



The Second Online Course on East Caucasian Languages

Michael Daniel, Linguistic Convergence Laboratory & School of Linguistics, HSE

---

# **DIRECTIONALITY IN EAST CAUCASIAN**



# ROADMAP

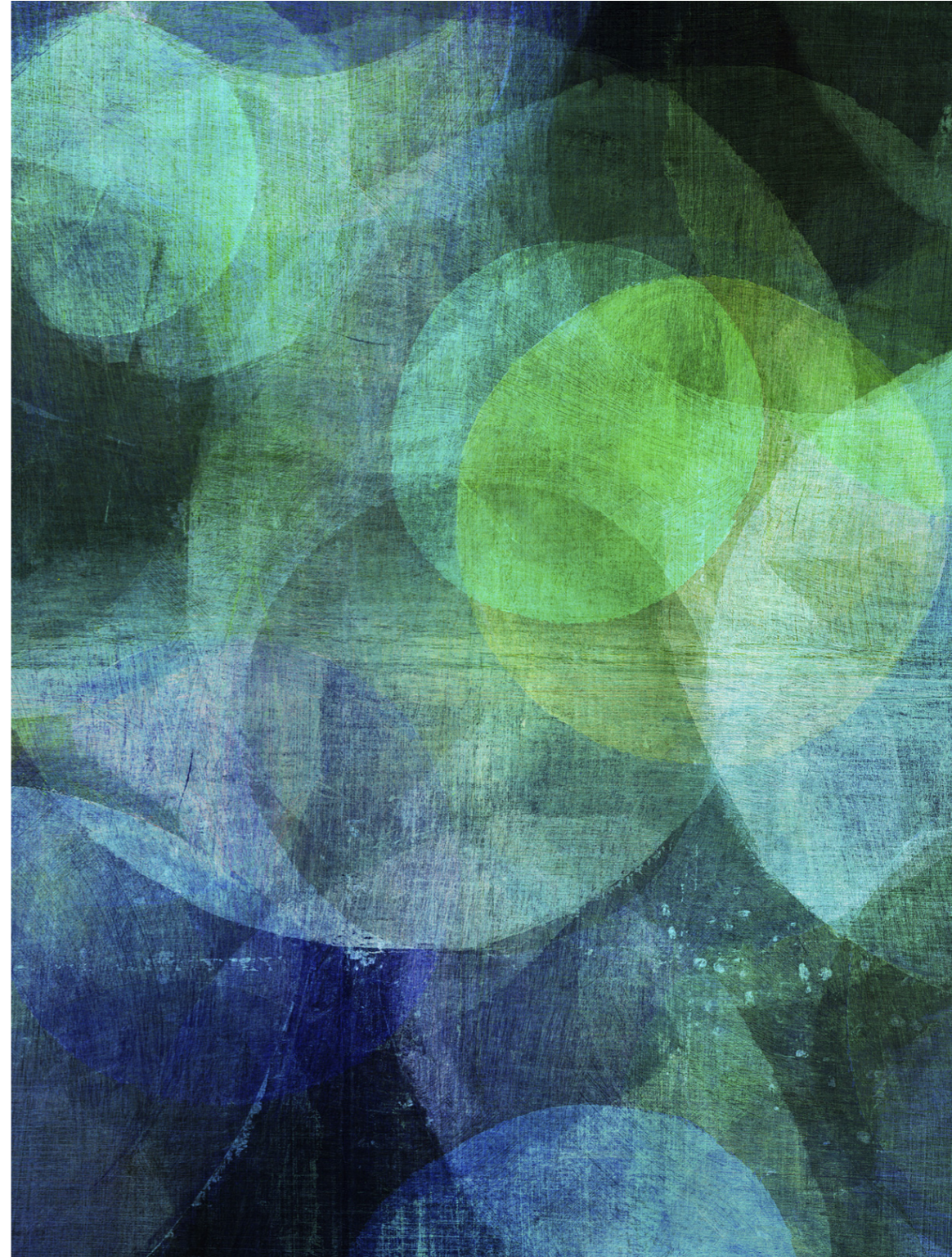
---

- Introduction: a quick recap
- Inventories: paradigmatics of directional categories
- Directionality and agreement: the Dargwa puzzle
- Decomposition of directionality: between morphology and syntax

# INTRODUCTION

---

*A quick recap of spatial forms*

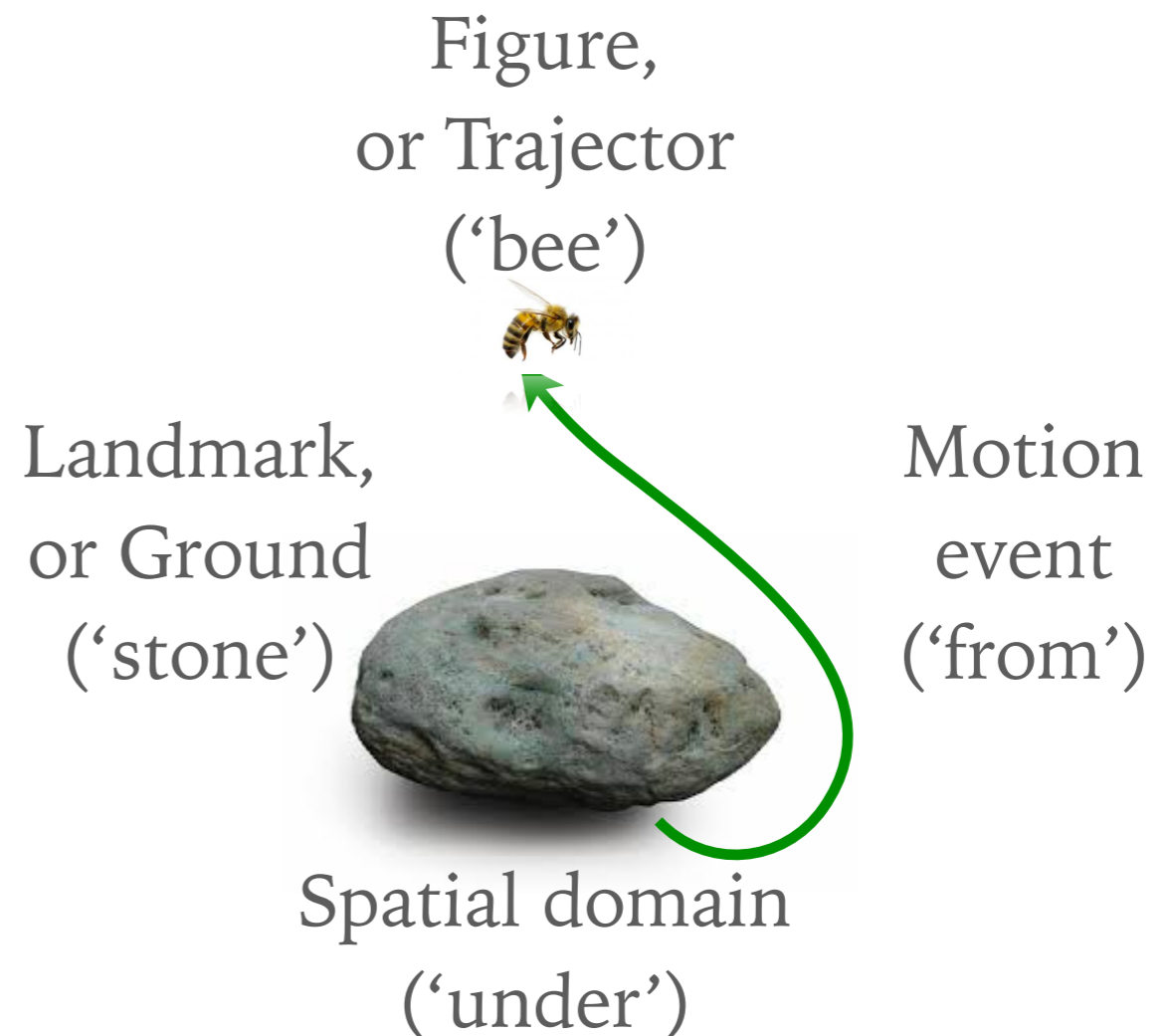


## INTRODUCTION AND REMINDER

---

- Archi (Lezgic): *bimorphism of the spatial template* (bidimensionality in Creissels 2009)

*č'eleli-L'i-š*  
stone-**Sub-El**  
**'from under** the stone'



## INTRODUCTION AND REMINDER

---

### ((landmark) Localisation) Direction



landmark	localization	direction	order <sub>1</sub>
----------	--------------	-----------	--------------------

*č'eleli*

*-L'i*

*-š*

Archi

*из-*

*под*

*камня*

Russian

*from*

*under*

*the stone*

English

direction	localization	landmark	order <sub>2</sub>
-----------	--------------	----------	--------------------



### Direction (Localization (landmark))

## INTRODUCTION AND REMINDER

---

What, apart from morpheme order, makes East Caucasian different from the European examples?

