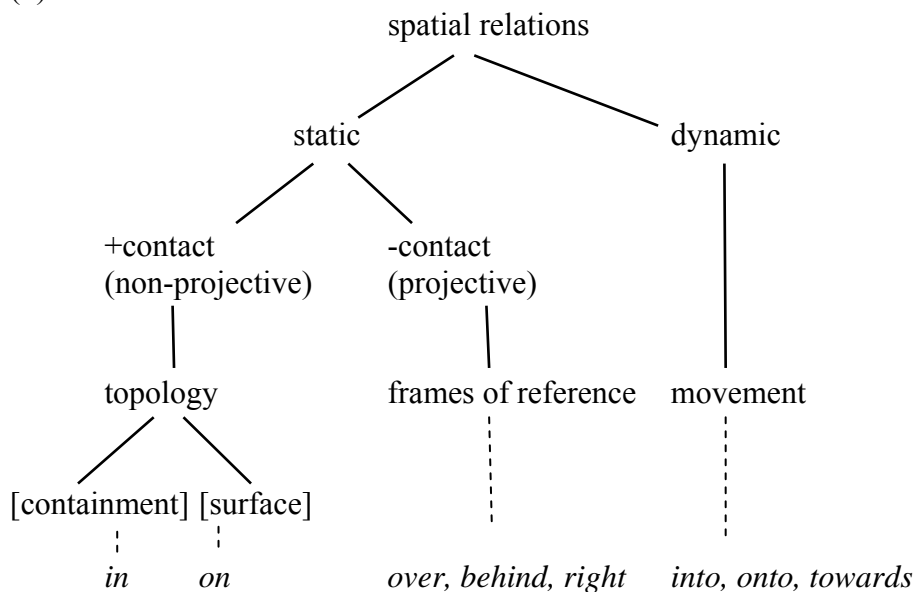# Locative classification and orientation of the configuration: Spatial conceptualisation in Laz

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1. Introduction

stratification of the conceptual domain SPACE (cf. Herskovits 1986, Levinson/Wilkins 2006):

(1)

construction scheme of a topological expression in an adpositional language (e.g. English)

(2) *The bottle is on the table.*

Figure	predicate	Relator	Gound
the bottle	*is*	*on*	*the table*

construction scheme of a topological expression in Laz: Relator is affix on the finite verb (preverb), no adpositions, no local case marker (in Ardeşen; in other Laz dialects: locative case marker = dative).

(3)	Figure	Ground	Relatum	predicate
	NP	NP	PRV-	verb
	şişe	*masa*	**goo-**	*dgun*
	bottle:NOM	table:NOM	on	stand:3s:PRS

2   IN-ON-scale as a universal (?) principle of conceptual ordering in the spatial domain

As a short comparison between English and German shows, "in" and "on" are not universal concepts but rather can be analysed as conceptual clusters consisting of primitive concepts such as containment , surface, superposition (Wunderlich 1986, Klein 1991, Nüse 1999, Levinson/Meira 2003):

(4)   a.

German	*auf*	*an*	*in*
English	*on*	*on*	*in*

b.   English   Deutsch
   *in*:   [+containment]   *in*:   [+containment]
    on: [+surface]   *an*:   [+surface, + side]
                       auf: [+surface, + support from below/superposition]

Hypothesis of a "similarity space" for the topological subdomain of space. The claim is that, crosslinguistically, topological spatial relations are conceptually ordered in the same way along a so-called "IN-ON scale" (Bowerman/Choi 2001, Levinson/Meira 2003: 488). The scale has been developed after investigating 40 genetically and typologically diverse languages. Relators are supposed to denote only adjacent configurations of the scale.

(5)

[superposition]   [containment]
ON ⟵ — — — — ⟶ IN

English	*on*	*on*	*in*	*in*	*in*

but:

