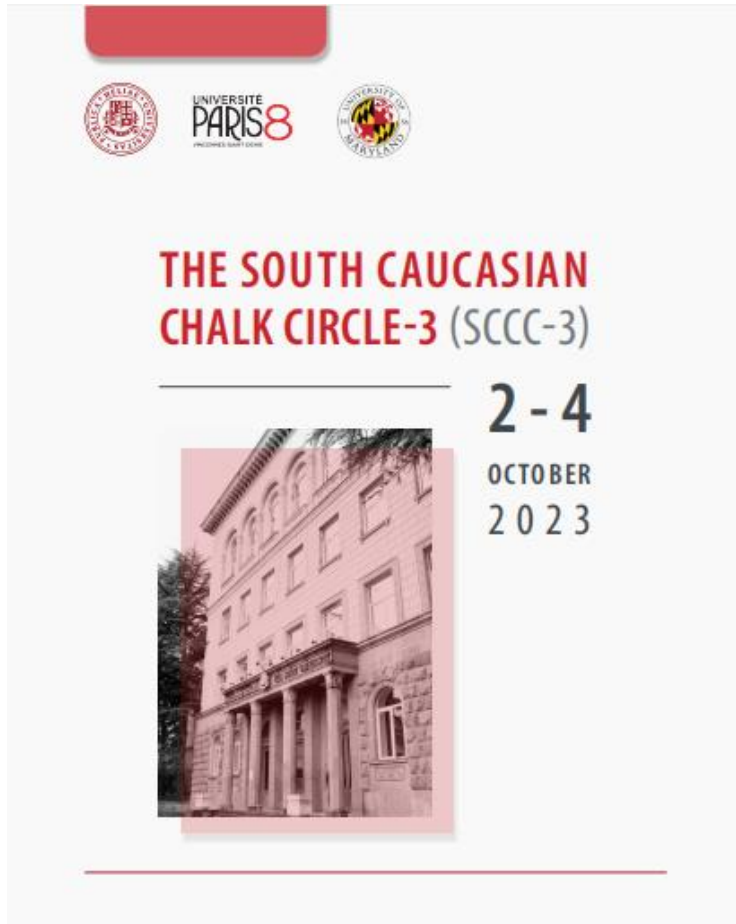


SVAN DIALECTOMETRY: APPLYING *GABMAP* TO SVAN PHONOLOGY AND INFLECTIONAL MORPHOLOGY

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Overview

- Introduction: fieldwork, database and method
- Results
 - Phonological results
 - Morphonological results
 - Multidimensional scaling analyses
 - *Shibboleths*
- Conclusion: An alternative classification of Svan dialects
 - Convergences with the traditional taxonomy
 - Divergences from the traditional taxonomy



Introduction: Svan dialects

- Traditionally, four Svan dialects are distinguished: *Upper Bal*, *Lower Bal*, *Lent'exi*, and *Lashx*.
- Ak'ak'i Shanidze (1925) proposed three morphophonological parameters for classifying Svan dialects:

Dialect	Vowel length	Umlaut	Reduction
Upper Bal	+	+	+
Lower Bal	-	+	+
Lent'ex	-	+	-
Lashx	+	-	+