- **morphological boundedness:** affixes rather than function words
- **regular meaning-form mapping:** no cumulation, same affixes are responsible for the same components of spatial meaning across the paradigm in a compositional way

Cf. Kibrik (1970), Testeletz (1980)

# INTRODUCTION AND REMINDER

spatial forms of Archi				
	Place	Goal	Source	Direction
<b>In</b>	<i>-a</i>	<i>-a-k</i>	<i>-a-š</i>	<i>-a-ši</i>
<b>Inter</b>	<i>-q<sup>ʃ</sup></i>	<i>-q<sup>ʃ</sup>a-k</i>	<i>-q<sup>ʃ</sup>a-š</i>	<i>-q<sup>ʃ</sup>a-ši</i>
<b>Sub</b>	<i>-L'</i>	<i>-L'a-k</i>	<i>-L'a-š</i>	<i>-L'a-ši</i>
<b>Super</b>	<i>-tɿ</i>	<i>-tɿi-k</i>	<i>-tɿi-š</i>	<i>-tɿi-ši</i>
<b>Cont</b>	<i>—</i>	<i>-ra-k</i>	<i>-ra-š</i>	<i>-ra-ši</i>

spatial forms of English			
	Place	Goal	Source
<b>In</b>	<i>in</i>	<i>in(to)</i>	<i>out (of), from</i>
<b>Inter</b>	<i>between</i>	<i>between</i>	<i>(?from between)</i>
<b>Sub</b>	<i>under</i>	<i>under</i>	<i>(?from under)</i>
<b>Apud</b>	<i>at</i>	<i>to</i>	<i>from</i>
<b>Super/Cont</b>	<i>on</i>	<i>on(to)</i>	<i>off (of), from</i>

# INTRODUCTION AND REMINDER

spatial forms of Archi					spatial forms of English			
	essive	lative	elative	directive		Place	Source	Goal
In	-a	-a-k	-a-š	-a-ši	In	<i>in</i>	<i>in(to)</i>	<i>out (of), from</i>
Inter	-qʰ	-qʰa-k	-qʰa-š	-qʰa-ši	Inter	<i>between</i>	<i>between</i>	<i>(?from between)</i>
Sub	-Lʰ	-Lʰa-k	-Lʰa-š	-Lʰa-ši	Sub	<i>under</i>	<i>under</i>	<i>(?from under)</i>
Super	-tʰ	-tʰi-k	-tʰi-š	-tʰi-ši	Apud	<i>at</i>	<i>to</i>	<i>from</i>
Cont	—	-ra-k	-ra-š	-ra-ši	Super/Cont	<i>on</i>	<i>on(to)</i>	<i>off (of), from</i>

Today's focus is on the category of directionality

Nakh languages and Udi, where spatial forms do not (clearly) form an inflectional sub paradigm, are off the floor for today.



# TERMINOLOGICAL NOTE: CATEGORY OF DIRECTIONALITY

---

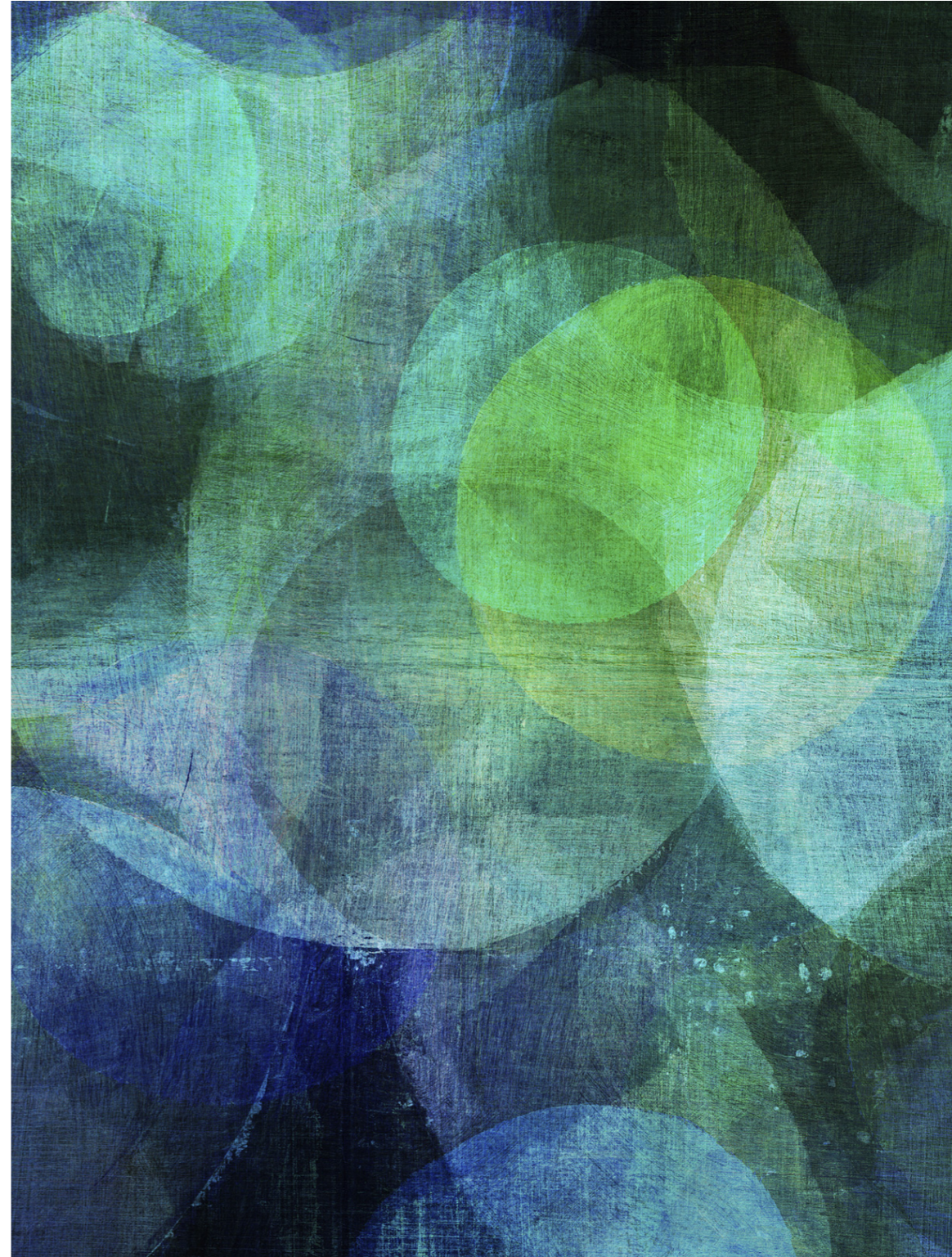
	First slot	Second slot
local descriptive tradition	серия	падеж
Kibrik 1970	ориентирующее значение	двигательное значение
Kibrik's school	локализация	ориентация, двигательный падеж
Testelefs 1980	локализация	пространственный падеж
Comrie & Polinsky 1998	orientation	directional suffix
Kibrik 2008	localization	direction
Creissels 2009	(series, spatial configuration, relative orientation)	(case?)
<b>These slides:</b>	<b>localization</b>	<b>directionality</b>

# PART I

# INVENTORIES

---

*paradigmatics of directionality*



## DIRECTIONALITY VALUES: INVENTORIES

---

- **essive** - Place - ‘**sleep in the bed**’
- **lative** - Goal - ‘**go to the field**’
- **elative** - Source - ‘**come back from the woods**’
- **translative** - Path - ‘**climb through the window**’
- **directive** - Orientation? (‘**towards**’) - ‘**head for the woods**’
- **terminative** - Limit? (‘**up to**’) - ‘**go as far as the river**’

\*Below, I will designate (comparative) concepts such as Goal or Source by capitalizing the first letter, and language specific (descriptive) categories such as **essive** or **locative** by all-small letters