Laz	*goo-*	*ce-*	*dolo-*	*dolo-*	*ce-*
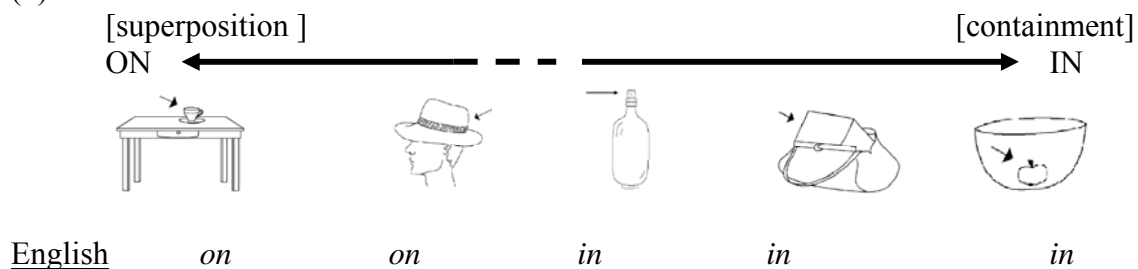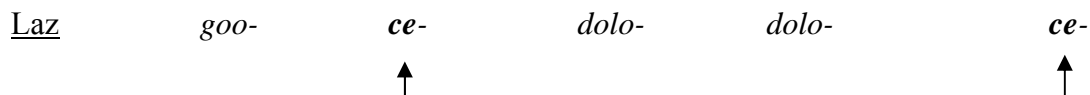
→Laz relators cover discontinuous parts of the scale, e.g. preverb *ce-* for 'on the head' and 'in the bowl'.

3. Conceptualisation of topological relations in Laz

Data: - Ardeşen-Laz
- fieldwork data collected in Ardeşen using visual stimuli developed by the Language and Cognition Group of the Max-Planck-Institute Nijmegen: two booklets with drawings and photographs showing topological configurations (for a detailed description see Ameka/Levinson 2007 and Kutscher /Genç 2007). The stimuli were tested with 4 fluent speakers
- spontaneous data overheard during the fieldwork stay
- data from spoken narratives (Kutscher/Genç 1998)

3.1 Configurations of Containment

ce-
(6)   *bere   yatayi **ce**-zun*
    child   bed   PRV-lie:3s:PRS

    'The child is in the bed.

(7)   *oşǩuri tasi   **ce**-zun*
    apple   bowl   PRV- lie:3s:PRS

    'The apple is in the bowl.'

dolo-
(8)   *şişe   ťiǩina **dolo**-zun*
    bottle   basket PRV- lie:3s:PRS

    'The bottle is in the basket.'

mola-
(9)   *ǩoçi   oxori   **mola**-xen*
    man   house   PRV- sit:3s:PRS

    'The man is in the house/is at home.'

b.   *fincani   dolabi   **mola**-dgun*
    cup   cupboard   PRV-stand:3s:PRS

    'The cup is in the cupboard.'

meşǩa-

(10) ǩinçi   mca   **meşǩa**-xen
      bird   tree   PRV- sit:3s:PRS

'The bird is in the (hollow) tree (trunk).'

3.2   Surface configurations

goo-

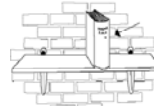(11) fincani masa   **goo**-dgun
      cup   table   PRV-stand:3s:PRS

'The cup is on the table.'

gola-

(12) çitabi oʒude **gola**-zun
      book   shelf   PRV-lie/stand:3s:PRS

'The book is on the shelf.'

cela-

(13) a.   rezimi ǩoda   **cela**-bun
            picture wall   PRV-hang:3s:PRS

            'The picture is on the wall.'
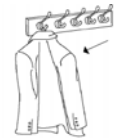
      b.   patto   aski   cela-bun
            jacket hook   down-hang:3s:PRS
            'The jacket is attached (lit.: hangs down from) to the hook.'

(14) balǩoni   **cela**-p-xer
      balcony   PRV-1.A-sit:PRS
      'I sit on the balcony.' (Kutscher/Genç 1998: 28)

me-

(15) msǩala   ǩoda   **me**-zun
      ladder   wall   PRV- lie:3s:PRS

'The ladder is leaning on the wall.' (lying along a wall: *ela-zun*)

(16) banǯi   ǩuçxe **me**-çabun
      band.aid   leg   PRV-stick.to:3s:PRS

'The band aid is on the leg.'

4   Hypothesis: IN-ON-scale holds for Laz

4.1 Are there Ground properties which are relevant for the use of preverbs denoting containment configurations?

- extensions of preverbs used for referring to containment configurations

dolo- and _meşǩe-_

dolo-: in a (cylindrical) basket (cf. (8)) or a pannier (Laz: _ǯiǩina_)
      (17)   _mantari   şişe   dolv-o-nʒoy_
             cork   bottle PRV-VV-be_stuck:3s:PRS
             'The cork is stuck in the bottle.'