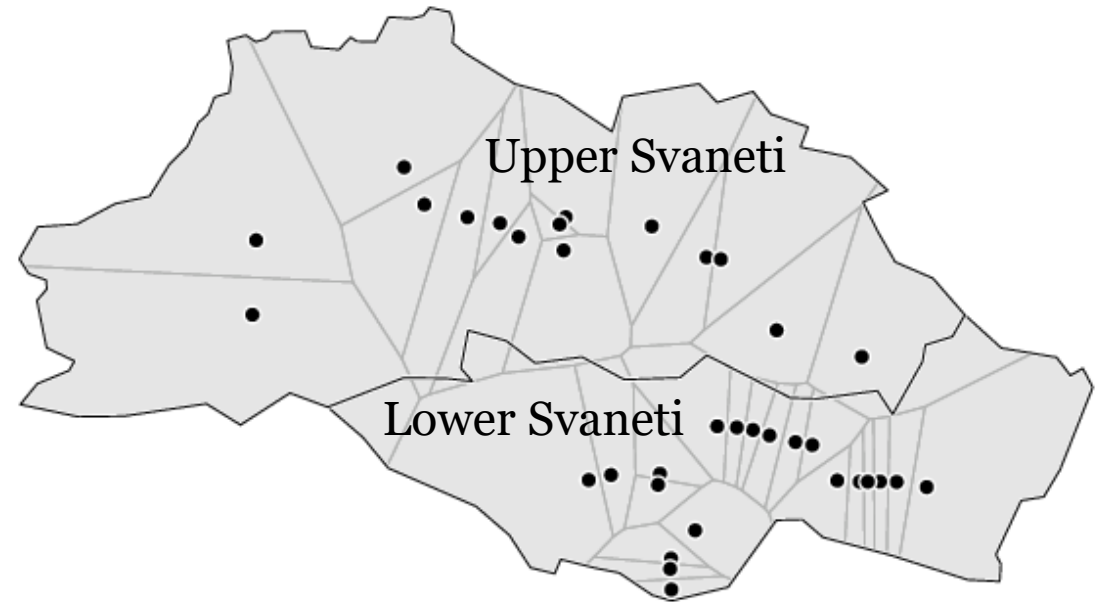
Source: Shanidze (1925/1981, as cited in Tuite 2023, modified)

Introduction: Svan dialects

- Some specialists suggest the existence of a fifth Svan dialect, *Cholur*, spoken in the villages of Choluri in Lower Svaneti (see Lip'art'eliani 1994; also refer to Chant'ladze 2018).
- However, Varlam T'op'uria (2008: 14) views the dialectal varieties of Choluri as a sub-dialect of Lashx.

Fieldwork and Micro-database

- 20 April – 21 June 2022: dialectometric surveys in Mest'ia and Ushguli, Upper Svaneti
- 21 November 2022 – 27 January 2023: dialectometric surveys in 29 villages in Upper and Lower Svaneti



Fieldwork and Micro-database

- We collected dialectometric data from 15 localities in Upper Svaneti and 20 localities in Lower Svaneti.

Regions	Villages and settlements
Upper Svaneti: 15 localities	უმგული [USHG], კალა [KALA], იფარი [IPAR], წვირმი [CVRM], მესტია [MESTIA], ლატალი [LATAL];
	უმხვანარი [BECHO.U], ცხეკვანი [BECHO.C], ცხუმარი [CXMR], ეცერი [ECER], ფარი [PARI], ნოდაში [NDSH], ნაკრა [NAKR], ჭუბერი [CHBR], ხაიში [XAISH];
Lower Svaneti: 20 localities	ღობი [GHOB], მელე [MELE], ჩიხარეში [CHXRSH], ლემზაგორი [LMZGR], ჟახუნდერი [ZHXDR], სასაში [SASA];
	ჭველფი [CHVLP], ფანაგა [PANAG], ლეუშერი [LSHR], თეკალი [TEKL], ჭველიერი [CHLR], საყდარი [SAQDR];
	ბაბილი [BABIL], ყარიში [QARSH], წანაში [CANASH], ხელედი [XELED], გვიმბრალა [GVIMB], ყვედრეში [QVEDR], რცხმელური [RCXML]

Fieldwork and Micro-database

- The dialectometric data collected can be divided into two groups:
 - **Phonological Database:**
 - Total items: 57
 - Localities covered: 35
 - Total instances: 1840
 - **Morphological Database:**
 - Inflected forms/paradigms: 30
 - Verbs studied, among which:
 - ახტაჲო (paints)
 - ხსირა (is written)
 - ხალაგ (loves)
 - Localities covered: 19
 - Total instances: 549