# TERMINOLOGICAL NOTE: DIRECTIONALITY VALUES

---

	Place	Goal	Source	Path	Orientation	Limit
<b>Kibrik 1970</b>	ЛОКАТИВ (ЭССИВ)	ЛАТИВ	ЭЛАТИВ			
<b>Testelefs 1980 (2003)</b>	ЭССИВ	ЛАТИВ	ЭЛАТИВ	ТРАНСЛАТИВ vs. ПРОСЕКУТИВ	АЛЛАТИВ	ТЕРМИНАТИВ
<b>Comrie &amp; Polinsky 1998</b>	essive	allative	ablative		versative	
<b>Kibrik 2008</b>	essive	lative	elative	translative	allative	terminative
<b>Creissels 2009</b>	(location)	(destination)	(source)	(path)		
<b>These slides:</b>	essive	lative	elative	translative	directive	

## BEYOND CATEGORIAL DIRECTIONALITY

---

- Other functions of directionality markers
- Other means of expression directional meanings

## BEYOND CATEGORIAL DIRECTIONALITY

---

- Other functions of directionality markers
  - lative = dative (Khwarshi *-l*, Lak *-n*)
  - directive = allative as an extraparadigmatic spatial case (Tsakhur *-qa*, Kibrik et al. 1999: 55)
  - lative or directive = converb and/or adverbializer and/or functive (Aghul *-di*, Rutul *-na*, Archi *-ši*)
  - essive = class agreement (most Dargwa languages)
- Other means of expression directional meanings

## BEYOND CATEGORIAL DIRECTIONALITY

---

- Other functions of directionality markers
- Other means of expression directional meanings
  - Postpositions and other extraparadigmatic markers: directive  $\chi:in$  in Chamalal (Bokarev 1949: 53), directive/translative *-di* in Tabasaran (Magometov 1965: 127)
  - Dative: goal in Lezgian and Aghul

## BEYOND CATEGORIAL DIRECTIONALITY

---

- Other functions of directionality markers
- Other means of expression directional meanings
  - Postpositions and other extraparadigmatic markers: directive  $\chi:in$  in Chamalal (Bokarev 1949: 53), directive/translative *-di* in Tabasaran (Magometov 1965: 127)
  - Dative: goal in Lezgian and Aghul; but note the difference from Tsezic and Lak just discussed:
    - Khwarshi and Lak: the dative suffix is also used as lative (Goal) in spatial sub-paradigm
    - Lezgian and Aghul use the dative (a syntactic case) with some nouns to express Goal



## INTERNAL STRUCTURE OF THE CATEGORY OF DIRECTIONALITY

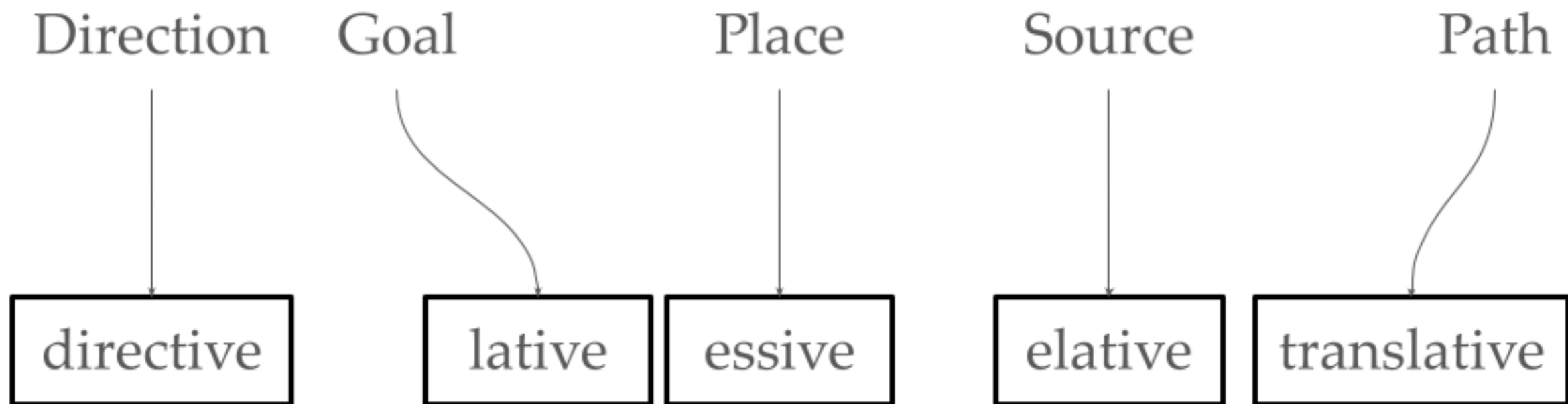
---

- Essive (unmarked), Lative, Elative, Translative, Directive, Terminative (**Archi**)
- Essive (unmarked), Lative, Elative, ~~Translative~~, Directive or Terminative? (**Tsakhur**)
- Essive (unmarked), ~~Lative~~, Elative, ~~Translative~~, Directive, ~~Terminative~~ (**Lezgian**)
- Essive (unmarked), ~~Lative~~, Elative, ~~Translative~~, ~~Directive~~, ~~Terminative~~ (**Rutul**)
- Essive (unmarked), ~~Lative~~, Elative, Translative, ~~Directive~~, ~~Terminative~~ (**\*Bagvalal**)

No obvious pattern. But let us look at what happens to meanings that do not get dedicated marking - **mergers** (patterns of neutralisation of directional meanings in Kibrik 1970) and **gaps** (directional meanings that may remain outside the category of directionality).