   →dolo-: [Ground: cylindrical]

meşǩe-: in a narrow object like a hole in a tree, cf. (10)
      (18)   _d-i-mpulu ,_   _nçala bardi_ **meşǩa**-_xedu,_
             MOD-VV-hide:3s:PRS   hay.stack   PRV-sit:3s:PAST.PFV
             va   gam-ulun
             NEG   PRV-go:3s:PRS
             '(The man) hid, he sat in the hay stack, he did not come out of it.'
             (Kutscher/Genç 1998: 155)

      →_meşǩe-_: [Ground: dense, narrow]

gola- vs. _cela-_ vs. _ela-_

_go-la-:_ 'being on a shelf', cf. (12).
      (19)   _golo-b-ulur_
             PRV-1.A-go:PRS
             'I go along a horizontally oriented road or path'

_ce-la-_: 'hanging down on the wall', cf. (13), 'being on a balcony', cf. (14).
      (20)   a.   _cele-b-ulur_
                  PRV-1.A-go:PRS
                  'I go down a road/path (e.g. in the mountains)'
_e-la-_: b.   _ele-b-ulur_
                  PRV-1.A-go:PRS
                  'I go up a road/path (e.g. in the mountains)'

→   _-la-_   [Ground: strip]

5

Shape properties of the ground seem to be relevant for the usage of Laz preverbs:

i)	Ground is striplike or has an edge:	*gola-, cela-*	(vs. *goo-*)	ON
ii)	Ground is cylindrical:	*dolo-*	(vs. *ce-*)	IN
iii)	Ground is dense, narrow:	*meşǩa-*	(vs. *mola-*)	IN

→locative classification (Allen 1977, Aikhenvald 2000)

Comparable to the cluster concepts for containment and surface configurations in Tiriyó (Levinson/Meira 2003) and Palikur (Aikhenvald/Green 1998), Laz seems to have a finer grained differentiation in the conceptualisation of containment and surface configurations, i.e. the IN-ON-scale may need some rearrangement but in principle holds also for Laz.

But:
4.2 The orientation of configuration is also relevant for configurations which - from a geometrical perspective - are containment relations

dolo- vs. mola-

dolo-:
(21)   *zeytiniγaγi   dolo-b-u-bi*
        olive.oil   PRV-1.A-VV-pour:[1>3]s:PAST.PFV
        'I poured olive oil into (the cow's mouth).' [the cow is lying on the ground]
                                                                    (Kutscher/Genç 1998:34)
mola-
(22)   *ǩici   ʒari   molo-b-i-bi*
        mouth water   PRV-VV-pour:1.A:PAST.PFV
        'I put water in my mouth.' [in order to spray it on swarming bees]
                                                                    (Kutscher/Genç 1998:40)
cela-/ela- vs. *gola-*, *ceşǩa-/eşǩa-* vs. *meşǩa-*

cela- / ela-:   'Ground is a **vertical oriented** striplike object (e.g. a mountian path)' vs.

gola-:   'being on a shelf', 'going along a horizontally oriented road or path'
                  (cf. section 3.1) vs.

ceşǩa-/eşǩa-:   *ceşǩe-bulur* 'I go down in a mountain forest', *eşǩe-bulur* 'I go up in a
                  mountain forest'

          -> 'Ground is a **vertical oriented** dense or narrow object' vs.

meşǩa-:   being in a small place (like a hole in a tree), cf. (10) being in a dense or narrow
                  object (like a hay stack)', cf. (18); moving **horizontally** amidst a narrow or a
                  dense object'

5   New Claim:
Laz preverbs cannot be ordered according to the IN-ON-scale

- Orientation of configuration relevant for (geometrical) containment configuration (e.g. *dolo-* vs. *mola-*)
- Preverb *mo-* does not refer to meaning components such as [surface] or [containment], see section 5.1
- There are preverbs which refer to both surface (ON) and containment (IN) relations (*ce-*), see section 5.2

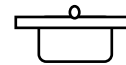## 5.1   Semantic extension of the topological uses of *mo-*

(23) *ǩapaɣi*   *tencere*   ***mo**-zun*
      lid   pot   PRV-lie:3s:PRS

'The lid is on the pot.' (in case of lid belonging to pot)

(24) *ǩapaɣi*   *tencere*   ***goo**-zun*
      lid   pot   PRV-lie:3s:PRS

The lid is on the pot.' (in case of lid too big for pot)

(25) a. *kitabi ǩapaɣi*   ***mo**-zun*
          book   slip.case   PRV-lie:3s:PRS

          'The book is in the slip case.'

      b. *maçindri*   *ǩiǩi*   *mo-zun*
          ring   finger PRV-lie:3s:PRS
          'The ring is on the finger.'

      c. *ǩuçxe modvala*   *ǩuçxe mo-zun*
          shoe   foot   PRV-lie:3s:PRS
          'The shoe is on the foot.'

- with movement verbs used as a proximal deictic marker 'towards speaker'

(26) *ko-mo-xti*
      MOD-PRV-go:2s:IMPER
      'Come here!'