A sample of the (phonological) database
(further converted into Unicode Text File, for data processing)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1		trois	heure	sucre	année	avalanche	cent	loin	ne pas pouvoi	baptiser	dent	oreille	jour	femme	homme
2	MESTIA	semi	săt	šakär	zäy	žäh	ašir	žwēdias	deš	prisd	šdik	šdim	ladäy	zuräl	märe
3	USHG	sēmi	săt	šakär	zä	žäh	ašir	žwēdias	deš	prisd	šdik	šdim	ladey	zuräl	märe
4	LATAL	semi	săt	šakär	zäy	žäh	ašir	žēdias	deš	prisd	šdik	šdim	ladäy	zuräl	märe
5	KALA	semi	săt	šakär	zäy	žäh	ašir	žwēdias	deš	prisd	šdik	šdim	ladäy	zuräl	märe
6	IPAR	semi	săt	šakär	zäy	žäh	ašir	žwēdias		prisd	šdik	šdim	ladey	zuräl	märe
7	CVRM	semi	săt	šakär	zäy	žäh	ašir	žwēdias	deš	prisd	šdik	šdim	ladäy	zuräl	märe
8	BECHO.U	semi	săt	šakär	zäy	žäx	ašir	žodias		prist	šdik	šdim	ladey	zural	mare
9	BECHO.C	semi	săt	šakär	zäy	žäh	ašir	žodias	deš	prisd	šdik	šdim	ladey	zural	mare
10	ECER	semi	saät	šakär	zä	žäh	ašir	žodias	deš	prist	šdik	šdim	ladey	zural	mare
11	PARI	semi	sayät	šakär	zä	žäh	ašir	žwedias	deš	prisd	šdik	šdim	ladey	zural	mare
12	NAKR	semi	săt	šakär	zä	žäh	ašir	žwedias	deš	prist	šdik	šdim	ladey	zural	mare
13	NDSH	semi	săt	šakär	zä	žäh	ašir	žodias	deš	prisd	šdik	šdim	ladey	zural	mare
14	CXMR	semi	săt	šakär	zä	žäh	ašir	žodias	deš	prist	šdik	šdim	ladäy	zural	mare
15	CHBR	semi	sayät	šakär	zä	žäh	ašir	žwedias	deš	prisd	šdik	šdim	ladey	zural	mare
16	XAISH	semi	sayät	šakär	zä	žäh	ašir	žedias	deš	prisd	šdik	šdim	ladey	zural	mare
17	MELE	sēmi	săt	šakar	zay	žay	ašir	žōdias	deš	prisd	šdik	štim	ladey	zuräl	märe
18	GHOB	semi	săt	šakar	zay	žay	ašir	žōdiaš	deš	prisd	šdik	štim	ladey	zuräl	märe
19	CHXRSH	semi	săt	šakar	zay	žay	ašir	žōdias	deš	prisd	šdik	štim	ladey	zuräl	märe
20	LMZGR	semi	săt	šakar	zay	žay	ašir	žōdias		prisd	šdik	štim	ladey	zuräl	märe
21	ZHXDR	semi	săt	šakar	zay	žay	ašir	žōdias	deš	prisd	šdik	štim	ladey	zuräl	märe
22	SASA	semi	săt	šakar	zay	žay	ašir	žōdias	deš	prisd	šdik	štim	ladey	zuräl	märe
23	PANAG	sēmi	săt	šakar	zay	žay	ašir	žodias	deš	prisd	štik	štim	ladey	zuräl	märe
24	LSHR	sēmi	săt	šakar	zay	žay	ašir	žodias	deš	prisd	štik	štim	ladey	zuräl	märe
25	CHVLP	semi	săt	šakar	zay	žay	ašir	žodias	deš	prisd	štik	štim	ladey	zuräl	märe
26	TEKL	sēmi	săt	šakar	zay	žay	ašir	žōdias	deš	prist	štik	štim	ladey	zuräl	märe
27	CHLR	sēmi	săt	šakyar	zay	žay	ašir	--	deš	prisd	štik	štim	ladey	zuräl	märe