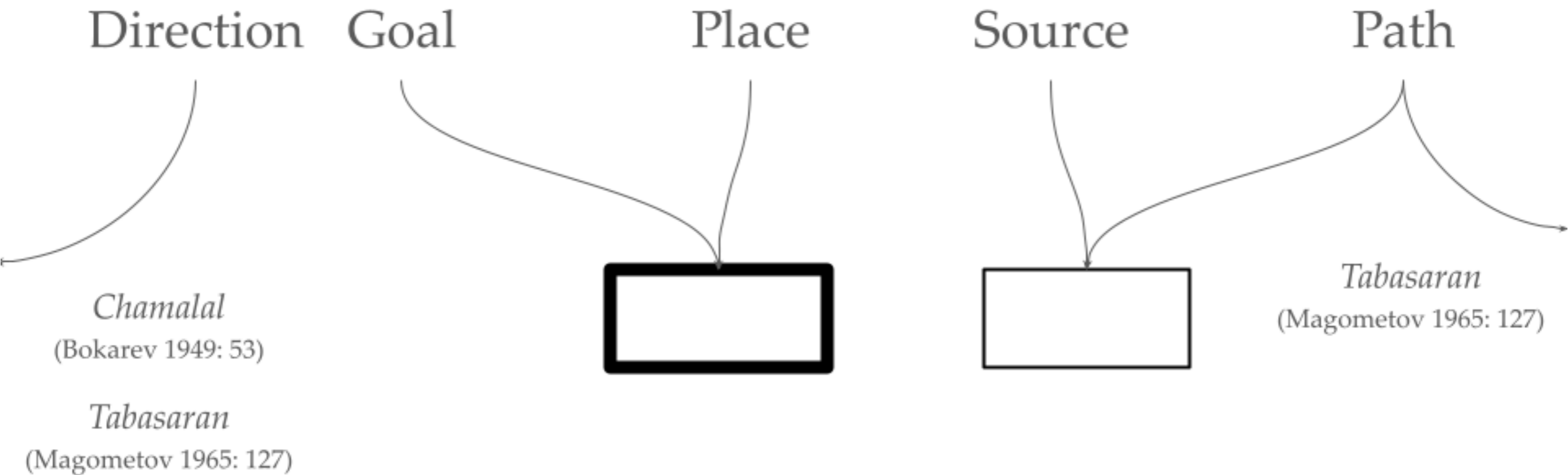
# MERGERS AND GAPS: FULL SYSTEM

---



# MERGERS AND GAPS: POSSIBILITIES

---



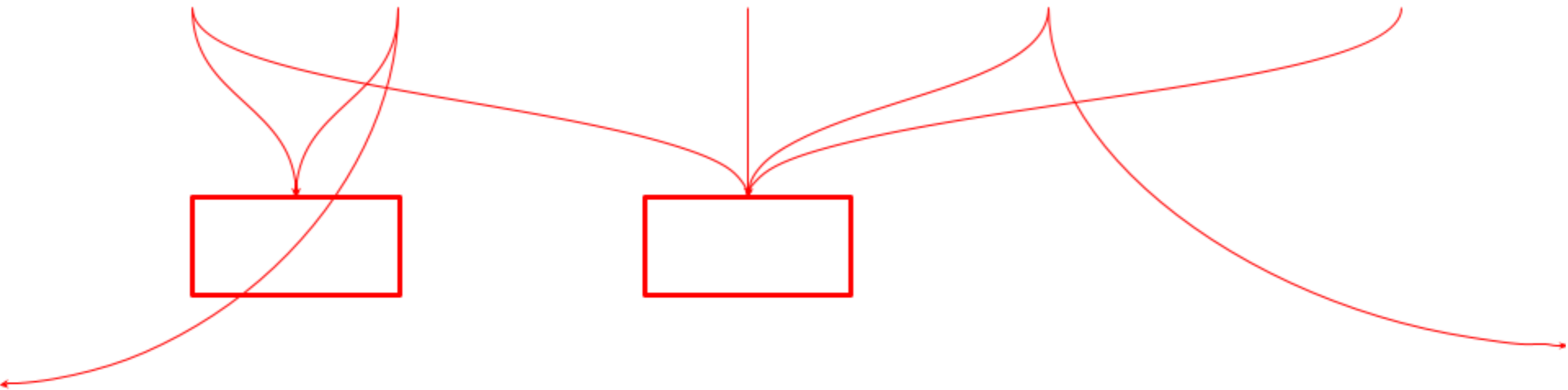
# MERGERS AND GAPS: IMPOSSIBILITIES

Direction Goal

Place

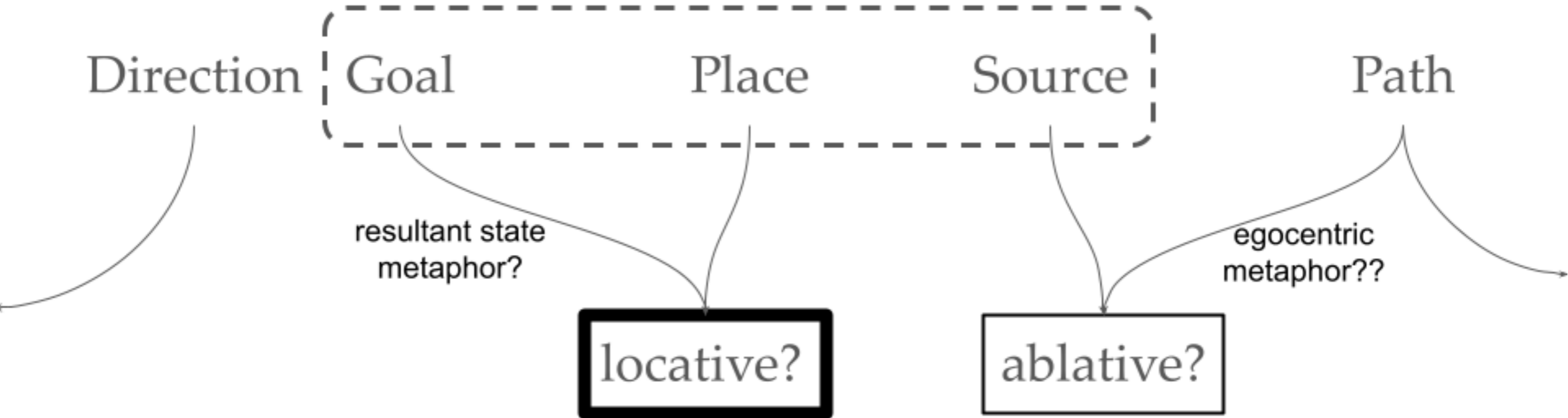
Source

Path



# MERGERS AND GAPS: POSSIBILITIES

---



## TOWARDS TYPOLOGY

---

The generalisations (cf. Kibrik 1970):

- any directional system expresses at least three meaning - Place, Goal and Source
- Goal and Place may be formally co-expressed while Source is always apart
- No other meaning is expressed by all directionality systems

Hence, we classify all instantiations of the category of directionality in East Caucasian into **tripartite** (Goal ≠ Place ≠ Source) and **bipartite** (Goal = Place ≠ Source)

## TOWARDS TYPOLOGY

	Source	Place	Goal	language groups
<b>Tripartite systems</b>	elative 'from the house'	essive 'in the house'	lative 'into the house'	Lezgian Lak Andic Tsezic
<b>Bipartite systems</b>	elative 'from the house'	locative 'in/into the house'		Lezgian Khinalug Andic

## TOWARDS TYPOLOGY

	Source	Place	Goal
Tripartite systems	relative	essive	lative
Bipartite systems	relative	locative	
Full merger	locative (see Nikitina 2009 on Mande)		



## CASES IN FLUX

---

- For Avar, Alekseev&Ataev (1997: 48) notices, with a reference to Madieva (1981), that in most series Source tends to neutralise with Path in the relative form (the dedicated translative form is available but rare)
- For Botlikh, Andic, two markers are used for Path, one also showing translative uses (Gudava 1967, Zadykian et al. 2020)
- For Tabasaran, Lezgif, Magometov (1965: 126) notes that relative of Super (localization) may be interpreted as Path

## CASES IN FLUX

---

- For Alik as compared to the other Kryz (Lezgetic) dialects, Authier (2009: 35) notes that its essive started to express Goal (essive → locative), while the form specialised as a lative in the other Kryz dialects in Alik starts to express highly specialized adverbial meanings
- For Lezgian, Dmitry Ganenkov (p.c.) notes that Haspelmath' (1993) directive is in fact a highly constrained lative as opposed to locative (Place + Goal)
- For Hinuq, Tsezic, it has been observed that the essive is used for Goal (Forker 2013)

## THE CASE OF POSTURE VERBS

---

These mergers should not be confused with certain semantic effects:

- All East Caucasian languages but one branch use the essive with verbs ‘put’, ‘hide’, ‘sit’ and several similar verbs (Dargwa uses lative):

Archi, Lezgetic:

*q'u <w> q'i*    *o<sup>ʁ</sup>ržu-b*    *š<sup>ʁ</sup>e<sup>ʁ</sup>ntli-t*  
<1> sit.Imp    left.Attr-3    chair-Sup(Ess)

‘Sit down on the chair on the right.’

See (Filatov 2018 for a study of posture verbs in East Caucasian, and Zaika 2016 for a typological background)

## THE CASE OF POSTURE VERBS

---

- These mergers should not be confused with certain semantic effects:
- All East Caucasian languages but one branch use the essive with verbs ‘put’, ‘hide’, ‘sit’ and several similar verbs (Dargwa uses lative):
- Does this mean an ongoing merger of the essive and lative into locative? No, because the basic verbs of motion like ‘go’ continue to distinguish between Place and Goal (cf. typological overview in Zaika 2016)
- It is not the case that essive in these languages starts expressing Place and Goal (and thus develops into a locative), but that verbs of posture combine with Place rather than Goal

## TAKEAWAY: INVENTORIES

---

- Up to five different values (essive, lative, elative, translative, directive, terminative)
- Only Source, Place and Goal expressed in all languages
- Goal often merges with Place (essive and lative neutralised as *locative*) - **bipartite systems**
- Translative sometimes merges with elative; it can also be expressed by non-paradigmatic means
- Unclear whether directive ever fully merges with lative (more data is needed, and depending on the definition of directive)

