FIRST EURASIAN CONGRESS OF LINGUISTS

Institute of Linguistics of the Russian Academy of Sciences
December, 9-13, 2024

Case-Marking Alignment in Kartvelian: An Insight from the BivalTyp Database

Alexander Rostovtsev-Popiel (Mainz University)

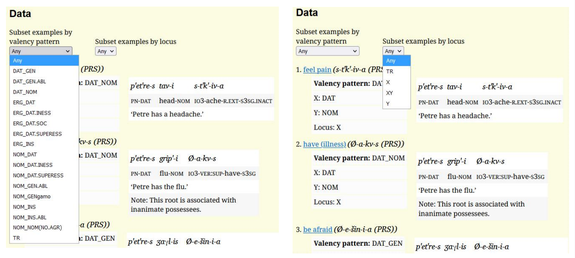
Introduction (1)

This presentation addresses case-marking alignment phenomena in Kartvelian in view of the methodological paradigm of BivalTyp (Say 2020–).
In 2023, all the four modern languages of the Kartvelian family (Georgian, Megrelian, Laz, and Svan; Rostovtsev-Popiel 2023) were processed within the framework of BivalTyp, a typological online database of 130 bivalent verbs and their encoding frames.

Introduction (2)

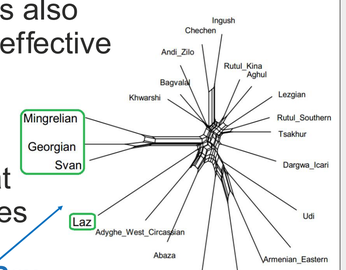
The database features argument encoding patterns of predicates in a convenience sample of (currently) 136 languages. The online version of the database provides an array of interactive tools available for language comparison. These include search of respective valency patterns, as well as the locus of the deviation from the "canonical" transitive model, separately established for each language.

Introduction (3)



Introduction (4)

The database has also proven to be an effective tool for the establishment of diverse visualizations that point at differences and similarities.



Courtesy: Sergey Say.
Neighbornet_Entropy_Based_Caucasus

Preliminary Results (1)

A cursory evaluation of what first met the eye in the case frame typology of Kartvelian was presented in (Rostovtsev-Popiel 2024):

Homogeneity:	Heterogeneity:	Reanalysis:
#26 'X ate an apple'	#3 'X is afraid of the dog'	#100 'X costs Y'
M, L, S:	G: DAT_**GEN**; M: DAT_**ALL**;	L: NOM_is_**DAT**
ERG_NOM	L: DAT_**ABL**; S: DAT_**BEN**	S: NOM_resembles_**NOM**

Preliminary Results (2)

Heterogeneity:

(#3)

Giorgi-s { G *ʒaγl-**is*** / M *ǯoγor-(i)**ša*** / L *ǯoγor-(i)**šen*** / S *žey-**išd*** }
PN-DAT dog-**GEN** dog-**ALL** dog-**ABL** dog-**BEN**
{ G *ešinia* / M *oškʼuru(n)* / L *aškʼurine(n)* / S *xaqʼluːni* }.
is_afraid

'Giorgi is afraid of the dog.'

Preliminary Results (3)

Reanalysis

(L elicited vs. #100; S #6 vs. #100)

L *šuše-Ø* { *did-**Ø*** / *ar lira-**z*** } *(r)en.*
cup-NOM big-**NOM** / one lira-**DAT** { is / costs }
'The cup { is big / costs one lira }.'

S{ *maizer-Ø* / *čʼik-Ø* } { *gegi-**s*** / *ešxu lar-**Ø*** } *xaǯeš.*
{ PN-NOM / cup-NOM } { PN-**DAT** / one lari-**NOM** } { resembles / costs }
'{ Maizer / The cup } { resembles Gegi / costs one lari }.'

This Study

Focus on such domains of linguistic structure as "unanticipated" patterns in case-marking alignment in single languages (#60); language- specific and non-canonical, from what a Kartvelianist would "expect" from a Kartvelian language, wordings (#121); degrade of the "Kartvelian case frame model" (#25); specific patterns of relevant phraseology, detected e.g. in Laz; word-order constraints (i).

Examples

#60 'X surrounds Y'	K (G): **NOM**_around.strikes.STAT_**DAT**	
#121 'X wants Y'	L:	**ERG**_looks.for_NOM
		(instead of **DAT**_NOM)
#25 'X thinks about Y'	L:	**ERG**_thinks_NOM
(*i*) Deviation from SOV:	G: 2; M: 12; S: 2; L: **0** (per 130 stimuli)	

Parameters

The elicited data were processed with respect to the following three parameters:

- Valency pattern (ERG_NOM, NOM_DAT, etc.);
- Locus (TR / X / Y / XY), including "non-transitivity" rates;
- Etymology of the predicates (2-1-1, 1-1-1-1, 3-1, etc.);
- And cross-sections thereof.