A glimpse at a distance matrix: phonology

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1		MESTIA	USHG	LATAL	KALA	IPAR	CVRM	BECHO.U	BECHO.C	ECER	PARI	NAKR	NDSH	CXMR	CHBR	XAISH	MELE	GHOB	CHXRSH	LMZGR	ZHXDR	SASA	PANAG
2	MESTIA	0	0.030586	0.0228747	0.016965	0.0171469	0.0105715	0.0528638	0.0464878	0.0669918	0.056335	0.0552058	0.0539515	0.0492022	0.0575025	0.0640938	0.06956	0.0672495	0.069413	0.0707689	0.0724512	0.0707175	0.0618785
3	USHG	0.030586	0	0.0356016	0.0328778	0.0224551	0.0269903	0.0619447	0.0531694	0.0619368	0.0523445	0.0468983	0.0466259	0.0489325	0.0561964	0.0634665	0.0691107	0.0719015	0.0714784	0.0715457	0.0743951	0.0726913	0.0608923
4	LATAL	0.0228747	0.0356016	0	0.035194	0.0239907	0.0210431	0.0507486	0.0484435	0.0587158	0.051316	0.0434969	0.0447545	0.0484793	0.0478303	0.0543717	0.057294	0.0554102	0.0534887	0.0591404	0.0576412	0.0565499	0.055515
5	KALA	0.016965	0.0328778	0.035194	0	0.0188244	0.0128757	0.06748	0.0540854	0.0759826	0.0673929	0.0616872	0.060105	0.0585522	0.0706981	0.075892	0.0718489	0.0699054	0.0716541	0.0730578	0.0746923	0.0733902	0.0641673
6	IPAR	0.0171469	0.0224551	0.0239907	0.0188244	0	0.0121234	0.0552839	0.0467458	0.0565052	0.0479058	0.050042	0.0474497	0.0544136	0.0519357	0.062111	0.0579264	0.0560234	0.0575261	0.0565433	0.0596354	0.0605261	0.056762
7	CVRM	0.0105715	0.0269903	0.0210431	0.0128757	0.0121234	0	0.0520267	0.0397364	0.0583154	0.0482665	0.0516797	0.0487423	0.047494	0.0541552	0.061464	0.0611599	0.0592164	0.0606194	0.0609504	0.0628372	0.0636806	0.0544475
8	BECHO.U	0.0528638	0.0619447	0.0507486	0.06748	0.0552839	0.0520267	0	0.0133729	0.0295866	0.0367449	0.0334604	0.0295176	0.0233064	0.037814	0.0399672	0.0666799	0.0681289	0.0679477	0.0685653	0.071118	0.0693389	0.064533
9	BECHO.C	0.0464878	0.0531694	0.0484435	0.0540854	0.0467458	0.0397364	0.0133729	0	0.0210937	0.0270575	0.0317559	0.0161448	0.0139775	0.0283141	0.0344995	0.0702738	0.0720468	0.0728028	0.0710878	0.075841	0.07315	0.0684662
10	ECER	0.0669918	0.0619368	0.0587158	0.0759826	0.0565052	0.0583154	0.0295866	0.0210937	0	0.01926	0.0246172	0.01513	0.0162037	0.0201544	0.0181711	0.078718	0.0781765	0.076027	0.0743806	0.0790652	0.079152	0.0828279
11	PARI	0.056335	0.0523445	0.051316	0.0673929	0.0479058	0.0482665	0.0367449	0.0270575	0.01926	0	0.0243014	0.024717	0.0292427	0.0115517	0.0223777	0.0814752	0.0785432	0.0770868	0.0771034	0.0818298	0.0802118	0.0847968
12	NAKR	0.0552058	0.0468983	0.0434969	0.0616872	0.050042	0.0516797	0.0334604	0.0317559	0.0246172	0.0243014	0	0.0147131	0.0144128	0.0269492	0.0289644	0.0750289	0.0757873	0.0763599	0.0763452	0.0809889	0.0774994	0.0801904
13	NDSH	0.0539515	0.0466259	0.0447545	0.060105	0.0474497	0.0487423	0.0295176	0.0161448	0.01513	0.024717	0.0147131	0	0.0072948	0.0203763	0.0210037	0.0686182	0.0674407	0.0672596	0.0653451	0.0704298	0.0686654	0.0726864
14	CXMR	0.0492022	0.0489325	0.0484793	0.0585522	0.0544136	0.047494	0.0233064	0.0139775	0.0162037	0.0292427	0.0144128	0.0072948	0	0.0246317	0.0256257	0.0717302	0.0705777	0.0703226	0.0700452	0.0749217	0.070248	0.0685928
15	CHBR	0.0575025	0.0561964	0.0478303	0.0706981	0.0519357	0.0541552	0.037814	0.0283141	0.0201544	0.0115517	0.0269492	0.0203763	0.0246317	0	0.013896	0.0778807	0.0791878	0.0807432	0.0830655	0.0837814	0.0824793	0.0845004
16	XAISH	0.0640938	0.0634665	0.0543717	0.075892	0.062111	0.061464	0.0399672	0.0344995	0.0181711	0.0223777	0.0289644	0.0210037	0.0256257	0.013896	0	0.0771092	0.0750259	0.0757505	0.0780652	0.0789208	0.0769757	0.082033