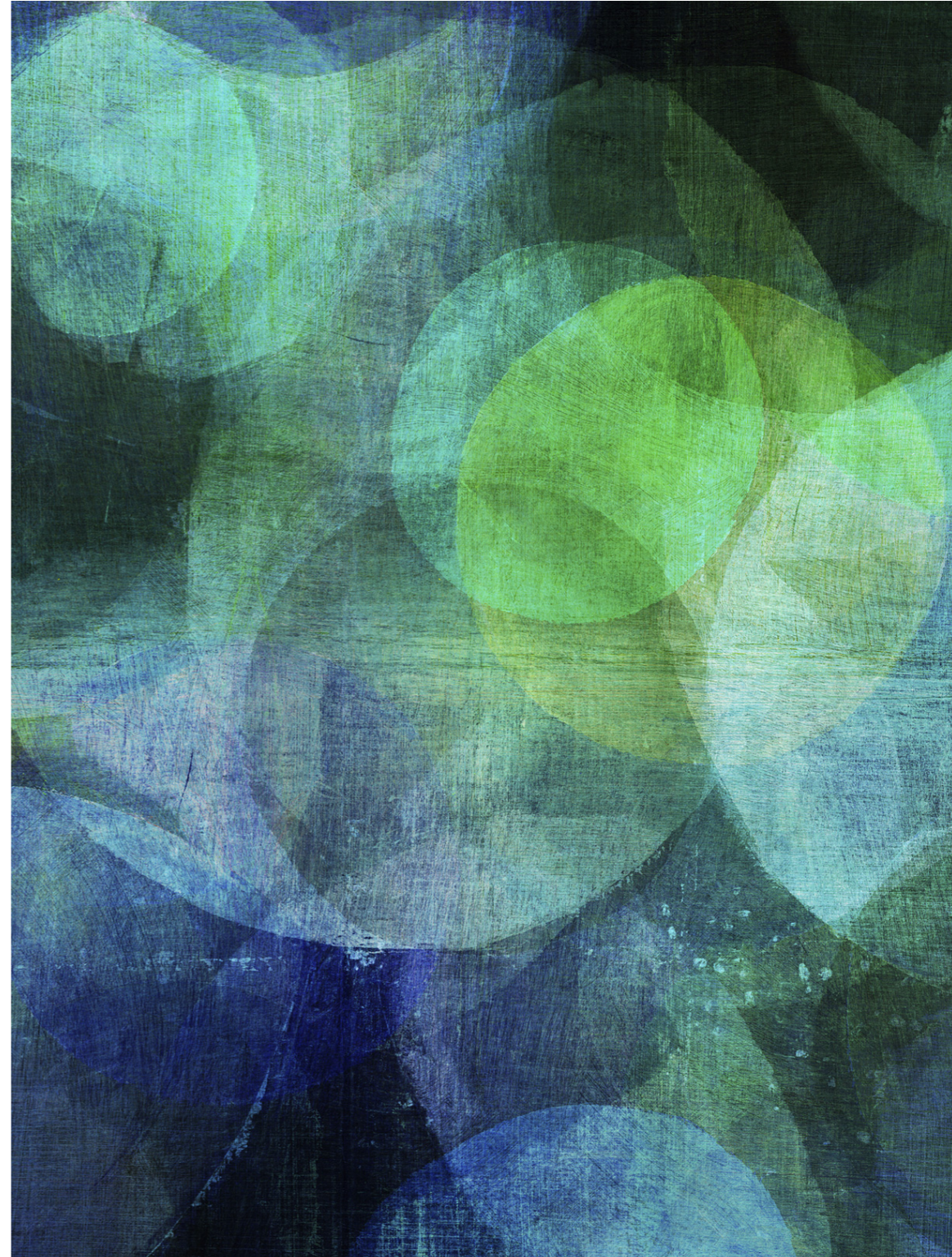
# PART II

# THE DARGWA

# PUZZLE

---

*directionality and agreement*



## INVENTORIES: THE DARGWA PUZZLE

---

► Dargwa appears to be a tripartite system. Mehweb Dargwa:

		<b>Ess</b>	<b>Lat</b>	<b>El</b>	<b>Trans</b>
		(Class)	(∅)	<i>-la</i>	<i>-di</i>
<b>Sup</b>	<i>-če</i>	<i>-če-b</i>	<i>-če</i>	<i>-če-la</i>	<i>-če-di</i>
<b>Ad</b>	<i>-šu</i>	<i>-šu-b</i>	<i>-šu</i>	<i>-šu-la</i>	<i>-šu-di</i>
<b>Apud</b>	<i>-ʔe</i>	<i>-ʔe-b</i>	<i>-ʔe</i>	<i>-ʔe-la</i>	<i>-ʔe-di</i>
<b>In</b>	<i>-ħe</i>	<i>-ħe-b</i>	<i>-ħe</i>	<i>-ħe-la</i>	<i>-ħe-di</i>
<b>Inter</b>	<i>-ze</i>	<i>-ze-b</i>	<i>-ze</i>	<i>-ze-la</i>	<i>-ze-di</i>

## INVENTORIES: THE DARGWA PUZZLE

---

Unexpected features of Mehweb Dargwa tripartite systems:

- Unlike all other tripartite systems, essive (Place) marked, lative (Goal) unmarked

*gumili-če-Cl* 'on the bridge' vs. *gumili-če* 'onto the bridge' vs. *gumili-če-la* 'from (on) the bridge'

- Place as opposed to Goal is expressed by the presence of agreement slot
  - Spatial forms do contain agreement slots, as in Avar (In), including in directionality markers, as in Lak (lative) or in Mehweb Dargwa itself (in one of the elatives) - but none expresses a spatial meaning by **agreement alone**



## INVENTORIES: THE DARGWA PUZZLE

---

What happens if we temporarily exclude the agreement slot from our field of vision?

Place	Goal	Source
<i>gumili-če-Cl</i>	<i>gumili-če</i>	<i>gumili-če-la</i>
‘on the bridge’	‘onto the bridge’	‘From the bridge’
essive	lative	elative
<hr/>		
<i>gumili-če [-Cl]</i>		<i>gumili-če-la</i>
‘on(to) the bridge’		‘From the bridge’
locative		elative

## INVENTORIES: DARGWA PUZZLE

---

What happens if we temporarily exclude the agreement slot from our field of vision? Then:

- There is no unmarked lative, only unmarked locative
- Dargwa is a bipartite system: one that does not distinguish between Place and Goal (locative vs. relative systems)

## INVENTORIES: DARGWA PUZZLE

---

A suggestion to change the perspective:

FROM: *the agreement slot is a morpheme expressing the essive meaning (agreement as a marker of the essive category)*

TO: *the form expressing Place agrees while the form expressing Goal does not (agreement as a morphosyntactic property of the locative form when encoding Place)*

The question remains: why does the locative form agree when it encodes Place but not when it encodes Goal? We need to dive a little bit deeper into East Caucasian clausal agreement.

## DIVERSION: WHAT DO WE KNOW ABOUT EC AGREEMENT?

---

- Unexpected targets: not only verb, but also adverbs, locative forms, particles - *clausal* agreement
- Among NPs, arguments are on the whole less likely targets than adjuncts
- Andic directional case in  $-V <Cl> a$  that extends into the domain of experiential uses tends to freeze its agreement slot

**Hypothesis:** In East Caucasian, clausal agreement serves as a means of **syntactic coherence**; adjuncts are less integrated with the core of the clause and are more often targeted by clausal agreement than arguments

## INVENTORIES: DARGWA PUZZLE

---

Why does the locative form agree when it encodes Place but not when it encodes Goal?

Goal is more closely integrated with the semantics of the verb (more argument like), Place is less (more adjunct like) and is targeted by clausal agreement.

A good test could be the use of Place in argument position, but what could this be?

## INVENTORIES: DARGWA PUZZLE

---

Why does the locative form agree when it encodes Place but not when it encodes Goal?

Goal is more closely integrated with the semantics of the verb (more argument like), Place is less (more adjunct like) and is targeted by clausal agreement.

A good test could be the use of Place in argument position, but what could this be?

*Wait! Posture verbs! Posture verbs take Place in East Caucasian.*

## FAST REWIND: THE CASE OF POSTURE VERBS

---

- These mergers should not be confused with certain semantic effects:
- All East Caucasian languages (but one branch) use the essive with verbs ‘put’, ‘hide’, ‘sit’ and several similar verbs (Dargwa uses lative):
- Does this mean an ongoing merger of the essive and lative into locative? No, because the basic verbs of motion like ‘go’ continue to distinguish between Place and Goal (cf. typological overview in Zaika 2016)
- It is not the case that essive in these languages starts expressing Place and Goal (and thus develops into a locative), but that verbs of posture combine with Place rather than Goal

## INVENTORIES: DARGWA PUZZLE

---

But what does it mean, exactly, that Dargwa languages use the “lative” form with posture verbs?

Under the interpretation below, it is the ambiguous “locative” (Place + Goal) form *without agreement*

We can then alternatively say that Dargwa posture verbs take Place argument, but because it is an argument, the locative form does not agree (as it does not agree when it expresses the Goal argument)...

... or else we have to admit that Dargwa languages are once again different from all sister branches.



