<td>'in front of a landmark'</td>
<td>in front</td>
<td>OR: fig.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HOR</td>
<td></td>
</tr>
<tr>
<td>go&lt;sup&gt;om&lt;/sup&gt;-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>meka&lt;sup&gt;-2&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e&lt;sup&gt;ko&lt;/sup&gt;-e&lt;sup&gt;ka&lt;/sup&gt;-&lt;sup&gt;1&lt;/sup&gt;</td>
<td>POST</td>
<td>'behind a landmark'</td>
<td>behind</td>
<td>OR: fig.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HOR</td>
<td></td>
</tr>
<tr>
<td>e&lt;sup&gt;ga&lt;/sup&gt;-&lt;sup&gt;2&lt;/sup&gt;</td>
<td>SUB</td>
<td>'under a landmark / beneath'</td>
<td>beneath, in an open area</td>
<td>-</td>
</tr>
<tr>
<td>meša&lt;sup&gt;-2&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ama&lt;sup&gt;-2&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>upper area</td>
<td>VRT from below upwards</td>
</tr>
<tr>
<td>geli&lt;sup&gt;-2&lt;/sup&gt;</td>
<td>SUPER</td>
<td>'From above of a landmark'</td>
<td>on a surface of a landmark</td>
<td>VRT from above downwards</td>
</tr>
<tr>
<td>do-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ge-</td>
<td></td>
<td></td>
<td>a specific point on a surface of a landmark</td>
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### Table III – Structure of combining elements of adverbs