17	MELE	0.06956	0.0691107	0.057294	0.0718489	0.0579264	0.0611599	0.0666799	0.0702738	0.078718	0.0814752	0.0750289	0.0686182	0.0717302	0.0778807	0.0771092	0	0.0036057	0.0024371	0.0066360	0.0052884	0.0028044	0.0191471
18	GHOB	0.0672495	0.0719015	0.0554102	0.0699054	0.0560234	0.0592164	0.0681289	0.0720468	0.0781765	0.0785432	0.0757873	0.0674407	0.0705777	0.0791878	0.0750259	0.0036057	0	0.0036163	0.0054341	0.0064903	0.0039308	0.0243555
19	CHXRSH	0.069413	0.0714784	0.0534887	0.0716541	0.0575261	0.0606194	0.0679477	0.0728028	0.076027	0.0770868	0.0763599	0.0672596	0.0703226	0.0807432	0.0757505	0.0024371	0.0036163	0	0.0040737	0.0027515	0.0027777	0.0231448
20	LMZGR	0.0707689	0.0715457	0.0591404	0.0730578	0.0565433	0.0609504	0.0685653	0.0710878	0.0743806	0.0771034	0.0763452	0.0653451	0.0700452	0.0830655	0.0780652	0.0066360	0.0054341	0.0040737	0	0.0069565	0.0070367	0.0260073
21	ZHXDR	0.0724512	0.0743951	0.0576412	0.0746923	0.0596354	0.0628372	0.071118	0.075841	0.0790652	0.0818298	0.0809889	0.0704298	0.0749217	0.0837814	0.0789208	0.0052884	0.0064903	0.0027515	0.0069565	0	0.0024839	0.0268394
22	SASA	0.0707175	0.0726913	0.0565499	0.0733902	0.0605261	0.0636806	0.0693389	0.07315	0.079152	0.0802118	0.0774994	0.0686654	0.070248	0.0824793	0.0769757	0.0028044	0.0039308	0.0027777	0.0070367	0.0024839	0	0.0238959
23	PANAG	0.0618785	0.0608923	0.055515	0.0641673	0.056762	0.0544475	0.064533	0.0684662	0.0828279	0.0847968	0.0801904	0.0726864	0.0685928	0.0845004	0.082033	0.0191471	0.0243555	0.0231448	0.0260073	0.0268394	0.0238959	0
24	LSHR	0.0664997	0.0663827	0.0575206	0.0688713	0.0547159	0.062796	0.0673837	0.0676489	0.0766293	0.0803885	0.0756777	0.0686811	0.0739895	0.0819677	0.0839153	0.0203134	0.0256239	0.0248106	0.0241087	0.0281566	0.0256239	0.0112716
25	CHVLP	0.0609159	0.0702338	0.0549231	0.0611195	0.0562085	0.053833	0.0755647	0.0734484	0.0886399	0.0839228	0.0850763	0.077898	0.0791552	0.08362	0.0872446	0.0162546	0.0187465	0.0180783	0.0232493	0.0216467	0.0183928	0.017071
26	TEKL	0.059821	0.0647898	0.0609894	0.0648709	0.054169	0.0551487	0.0617021	0.0666824	0.0765783	0.0835453	0.0793942	0.0758646	0.0696338	0.084914	0.0879053	0.0268194	0.0274802	0.0310295	0.0304715	0.0343666	0.0313382	0.0146252
27	CHLR	0.0607876	0.0652168	0.0532801	0.0650273	0.0598294	0.055378	0.0774887	0.0753306	0.0962157	0.0862784	0.0883872	0.0914622	0.0870763	0.0878513	0.0994861	0.0365851	0.0411876	0.0400658	0.0462197	0.0445851	0.0396243	0.0204301
28	SAQDR	0.062136	0.0644276	0.0650073	0.0609199	0.0579193	0.0535208	0.0747224	0.0676294	0.0878179	0.0850696	0.0917671	0.0834451	0.0838353	0.0898314	0.100589	0.0417603	0.0469687	0.0459252	0.0480467	0.0496129	0.0469687	0.0256336
29	XELED	0.0674996	0.0640196	0.0631528	0.0702849	0.0723465	0.0628658	0.0506978	0.0505864	0.054594	0.0572163	0.0547657	0.0511308	0.0497229	0.0588998	0.0638966	0.0874012	0.0910766	0.0878678	0.0894809	0.090776	0.087461	0.0676617
30	CANASH	0.0724118	0.0658779	0.0685467	0.0718339	0.0748266	0.0649952	0.0490054	0.0487613	0.0551339	0.0560602	0.0532597	0.0483502	0.0479703	0.0587627	0.0659827	0.0904193	0.0932769	0.0925266	0.0940995	0.0938603	0.089137	0.0748246
31	BABIL	0.0684182	0.0660342	0.063927	0.0717609	0.0748173	0.0647719	0.0478528	0.0543621	0.0616496	0.0626421	0.0578699	0.0529539	0.0525657	0.0594898	0.0658762	0.0860007	0.0857033	0.088236	0.090177	0.0895105	0.0861118	0.0676514
32	NANAR	0.0669928	0.0600999	0.0625668	0.0712773	0.0727851	0.0629102	0.0460412	0.0514324	0.0585648	0.0594687	0.0549282	0.0500542	0.0496742	0.056451	0.0626325	0.084515	0.0866557	0.0867358	0.0898349	0.087956	0.0846525	0.0665471