"Non-Transitivity" against the Sample

1–2.	Karata, Estonian	75%
3–6.	Kandyk Tabasaran, Mehweb, Kina Rutul, **Georgian**	**74%**
7–10.	Yargun Lezgian, Northern Akhvakh, **Svan**, **Megrelian**	**73%**
33–36.	Lezgian, Turoyo, Kaytag Dargwa, **Laz**	**66%**
47–51.	Guro, Azerbaijani, Kalderash Romani, Kumyk, Russian	58%
65–69.	Tuvan, Erzya, Buriat, Macedonian, Turkish	53%

Locus Deviation on X against the Sample

1.	**Svan**	**23%**
2.	Archi, **Megrelian**	**21%**
4–6.	Mehweb, Khwarshi, **Georgian**	**20%**
22–23.	Yargun Lezgian, **Laz**	**16%**
72–89.	Russian, Turkish...	5%

X Locus in Megrelian and Y Locus in Laz

M *čelo-**s*** *anučia-Ø* *gur-s* *gioxantʼu(n)* #129
PN-**DAT** PN-NOM heart-DAT is_fond
'Chelo is fond of Anuchia.'

L *Käzimi-**k*** *ayne* *tʼelefon-i* *go(r)ums.* #121
PN-**ERG** new telephone-NOM wants
'Käzim wants a new telephone.'

Locus Deviation on Y against the Sample

6–7.	Ismayilli Kryz, Russian	52%
16–21.	Udmurt, Ossetic, Czech, Ukrainian, Lithuanian, **Georgian**	**49%**
27–28.	Modern Hebrew, **Megrelian**	**47%**
45–59.	Uzbek, Mehweb, Shinaz and Southern Rutul, **Svan**	**44%**
50–57.	Abaza, Lezgian, Buriat, Bulgarian, Kina Rutul, Mukhad Rutul, Kalderash Romani, **Laz**	**43%**

Y Locus in Svan

#13 *maizer-d* *gegi-**s*** *žaxcʼinda.*
PN-ERG PN-**DAT** beat
'Maizer beat Gegi.'

#48 *maizer-Ø* *axne mankana-**s*** *iwdi.*
PN-NOM new car-**DAT** dreams
'Maizer dreams of a new car.'

Valency Pattern vs. Dominant Locus in Kartvelian (1)

Core (out of 17 patterns identified)

VP: 4–0	DL: TR	24	(18%)	*throw*, *take*, *bend*…
VP: 3–1	DL: Y	23	(18%)	*touch*, *catch up*, *follow*…
VP: 2–1–1	DL: Y	18	(14%)	*see*, *listen*, *trust*…
VP: 3–1	DL: X	14	(10%)	*forget*, *forfeit*, *miss*…

Valency Pattern vs. Dominant Locus in Kartvelian (2)

Periphery (out of 17 patterns identified)

VP: 2–1–1	DL: TR	1	(1%)	*respect*
VP: 1–1–1–1	DL: TR	1	(1%)	*cross*
VP: 2–1–0	DL: Y	1	(1%)	*punish*
VP: 1–1–1–1	DL: XY	1	(1%)	*be afraid*

Dominant Locus vs. Etymology in Kartvelian (1)

Core (out of 15 patterns identified)

DL: Y	E: 1–1–1–1	37	(28%)	*see*, *wait*, *dream*…
DL: Y	E: 2–1–1	19	(15%)	*win*, *fight*, *call*...
DL: TR	E: 2–1–1	18	(14%)	*take*, *milk*, *fry*…
DL: X	E: 2–1–1	17	(13%)	*need*, *hear*, *want*…

Dominant Locus vs. Etymology in Kartvelian (2)

Periphery (out of 15 patterns identified)

DL: XY	E: 2–1–1	1	(1%)	*be shy*
DL: XY	E: 1–1–1–1	1	(1%)	*envy*
DL: X	E: 2–1–1	1	(1%)	*feel pain*
DL: Y	E: 2–1–1	1	(1%)	*trust*

Valency Pattern vs. Etymology in Kartvelian (1)

Core (out of 18 patterns identified)

VP: 3–1	E: 2–1–1	24	(18%)	*lose*, *obey*, *cost*…
VP: 4–0	E: 2–1–1	20	(15%)	*tell*, *wave*, *plough*…
VP: 2–1–1	E: 1–1–1–1	16	(12%)	*see*, *flatter*, *agree*…
VP: 4–0	E: 1–1–1–1	13	(10%)	*throw*, *hold*, *bite*…

Valency Pattern vs. Etymology in Kartvelian (2)

Periphery (out of 18 patterns identified)

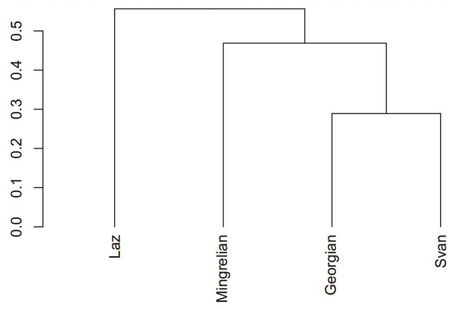
VP: 2–1–1	E: 2–2	1	(1%)	*be shy*
VP: 2–1–1	E: 4–0	1	(1%)	*trust*
VP: 2–1–1	E: 3–1	1	(1%)	*fall in love*
VP: 1–1–1–1	E: 1–1–1–1	1	(1%)	*be afraid*