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<tr>
<th></th>
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<tbody>
<tr>
<td></td>
<td>[h]ak-o-le 'hither'</td>
<td></td>
<td>[h]ek-e-le 'from there'</td>
</tr>
<tr>
<td></td>
<td>[h]ak-o-le-n-do 'from here'</td>
<td></td>
<td>[h]ek-o-le/u 'from there'</td>
</tr>
<tr>
<td></td>
<td>[h]ak-o-le-n-do-n 'hither'</td>
<td></td>
<td>[h]ek-o-le-n 'from there'</td>
</tr>
<tr>
<td></td>
<td>R (ADVsml : DEIX)-DER^n</td>
<td></td>
<td>[h]ek-o-le-n-do ‘thither , 'there'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[h]ek-o-le-n-do-n 'thither'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>R (ADVsml : DEIX)-DER^n</td>
</tr>
<tr>
<td></td>
<td>[h]ak-o-le-še 'from here'</td>
<td>[h]ek-o-le-še 'from there'</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADV:DEIX[-I path]-DER^n-ABL</td>
<td>ADV:DEIX[-I path]-DER^n-ABL</td>
<td></td>
</tr>
<tr>
<td>till here</td>
<td>[h]ak-ša 'til here'</td>
<td>till there</td>
<td>[h]ek-ša 'til there'</td>
</tr>
<tr>
<td></td>
<td>R (ADVsml : DEIX)-ALL</td>
<td></td>
<td>R (ADVsml : DEIX)-ALL</td>
</tr>
<tr>
<td></td>
<td>[h]ak-o-le-ša 'til here'</td>
<td></td>
<td>[h]ek-o-le-a 'til there'</td>
</tr>
<tr>
<td></td>
<td>R (ADVsml : DEIX)-DER^n-ALL</td>
<td></td>
<td>R (ADVsml : DEIX)-DER^n-ALL</td>
</tr>
<tr>
<td>here</td>
<td>[h]ak-on-aši 'this way, over here'</td>
<td>there</td>
<td>[h]ek-on-aši 'that way, over there'</td>
</tr>
<tr>
<td>this way</td>
<td>[h]aš-o</td>
<td>that way</td>
<td>[h]eš-o</td>
</tr>
<tr>
<td></td>
<td>ADV:DEIX[-I path]-DER:DIR</td>
<td></td>
<td>ADV:DEIX[-I path]-DER:DIR</td>
</tr>
<tr>
<td>upwards, on, above</td>
<td>downwards, beneath, downwards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>źi / žin ADVsmpl</td>
<td>tude(n) ADVsmpl</td>
<td></td>
<td></td>
</tr>
<tr>
<td>źi-le/ži-le 'upwards, above' R (ADVsmpl) DER</td>
<td>tude-le 'downwards, below' R(ADVsmpl)-DER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>źi-n-do 'from above'</td>
<td>tude-n-(i)-do-n 'from below' R(ADVsmpl)-DER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>źi-n-do-le 'from above'</td>
<td>c'a-le 'below' PTC:ADV-DER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>źi-n-do-le-n</td>
<td>c'a-le-n 'below' PTC:ADV-DER</td>
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<td></td>
</tr>
<tr>
<td>źi-le-n-do 'from above'</td>
<td>c'a-le-n-do 'downwards' PTC:ADV-DER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>źi-le-n-do-n 'upwards' R (ADVsmpl)-DER</td>
<td>c'a-le-n-do 'downwards' PTC:ADV-DER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>źi-n-še-n 'from above' R (ADVsmpl : DEIX)-ABL-DER: DIR(ABL)</td>
<td>tude-ša R(ADVsmpl-ALL)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>źin-še-n 'from above' R (ADVsmpl - ALL)</td>
<td>c'a-le-ša 'downwards, till below' PTC:ADV-DER-ALL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ži-n-kale 'on upside' R(ADVsmpl)-CHC-PP:LOC</td>
<td>tude-n-kale/a 'on downside' R-DER-PP:DIR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ži-n-kale 'on upside' R(ADVsmpl)-CHC-PP:LOC</td>
<td>c’a-le-n-do-kele ‘downwards, on downside’ PTC:ADV-DER~PP:DIR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ži-n-še-n 'from above' R (ADVsmpl : DEIX)-ABL-DER: DIR(ABL)</td>
<td>c’a-le-ša-kadar ‘till below’ PTC:ADV-DER-ALL-PP:DIR</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Inside, from inside | 244 | ḽi-le-n-do-ḳele-ši  
R (ADVsmpl : DEIX)–DER° –PP:LOC | ṽa-le-n-do-ḳele-ši  
PTC :ADV–PP–PP:LOC |
|---|---|---|---|
| inside, from inside |  | dolo-x /dolo-xe 'inside'  
PRV-DER(ADV:LOC)  
dolo-xe-n-do 'from inside'  
dolo-xe-n-do-n 'from inside'  
PRV-DER°  
dolo-xe-še 'from inside'  
PRV-DER-ABL | outside, from outside, outwards  
ga-le  
PRV-DER  
gaga-le-n-do  
ga-le-n-do-n 'from outside'  
PRV- DER°–DER:DIR(ABL)  
ga-le-ša 'till outside'  
PRV-DER-ALL |
| ṽo |  | c’o-x-le 'ahead'  
PTC:ADV- DER°  
c’o-x-le-n-do(n) 'from ahead/on the fore'  
PTC:ADV- DER°  | behind, next, in the end; from behind  
o/uḳ [v]a-č-xe / > uḳa-š-xe 'behind'  
PRV-DER  
o/uḳa-č-xe-le 'behind, backwards'  
PRV-DER  
oḳa-č-xe-n-do / > uḳa-š-qe-n-do 'from behind'  
PRV- DER°  |
| Beside |  | ṽa-ga-s  
R-DER:DAT | ṽa-ša-s  
ORTA-s  
R-DER:DAT |
| far, from far away, till far away | mendra  
R(ADVsmpl: DIST)  
mendra-še  
mendra-še-no-do-n(i)  
R(ADVsmpl: DIST)-DERn- DER: DIR  
mendra-še  
R(ADVsmpl: DIST)-ABL  
mendra-ša  
R(ADVsmpl: DIST)-ALL | close, from close, till close | yanda / yandan 'beside'  
R(ADVsmpl: DIST)  
xolo-s, iani-s, iakini-s  
R(ADVsmpl: PROX)-DER: DAT  
xolo-ša, yakini-ša, yani-ša  
R(ADVsmpl: PROX)-ALL  
yakini-še, yani-še  
R(ADVsmpl: PROX)-ABL |
| on the other side, beyond, to the other side, from the other side | me-le-n 'on the other side'  
ADV= PRVsmpl: DEIX-DER: DIR  
me-le-n-do 'to the other side'  
me-le-n-do-n 'from the other side'  
ADV= PRVsmpl: DEIX-DER: DIR  
me-le-n- ḳale 'on the other side'  
ADV= PRVsmpl: DEIX-DER - PP: DIR | on this side | mo-le  
ADV= PRVsmpl: DEIX-DER: DIR  
mo-le-n-do  
ADV= PRVsmpl: DEIX-DER: DIR |
| up/ uphill | e- mti  
ADV= PRVsmpl: VRT-DER | daun / daunhil | ge-mti  
ADV= PRVsmpl: VRT-DER |
<table>
<thead>
<tr>
<th>Horizontal</th>
<th>Vertical</th>
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<tr>
<td><strong>here</strong></td>
<td>[h]ak akonaši/y</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[h]ek ekonaši/y</td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>close</td>
<td>xolos, yanis, yakinis</td>
</tr>
<tr>
<td>on the other side</td>
<td>mele, melendo</td>
</tr>
<tr>
<td>inside</td>
<td>doloxe, doloxendo</td>
</tr>
<tr>
<td>ahead</td>
<td>c’oxle, öğine</td>
</tr>
<tr>
<td>beside</td>
<td>mɔgas, yanis, yandan</td>
</tr>
<tr>
<td>around</td>
<td>et’rafis, ortaluğis</td>
</tr>
<tr>
<td>Directional adverbs</td>
<td>Horizontal area</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>thither</td>
<td>išo / [h]ešo ‘over there’</td>
</tr>
<tr>
<td>from here</td>
<td>[h]akole-še ‘from here’</td>
</tr>
<tr>
<td>from close by</td>
<td>xolo-še, yani-še, yakini-še close:PROX-ABL</td>
</tr>
<tr>
<td>From</td>
<td>mendra-le, mendrašendo-n, mendrašendo-n(i) far-DER:DIR(:from) mendra-še far-ABL</td>
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<tr>
<td>--------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>From outside</td>
<td>galen-do / galen-de, galendo-n outside-DER:DIR(:from)</td>
</tr>
<tr>
<td>From the other side</td>
<td>melendo-n on the other side-DER:DIR(:from) melene-še-n on the other side-ABL-DER:DIR(:from)</td>
</tr>
<tr>
<td>From inside</td>
<td>doloxen-do, doloxendo-n inside-DER:DIR(:from) doloxe-še inside-ABL</td>
</tr>
<tr>
<td>From the right from the left</td>
<td>marčxani-ša, kvarčxani-ša to the right-ABL, to the left-ABL kvažali-še-n, soli-še-n to the right-ABL-DER:DIR(:from) saği-še-n to the left-ABL-DER:DIR(:from)</td>
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### Vertical area