## INVENTORIES: DARGWA PUZZLE

	Source	Place	Goal
interpretation			
Tripartite system	Elative <i>-la</i>	Essive <i>-Cl</i>	Lative ( $\emptyset$ )
Bipartite system	Elative <i>-la</i>	Locative ( $\emptyset$ ) in adverbial use, the form agrees	

## DARGWA PUZZLE: TAKEAWAY

---

A re-interpretation of the Dargwa system allows aligning Dargwa languages with the rest of the family:

- From a weird tripartite to the regular bipartite system
- Verbs of change of posture and the like take Place as their arguments, as in other branches

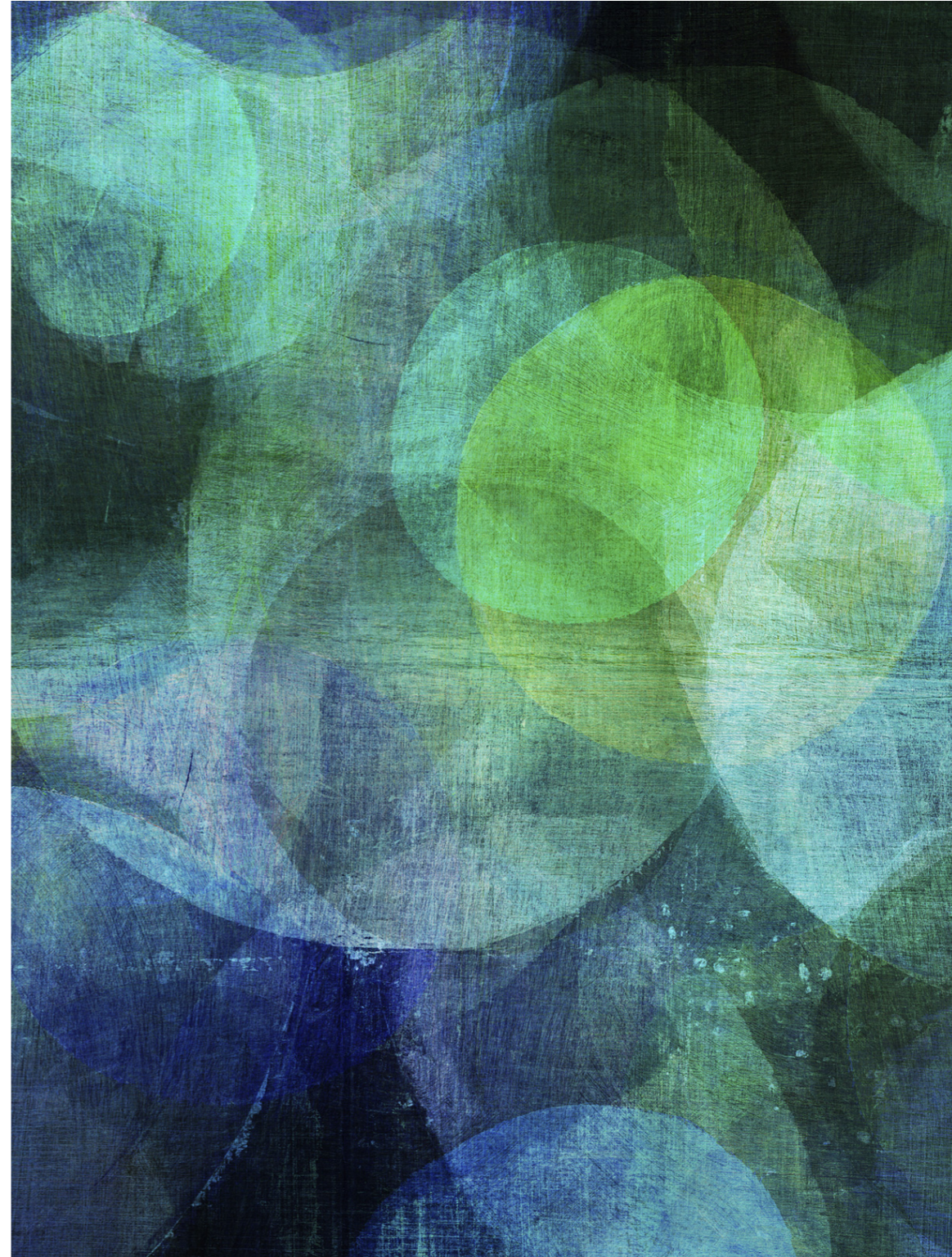
There is a price to pay: assumptions about the role of agreement in East Caucasian languages (luckily, advanced on grounds independent from this analysis)

# PART III

# DECOMPOSITION

---

*directionality between  
morphology and syntax*



## FURTHER INTO MORPHOSYNTAX

---

- I have argued above that two properties distinguish East Caucasian spatial forms from complex preposition (as in English): formal regularity and boundedness (inflection)

## FURTHER INTO MORPHOSYNTAX

spatial forms of Archi				
	Place	Goal	Source	Direction
<b>In</b>	-a	-a-k	-a-š	-a-ši
<b>Inter</b>	-qʰ	-qʰa-k	-qʰa-š	-qʰa-ši
<b>Sub</b>	-L'	-L'a-k	-L'a-š	-L'a-ši
<b>Super</b>	-tɿ	-tɿi-k	-tɿi-š	-tɿi-ši
<b>Cont</b>	—	-ra-k	-ra-š	-ra-ši

spatial forms of English			
	Place	Goal	Source
<b>In</b>	<i>in</i>	<i>in(to)</i>	<i>out (of), from</i>
<b>Inter</b>	<i>between</i>	<i>between</i>	<i>(?from between)</i>
<b>Sub</b>	<i>under</i>	<i>under</i>	<i>(?from under)</i>
<b>Apud</b>	<i>at</i>	<i>to</i>	<i>from</i>
<b>Super/Cont</b>	<i>on</i>	<i>on(to)</i>	<i>off (of), from</i>

## FURTHER INTO MORPHOSYNTAX

---

- I have argued above that two properties distinguish East Caucasian spatial forms from complex preposition (as in English): formal regularity and boundedness
- Formal regularity can however be disputed, because in various languages combinability of directionality with different localisation markers is less than predictable

## FURTHER INTO MORPHOSYNTAX

---

Kina Rutul		
	Essive	Elative
In	<i>-a</i>	<i>-aʕ</i>
Super	$(\emptyset)$	<i>-la</i>
Apud	<i>-da</i>	<i>-daʕ</i>
Sub	<i>-xda</i>	<i>-xla / -qla</i>
Inter	<i>-k</i>	<i>-kla</i>

Bagvalal			
	Essive	Lative	Elative
Super	<i>-la</i>	<i>-la:</i>	<i>-las:</i>
In	<i>-ni</i>		<i>-nis:</i>
Ad	<i>-χ</i>		<i>-χis:</i>
Sub	<i>-L'i</i>		<i>-L'is:</i>
Inter	<i>-ti</i>		<i>-tis:</i>
PersLoc	<i>-ta:</i>		<i>-ta:s:</i>
Cont	<i>-č'</i>		<i>-č'is:</i>

## FURTHER INTO MORPHOSYNTAX

---

- I have suggested above that two properties distinguish East Caucasian spatial forms from complex preposition (as in English): formal regularity and boundedness.
- Formal regularity can however be disputed, because in various languages combinability of directionality with different localisation markers is less than predictable
- On the upside, this confirms their bounded status, as selectivity excludes their analysis as clitics.



## FURTHER INTO MORPHOSYNTAX

---

- I have suggested above that two properties distinguish East Caucasian spatial forms from complex preposition (as in English): formal regularity and boundedness.
- Formal regularity can however be disputed, because in various languages combinability of directionality with different localisation markers is less than predictable
- On the upside, this confirms their bounded status, as selectivity excludes their analysis as clitics.