Levenshtein Distance and Gabmap

- Levenshtein's algorithm computes linguistic distance between two strings on the basis of three operations: **addition**, **deletion**, and **substitution** (Brun-Trigaud et Le Dû, 2016: 135)
- Here, item 'herd'

AL	AM	AN
cinq	troupeau	hache
oxwišd	žweg	ķāda
oxwišd	žweg	ķāda
woxwišd	žeg	
oxwišd	žweg	ķāda
oxwišd	žeg	ķāda
oxwišd	žweg	ķāda
woxušd	žweg	ķada
oxušd	žweg	ķada
oxušd	žeg	
oxušd	žeg	
oxušd	žeg	ķahda
oxušd	žeg	
oxušd	žweg	
woxušd	žeg	ķahda
woxušd	žeg	
woxušd	žog	
woxušd	žog	ķāde
woxušd	žog	ķāde
oxušd	žog	ķāde
woxušd	žog	ķāde
woxušd	žog	ķāde
woxušd	žog	ķāde
woxwišt	žweg	ķāda
oxwišt	žog	ķāda
woxwišt	žog	ķāda
oxwišt	žweg	ķāda
woxwišt	žweg	ķāda

a)					b)					c)				
SAQDR — USHG					SAQDR — LATAL					LATAL — MELE				
ž	w	e	g		ž	w	e	g		ž	e	g		
ž	w	e	g		ž		e	g		ž	o	g		
				0		1			1		1		1	

Levenshtein Distance and *Gabmap*

- Gabmap (<https://gabmap.let.rug.nl/>) is an online application that offers multiple functions for processing and visualizing dialectometric data.

Gabmap

Doing dialect analysis on the web



Home

This is Gabmap

Gabmap is a web application that visualizes dialect variations. It's made for dialectologists and students.