   ➔ *mo-* 'belonging-to-relation'
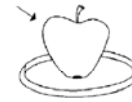
5.2   Semantic extension of the preverb *ce-*

(27) *oxorza   araba **ce**-xen*
      woman   car   PRV-sit:3s:PRS

      'The woman sits in the car.'   IN

(28) a.   *oşǩuri ǎabayi **ce**-zun*
            apple   plate   PRV-lie:3s:PRS

            'The apple is on the plate.'   ON/IN
      b.   *masa   hali   **ce**-dgun*
            table   carpet PRV-stand:3s:PRS
            'The table is on the carpet.'

semantic overlap of *ce-* and *goo-*: [two speakers out of 4 used *ce-*, two used *goo-*]:
(29) *şeyi   masa **ce**-zun   /   goo-zun*
      cloth   table PRV-lie:3s:PRS

      'The cloth is on the table.'   ON

(30) *msǩala   me-m-i-du   **ce**-fti*   DOWN
      ladder   PRV-1.U:VV-put:[3>1]s:PRS   PRV-go:1.A:PRS
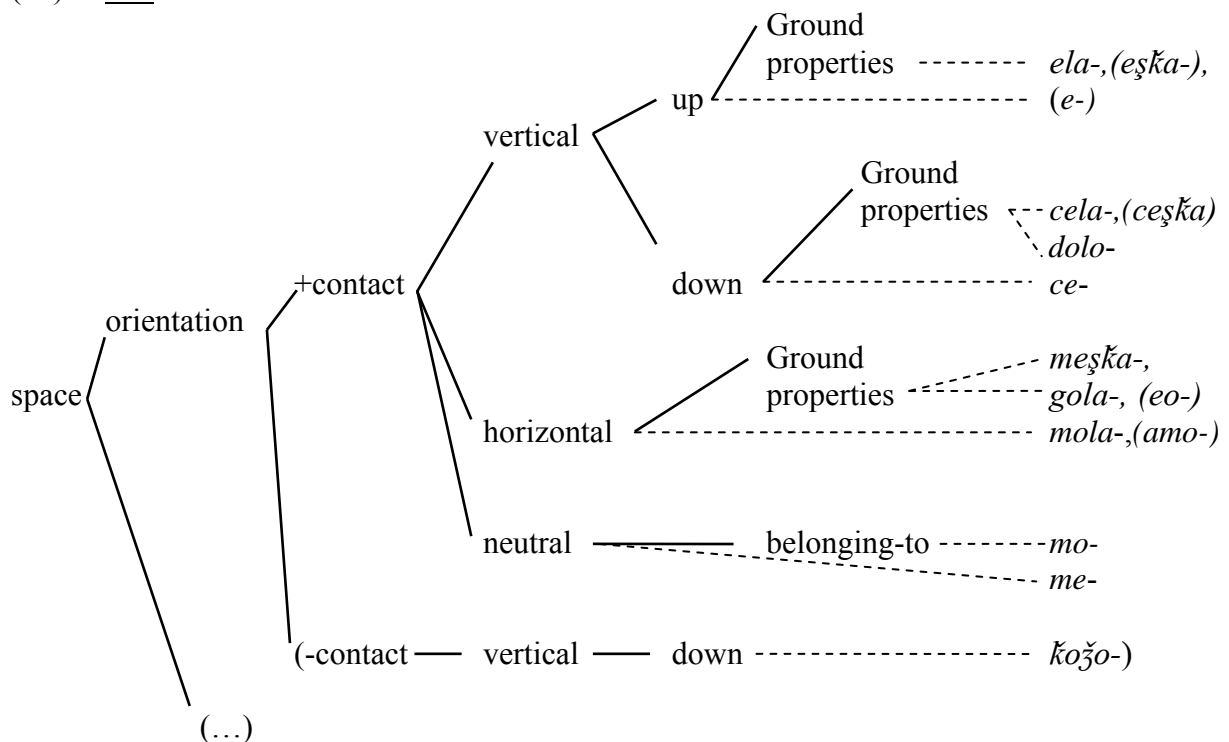   'She put the ladder (on the wall) for me (and) I went **down**.' (Kutscher/Genç 1998:83)

5.3   Clustering of Concepts in Laz

table (1)