*Or does it indeed?*

## DECOMPOSITION OF DIRECTIONALITY: SPATIALS AS A PART OF SPEECH

---

In addition to the spatial forms of nouns, East Caucasian languages have a number of other lexical classes that convey spatial semantics, including:

- Spatial adverbs: ‘The sheep went **up there**.’ (Mehweb *heč’e-*)
- Spatial postpositions (often also used as adverbs and sometimes taking the noun in the essive): ‘**inside** the ditch’ (Tukita *hini-*)
- Local place names: ‘He is **in Rutul** at the market.’ (Kina Rutul *mī<sup>ʃ</sup>χa-*)
- Bodypart locations: ‘He had a rifle **in (his) hands**.’ (Tukita *kodi-*)
- Locative converbs: ‘**Where** the dog **stopped**, there you should plough!’ (Archi *baḥri o⟨b⟩s-di-ma* — dog ⟨4⟩stand-Pfv-Loc)

## DECOMPOSITION OF DIRECTIONALITY: SPATIALS AS A PART OF SPEECH

---

All these items may take directionality marking just as nouns with localization suffixes; cf. Mehweb (Dargwa):

Mehweb locatives	Place	Goal	Source
spatial adverb 'up there'	<i>heč'e-Cl</i>	<i>heč'e</i>	<i>heč'e-la</i>
local placename 'in Mehweb'	<i>meħ<sup>w</sup>e-Cl</i>	<i>meħ<sup>w</sup>e</i>	<i>meħ<sup>w</sup>e-la</i>
bodypart location 'in hands'	<i>k<sup>w</sup>e-Cl</i>	<i>k<sup>w</sup>e</i>	<i>k<sup>w</sup>e-la</i>
locative converb 'where (it) is put'	<i>b-ix-ib-i-ħe-Cl</i>	<i>b-ix-ib-i-ħe</i>	<i>b-ix-ib-i-ħe-la</i>
nominal locative 'on shoulder'	<i>qarč'aj-če-Cl</i>	<i>qarč'aj-če</i>	<i>qarč'aj-če-la</i>

## DECOMPOSITION OF DIRECTIONALITY: SPATIALS AS A PART OF SPEECH

---

- All these items may take directionality marking just as nouns with localization suffixes
- Should we take this as an indication the directionality markers are cross-categorial clitics?

## FAST REWIND: SELECTIVITY

---

Kina Rutul		
	Place/Goal	Source
In	<i>-a</i>	<i>-aʔ</i>
Super	( $\emptyset$ )	<i>-la</i>
Apud	<i>-da</i>	<i>-daʔ</i>
Sub	<i>-xda</i>	<i>-xla / -qla</i>
Inter	<i>-k</i>	<i>-kla</i>

Bagvalal			
	Place	Source	Goal
Super	<i>-la</i>	<i>-la:</i>	<i>-las:</i>
In	<i>-ni</i>		<i>-nis:</i>
Ad	<i>-χ</i>		<i>-χis:</i>
Sub	<i>-L'i</i>		<i>-L'is:</i>
Inter	<i>-ti</i>		<i>-tis:</i>
PersLoc	<i>-ta:</i>		<i>-ta:s:</i>
Cont	<i>-č'</i>		<i>-č'is:</i>

## DECOMPOSITION OF DIRECTIONALITY: SPATIALS AS A PART OF SPEECH

---

- All these items may take directionality marking just as nouns with localization suffixes
- Should we take this as an indication the directionality markers are cross-categorial clitics?
- **No, some of them are selective; inflectional morphology rather than clitics**
- Alternative: these stems all belong to the same morphosyntactic category of spatial words, *spatials* for short
- Localization markers on nouns and locative converb suffixes act as *spatializers* turning nouns and verbs into *spatials*, in much the same way as attributivizers turn verbs (and sometimes other parts of speech) into adnominal attributes - though, in case of nouns, with additional semantic specification

## DECOMPOSITION OF DIRECTIONALITY: SPATIALS AS A PART OF SPEECH

---

Localization markers, as well as locative converb suffixes, act as *spatializers*, in line with the concept of part-of-speech changing inflection (Haspelmath 1996):

Mehweb locatives	Essive	Lative	Erelative
spatial adverb 'up there'	<i>heč'e</i> -Cl	<i>heč'e</i>	<i>heč'e-la</i>
local placename 'in Mehweb'	<i>meħ<sup>w</sup>e</i> -Cl	<i>meħ<sup>w</sup>e</i>	<i>meħ<sup>w</sup>e-la</i>
bodypart location 'in hands'	<i>k<sup>w</sup>e</i> -Cl	<i>k<sup>w</sup>e</i>	<i>k<sup>w</sup>e-la</i>
locative converb 'where (it) is put'	<i>b-ix-ib-i-<b>ħe</b></i> -Cl	<i>b-ix-ib-i-<b>ħe</b></i>	<i>b-ix-ib-i-<b>ħe</b>-la</i>
nominal locative 'on shoulder'	<i>qarč'aj-<b>če</b></i> -Cl	<i>qarč'aj-<b>če</b></i>	<i>qarč'aj-<b>če</b>-la</i>

In this view, adverbs, place names and body parts are *non-derived* spatial, and spatial forms of nouns and verbs are *derived* spatial.

## DECOMPOSITION OF DIRECTIONALITY: SPATIALS AS A PART OF SPEECH

---

- All these items may take directionality marking just as nouns with localization suffixes
- Localization markers on nouns and locative converb suffixes act as *spatializers* turning nouns and verbs into *spatials*, in much the same way as attributivizers turn verbs (and sometimes other parts of speech) into adnominal attributes
- But they are selective, so the directionality is inflection. Also, they are bound.



## DECOMPOSITION OF DIRECTIONALITY: SPATIALS AS A PART OF SPEECH

---

- All these items may take directionality marking just as nouns with localization suffixes
- Localization markers on nouns and locative converb suffixes act as *spatializers* turning nouns and verbs into *spatials*, in much the same way as attributivizers turn verbs (and sometimes other parts of speech) into adnominal attributes
- But they are selective, so the directionality is inflection. Also, they are bound.

*Well, are they bound?*

## DECOMPOSITION OF DIRECTIONALITY: LOCATIVE PHRASES

---

Consider the following example from Archi, Lezgian:

*uqʰa-li*

*i<w>di-li*

1.go.Pfv-Cvb    <1>be.Pfv-Evid

*tu-w*

*gurži-m-ma*

*noL'-a-k*

*jak*

that-1

Georgian-Gen-Loc

house-In-Lat

inside

‘(He) went to the Georgian, to his house.’ (lit. ‘at Georgian’s into his house’) (Kibrik et al. 1977)

## DECOMPOSITION OF DIRECTIONALITY: LOCATIVE PHRASES

---

Or from Godoberi, Andic (Kibrik et al. 1996):

*ʒalík<sup>j</sup>a-di    mak'í il-ú-č'u                    k<sup>w</sup>ádu-ru.    caxa-w-á qam-ú-da*

Alikja-Erg    child    mother-Cont    in.arms-El    away-M    steal.Pst-Cvb-Cop

‘(Hidden under the window), Alikja stole the child **from the mother’s hands.**’ (lit. ‘at the mother from hands’)

## DECOMPOSITION OF DIRECTIONALITY: LOCATIVE PHRASES

---

Or from Hinuq, Tsezic (courtesy Diana Forker):

*hado piru muḥamad ḥažin užin biL'ijo*

this Piru Mohammad Hadzhi-and son-and HPL-go-Prs

*hajli suda-L'o zijaratmo-L'o-r*

there grave-Sup zijarat-Sup-Lat

‘This Piru Mohammad Hadzhi and his son are going to his grave, to the sanctuary.’

## DECOMPOSITION OF DIRECTIONALITY: LOCATIVE PHRASES

---

Or finally and most convincingly, the following example from Dargwa (specifically Icarl Dargwa in Sumbatova and Mutalov 2003:, ex. 676, 123, 582):

ʒa<sup>ʕ</sup>min Ha<sup>ʕ</sup>ʔ, iʃtɹu kɹ<sup>w</sup>i-b kɹ<sup>w</sup>a<sup>ʕ</sup>ʒ

ugh pooh here inside-N smell

‘Ugh, what a bad smell there is in here!’