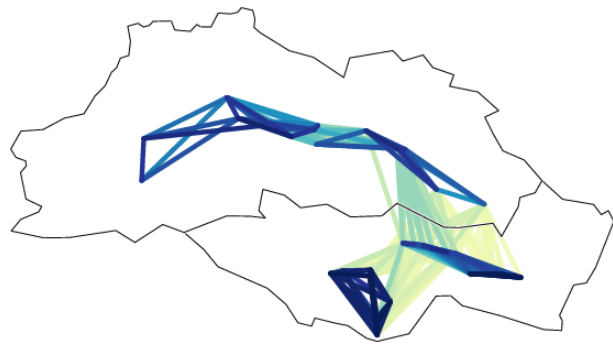
start application

try the demo

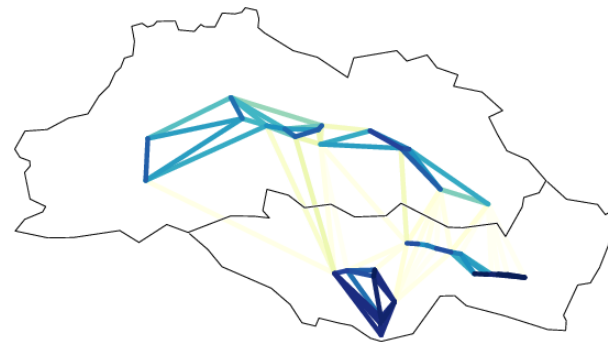
John Nerbonne, Rinke Colen, Charlotte Gooskens, Peter Kleiweg, and Therese Leinonen (2011)

Phonological results

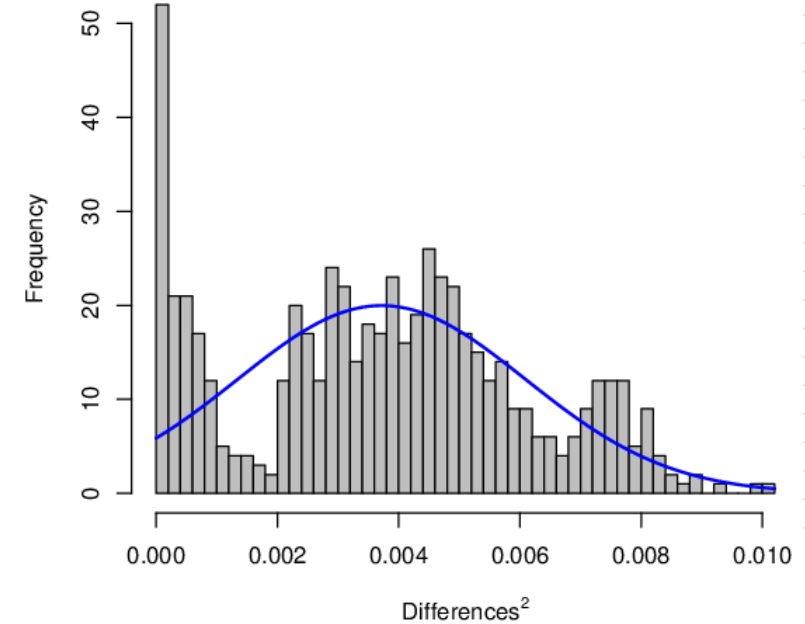
- Despite some asymmetry, the data distribution is close to a Gaussian curve. Cronbach's alpha index is also encouraging (> 0.7).