Valency Pattern vs. Dominant Locus vs. Etymology in Kartvelian

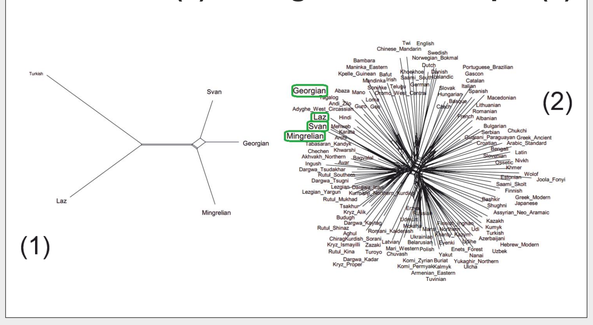
Quasi-Core (out of 37 patterns identified)

VP: 2–1–1	DL: Y	E: 1–1–1–1	13	(10%)	*agree*…
VP: 3–1	DL: Y	E: 1–1–1–1	11	(8%)	*kiss*…
VP: 4–0	DL: TR	E: 2–1–1	11	(8%)	*find*…
VP: 3–1	DL: X	E: 2–1–1	10	(8%)	*want*…

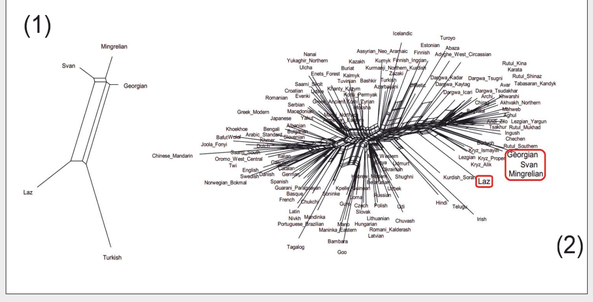
Hierarchical Clusters Based on Direct Pattern Equation



Neighbornet Entropy in Kartvelian vs. Turkish (1) and against the Sample (2)



Neighbornet Locus in Kartvelian vs. Turkish (1) and against the Sample (2)



Conclusions (1)

(1)Viewed against the background of the whole BivalTyp sample, Kartvelian demonstrates an unexpectedly large number of deviations from the "canonical" valency pattern. While e.g. Western European languages usually feature Y locus deviations, Kartvelian clearly features X and XY deviations as well.

Conclusions (2)

(2)Georgian, Megrelian, and Svan demonstrate a high degree of "non-transitivity" rates throughout the BivalTyp questionnaire, whereby Laz clearly inclines toward transitive treatment of the contexts examined.

(3)Svan and Megrelian also top the list of X Locus deviation in BivalTyp with the rates of over 20%.

Conclusions (3)

(4)In terms of Kartvelian lexicon, Laz proves to have retained the fewest number of "canonical" wordings (thus e.g. employing guri 'heart' in six collocates; and listen in place of agree, obey, and respect).

(5)Examples of the reanalysis in Laz and Svan demonstrate that a change of valency pattern can affect the lexical semantics of the verb in a given instance.

Abbreviations

ABL – ablative; ALL – allative; BEN – benefactive; DAT – dative; DL – dominant locus; E – etymology; ERG – ergative; G – Georgian; K – Kartvelian; L – Laz; L – locus; M – Megrelian; NOM – nominative; PN – person name; S – Svan; SOV – subject-object-verb; STAT – stative; TR – transitive; VP – valency pattern; X – first argument; Y – second argument.

References

Rostovtsev-Popiel, Alexander. 2023. Bivalent Patterns in Georgian / Mingrelian / Laz / Svan, in: Say, Sergey (Ed.). BivalTyp: Typological Database of Bivalent Verbs and Their Encoding Frames (URL: https://www.bivaltyp.info/languages/listview/); Rostovtsev-Popiel, Alexander. 2024. Odnorodnost', raznorodnost' i pereosmyslenie: pervye zamečanija po obrabotke kartvel'skogo materiala v baze BivalTyp [Homogeneity, Heterogeneity, and Reanalysis: First Remarks on the Processing of Kartvelian Data for the Database BivalTyp]. *Izvestiâ Rossijskoj Akademii Nauk* 2: 64–71; Say, Sergey (Ed.). 2018. *Valentnostnye klassy dvuxmestnyx predikatov v raznostrukturnyx jazykax* [Bivalent Valency Classes in Structurally Diverse Languages]. St. Petersburg: ILS RAN; Say, Sergey (Ed.). 2020–. BivalTyp: Typological Database of Bivalent Verbs and Their Encoding Frames (URL: https://www.bivaltyp.info/).