ORIENTATION	GROUND PROPERTIES	INCLU-SION ?		
VERTICAL ("up")	--	-	*e-*	UP ON LADDER
	dense, narrow	?	*eşǩe-*	UP IN FORREST
	strip	-	*ele-*	UP ON PATH
("down")	--	-/+	*ce-*	IN CAR, ON PLATE, DOWN ON LADDER
	dense, narrow	?	*ceşǩe-*	DOWN IN FORREST
	strip	-	*cele-*	DOWN ON WALL , DOWN ON PATH
	cylindric	?	*dolo-*	IN BASKET(PANNIER), IN BOTTLE NECK
HORIZONTAL	dense, narrow	+	*meşǩe-*	IN TREE CAVE, IN HAYSTACK
	strip	-	*gola-*	ON SHELF
	--	+	*mola-*	IN HOUSE
	--	-	*goo-*	ON TABLE
NEUTRAL (+belonging)	--	-/+	*mo-*	LID ON POT
(-belonging)	--	-	*me-*	ON LEG, LEANING ON WALL

- Comparing two Taxonomies of Space
(31) Laz:

```
                                              Ground
                                              properties  -------- ela-,(eşǩa-),
                                        up  <---------------------- (e-)
                               vertical
                                                        Ground
                                                        properties  <-- cela-,(ceşǩa)
                                                                    ·. dolo-
                    +contact                       down  <---------------- ce-
        orientation
                                                  Ground          --- meşǩa-,
                                                  properties  <---- gola-, (eo-)
space                                 horizontal  <---------------- mola-,(amo-)

                                   neutral  ————belonging-to ------- mo-
                                                                     me-

                          (-contact — vertical — down ------------------ ǩoʒo-)

                (…)

(32)  German:

                                    inclusion -------------------------------- in
                    +contact
                                    surface ————— superposition ---------- auf
space                                                side  -------------------- an

                (…)
```
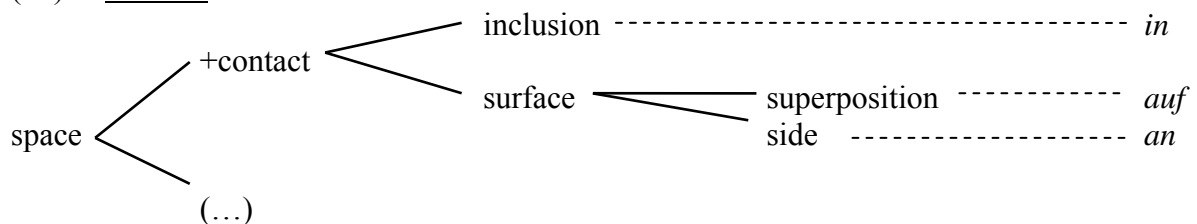
The taxonomy of conceptual components of preverbs used to express topological configurations in (31) shows that these components specify the configuration between a Figure and a Ground, but also relate to properties of the Ground ([strip], [dense], [cylindric]). In contrast to European adpositional (e.g. German in (32)) and Fennic/NE-Caucasian locative case systems, Laz seems to focus mainly on features such as [orientation] and [shape properties of ground] whereas the former treat components such as [inclusion] and [surface] as the fundamental features.

6   Conclusion

- For Laz, concepts such as surface and containment seem not to be fundamental spatial concepts. In addition, the IN-ON-scale proposed by Bowerman/Choi (2001) and Levinson/Meira (2003) is not applicable for topological expressions in Laz (cf. (5)).

- Rather, concepts such as orientation of the configuration ([vertical: downwards], [horizontal]), shape properties of the ground ([striplike], [cylindrical]), and „belonging together" (lid on pot) are relevant for the meaning of Laz preverbs.

A typology of spatial conceptualisation:
With respect to the fundamental concepts of space, we find at least two types of languages:

- Type 1 (English, German, Finnish, Turkish, etc.):
  topological spatial concepts are ordered according to the IN-ON-scale. All seem to
  have nominal relators (adpositions, local cases).
- Type 2 (Laz, Mingrelian?):
  topological spatial concepts relate to endpoints of path configurations. The relators are
  part of the verbal complex.

Abbreviations

A	Actor	PRV	preverb
IMPER	imperative	s	singular
MOD	speaker modality/focus	U	Undergoer
	particle	VV	version vowel
NEG	negation	[>]	verbform is marked for two
NOM	nominative		arguments, subject (= Actor)
PAST.PFV	past perfective		acting on object (=
PRS	present tense		Undergoer

Laz orthographie
Examples are written in the Lazoğlu/Feurstein-alphabet introduced to the Laz community in Turkey
in 1984. It deviates from the Caucasianists' transcription in the following graphemes (<Laz =
Caucasianist>):
 <ç = č̆>, <c = ǰ>, < ǩ = k'>, <p̌ = p'>, <ş = š>, <ťl = t'>, <ʒ = c>, <ǯ = c'>

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