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<tr>
<th>from above</th>
<th>žindo-le (above-DER:DIR(:from))</th>
<th>žindole-n</th>
<th>žilendo-n</th>
<th>above-DER:DIR(:from/to)</th>
<th>žilen-do</th>
<th>žin-še-n</th>
<th>above-ABL:DER:DIR</th>
<th>till above / upwards</th>
<th>žin-ša</th>
<th>above-ALL</th>
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</thead>
<tbody>
<tr>
<td>from below</td>
<td>tudo/e-le, tudendo-n (below-DER:DIR(:from))</td>
<td>tude-še</td>
<td>below-ABL</td>
<td>tude-ša</td>
<td>below-ALL</td>
<td>tudende-kala/-kele</td>
<td>below-PP:DIR(:from)</td>
<td>till below</td>
<td></td>
<td></td>
</tr>
<tr>
<td>downwards</td>
<td>c’a-le (ADV=PRV-DER:DIR)</td>
<td>c’alen-do</td>
<td>c’alendo-n</td>
<td>below/down-DER:DIR(:to)</td>
<td>c’aleša-ša (below-PP:DIR(:from))</td>
<td>c’aleša-ša (below-ALL)</td>
<td>till below</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>up</td>
<td>e-mti (ADV= PRVsmpl:VRT-DER)</td>
<td></td>
<td></td>
<td>down</td>
<td>ge-mti (ADV= PRVsmpl:VRT-DER)</td>
<td></td>
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</tr>
</tbody>
</table>
SPACE AND MOTION IN LANGUAGE REPRESENTATION

IZABELA KOBALAVA

RUSUDAN GERSAMIA

Izabela Kobalava

Doctor of Philological Science, Professor Emerita of Ilia State University
Research interests: theoretical linguistics, general and experimental phonetics/phonology, Kartvelian languages.

Featured publications:

Rusudan Gersamia

PhD, Associate Professor at Ilia State University
Research interests: formal grammar and semantics of the Kartvelian languages, historical-comparative linguistics, field linguistics and corpus linguistics, teaching and studying Georgian as a second language.

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