(Cf. *iʃtɹu* ‘thither’, *iʃtɹu-Cl* ‘there’, *iʃtɹu-r* ‘thence’)

As *iʃtɹu* without class agreement reads as Goal, a naive analysis of *iʃtɹu kɹ<sup>w</sup>i-b* would yield uninterpretable ‘to there inside there is smell’

## DECOMPOSITION OF DIRECTIONALITY: LOCATIVE PHRASES

---

*gurži-m-ma*

*noL'-a-k*

[Georgian-Gen-Loc

house-In]-Lat

---

*hajti*

*suda-L'o*

*zijaratmo-L'o-r*

[there

grave-Sup

zijarat-Sup]-Lat

---

*il-ú-č'u*

*k<sup>w</sup>ádu-ru*

[mother-Cont

in.arms]-El

*ištɿu kɿ<sup>w</sup>i-b*

[here inside]-N

# DECOMPOSITION OF DIRECTIONALITY: LOCATIVE PHRASES

---

Analysis (Mehweb Dargwa):

(a) single AdvP: possible construction

heč'e      bek'a-li-če-r

[up.there hill-Obl-Sup]-NPl(Ess)

'up there on the hill'

heč'e      bek'a-li-če-la

[up.there hill-Obl-Sup]-El

'from up there on the hill'

(b) two AdvPs: also possible

heč'e-r                      bek'a-li-če-r

[up.there]-NPl(Ess) [hill-Obl-Sup]-NPl(Ess)

'up there, on the hill'

heč'e-la      bek'a-li-če-la

[up.there]-El [hill-Obl-Sup]-El

'from up there, from on the hill'

(c) unacceptable

\*bek'a-li-če-r      heč'e

hill-Obl-Sup-NPl    there

#bek'a-li-če-la      heč'e

hill-Obl-Sup-El    there

(acceptable only as 'from the hill to up there')

## FAST REWIND: LOCATIVES AS A PART OF SPEECH

---

In addition to the spatial forms of nouns, East Caucasian languages have a number of other lexical classes that convey spatial semantics, including:

- Spatial adverbs: ‘The sheep went **up there**.’ (Mehweb *heč’e-*)
- Spatial postpositions (often also used as adverbs and sometimes taking the noun in the essive): ‘inside the ditch’ (Tukita *hini-*)

cf. *raqil-i hini* ‘in the ditch’ vs. *raqil-i hini-gi<b>a* ‘from the ditch’  
ditch-In inside [ditch-In inside]-<N>El

- Local place names: ‘He is **in Rutul** at the market.’ (Kina Rutul *mɪ<sup>ʰ</sup>χa-*)
- Bodypart locations: ‘He had a rifle **in (his) hands**.’ (Tukita *kodi-*)
- Locative converbs: ‘**Where** the dog **stopped**, there you should plough!’ (Archi *batʰri o<b>s-di-ma* — dog <4>stand-Pfv-Loc)



## DECOMPOSITION OF DIRECTIONALITY: ANALYSIS

---

What is the syntactic status of the phrase, and what is the morphological status of directionality markers?

- Directionality markers show a certain degree of selectivity (gaps and mergers), involve sandhi, vowel quality - inflection rather than clitics
- But their locus is governed by syntactic rules - on the right periphery of AdvP
- **Edge inflection** (Anderson et al 2006; Spencer & Luis 2012): morphological inflection whose locus is chosen by syntactic rules

## DECOMPOSITION OF DIRECTIONALITY: ANALYSIS

---

However, the effect varies across languages and directionality values. Some examples:

- In Aghul, I was so far unable to detect syntactic rules for directionality markers; in Kina Rutul, more data is needed
- In Andi (Andic), relative marking can be shared across the locative phrase but relative marking cannot
- Generally, relatives do not show selectivity - no arbitrary gaps and less unpredictable realizations

There may be a correlation between “edginess” of the inflection and the degree of boundedness; and, depending on the language, directional meanings may form a less homogeneous category than previously assumed.

## DECOMPOSITION OF DIRECTIONALITY: TAKEAWAY

---

- Localization markers act as **spatializers** - they recategorise nouns as spatial forms (spatials) allowing them to attach directionality affixes
- Spatials include **primary** (spatial adverbs and postpositions, local place names, bodypart locations) and **derived** (locative converbs, spatial forms of nominals) spatial forms
- For some languages, there is evidence that spatial words may combine into adverbial phrases that **take directional inflection as a whole**
- Marking of Source (relative markers) is probably **less bound** (more clitic-like) than marking of Goal (relative markers) - it is unclear how much essive, locative and relative form one category.

## CONCLUSION

---

More research on the degree to which directional markers form one homogeneous category is needed.

# REFERENCES

---

- Alekseev, Mixail, & Boris Ataev. 1997. *Avarskij jazyk* [Avar]. Moscow: Academia.
- Alexandr E. Kibrik (ed.) 1996. *Godoberi*. Munich.
- Anderson, Stephen R., Lea Brown, Alice Gaby, & Jaqueline Lecarme. 2006. Life on the edge: there's morphology there after all! *Lingue e Linguaggio* 5.1. 1–16.
- Authier, Gilles. 2009. *Grammaire kryz*. Leuven-Paris: Peeters.
- Bokarev, Anatolij A. 1949. Očerok grammatiki čamalinskogo jazyka [A sketch of Chamalal]. Moscow-Leningrad: AN SSSR.
- Comrie, Bernard. 1999. Spatial cases in Daghestanian languages. *Sprachtypologie und Universalienforschung* 52. 108-117.
- Comrie, Bernard & Maria Polinsky. 1998. The great Daghestanian case hoax. In Anna Siewierska & Jae Jung Song (eds.). *Case, Typology and Grammar: In Honor of Barry J. Blake*, 95-114. Amsterdam: John Benjamins Publishing Company.
- Creissels, Denis. 2009. Spatial cases. In Andrej Malchukov & Andrew Spencer. *The Oxford handbook of case*, 609-625. Oxford: Oxford University Press.
- Filatov, Konstantin. 2018. *Èssiv i lativ v glagolax pozicii: dannye perevodov Evangelija ot Luki na nekotorye jazyki Dagestana* [Essive and lative with posture verbs. Data from Luke's Gospel translations into some languages of Daghestan]. Term paper. Moscow: HSE.
- Forker, Diana. 2013. *A grammar of Hinuq*. De Gruyter Mouton.
- Haspelmath, Martin. 1993. *A Grammar of Lezghian*. Berlin – New-York: Mouton.
- Haspelmath, Martin. 1996. Word-class changing inflection and morphological theory. In *Yearbook of morphology 1995*, 43-66. Dordrecht: Springer.
- Kibrik, Aleksandr E., Sandro V. Kodzasov, Irina P. Olovjannikova, & Dzhilil S. Samedov. 1977. *Opyt strukturnogo opisanija arčinskogo jazyka* [Structural Grammar of Archi]. Moscow: MGU.
- Kibrik, Aleksandr E. (ed.). 1999. *Èlementy grammatiki caxurskogo jazyka v tipologičeskom osveščennii* [Elements of Tsakhur grammar in a typological perspective]. Moscow.
- Kibrik, Aleksandr E. 1970. K tipologii prostranstvennyx značenij (na materiale padežnyx sistem dagestanskix jazykov) [Towards a typology of spatial meanings: data from case systems of the languages of Daghestan]. In *Jazyk i čelovek. Sbornik statej pamjati professora P.S. Kuznecova* (OSiPL working papers, 4). Moscow: MGU.
- Kibrik, Aleksandr E. 2003. Nominal inflection galore: Daghestanian, with side glances at Europe and the world. In Plank, Frans (ed.) *Noun phrase structure in the languages of Europe*, 37-112. Berlin: Mouton de Gruyter.
- Madieva, Gulžaxan. I. 1981. *Morfologija avarskogo literaturnogo jazyka* [Morphology of Standard Avar]. Maxačkala.
- Magometov, Aleksandr A. 1965. *Tabasaranskij jazyk* [Tabasaran]. Tbilisi: Mecniereba.
- Mutalov, Rasul O. 2017. Padežnaja sistema šarinskogo dialekta darginskogo jazyka [Case system of Shari Dargwa]. *Acta Linguistica Petropolitana*. XIII, 1, 751-773. Saint-Petersburg.
- Nikitina, Tatiana. 2009. Subcategorization pattern and lexical meaning of motion verbs: a study of the source/goal ambiguity. *Linguistics* 47-5. 1113-1141.
- Spencer, Andrew & Ana R. Luis. 2012. *Clitics: an Introduction*. Cambridge: Cambridge University Press.
- Sumbatova, Nina R. & Rasul O. Mutalov. 2003. *A grammar of Icar Dargwa*. Muenchen.
- Testelets, Yakov G. 1980 (2003). *Imennyje lokativnyje formy v dagestanskix jazykax* [Nominal spatial forms in the languages of Daghestan]. Ms.
- Zaika, Natalia M. 2016. The directive/locative alternation in Lithuanian and elsewhere. In Axel Holvoet & Nicole Nau (eds.). *Argument Realization in Baltic*, 333-360. Amsterdam - Philadelphia: John Benjamins Publishing Company.

THAT'S ALL FOR TODAY

---