Linked/associated networks



Kernel networks



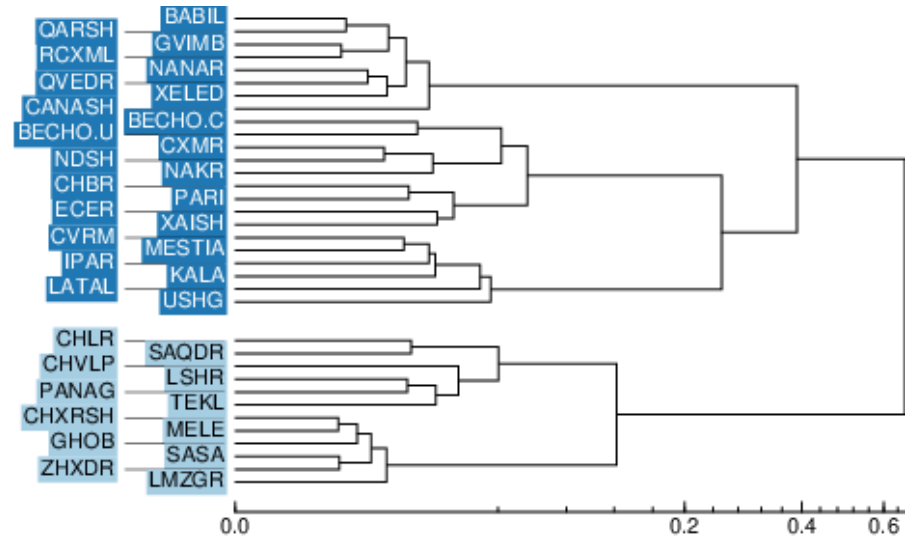
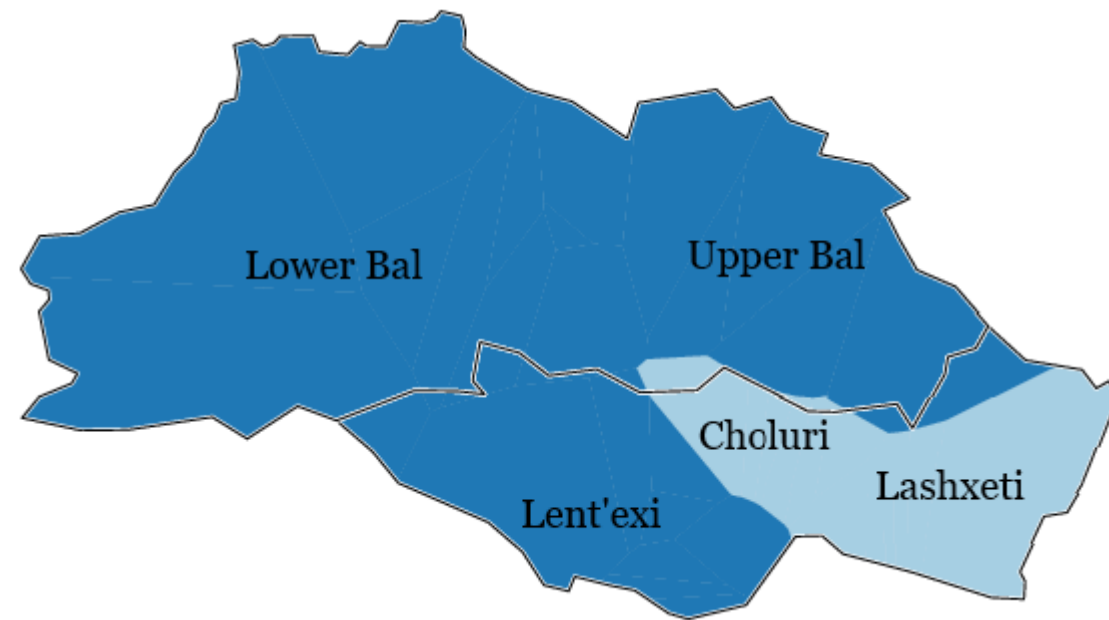
AH	AI
pont	quatre
bog	wōštxw
bog	ōštxw
bog	wōštxw
bog	ōštxw
bog	ōštxw
bog	ōštxw
bog	woštxw
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bog	woštxw
bog	wōštxw
bog	wōštxw

Method: String Edit Distance — Tokenized
Local incoherence: 0.47
Cronbach's alpha: 0.91

Phonological results

Ward's Method, 2 clusters

- Let's begin by examining the Ward's Method algorithm, which frequently yields results that align with the isoglottic approach.
- Instead of a simple dichotomy Upper Svaneti/Lower Svaneti when looking at the 2-cluster configuration, we observe an asymmetrical bipartition of the Svan dialect network. A minor southeastern area (comprising the Lashx and Cholur varieties) stands in contrast to the remainder of Svan dialect network.

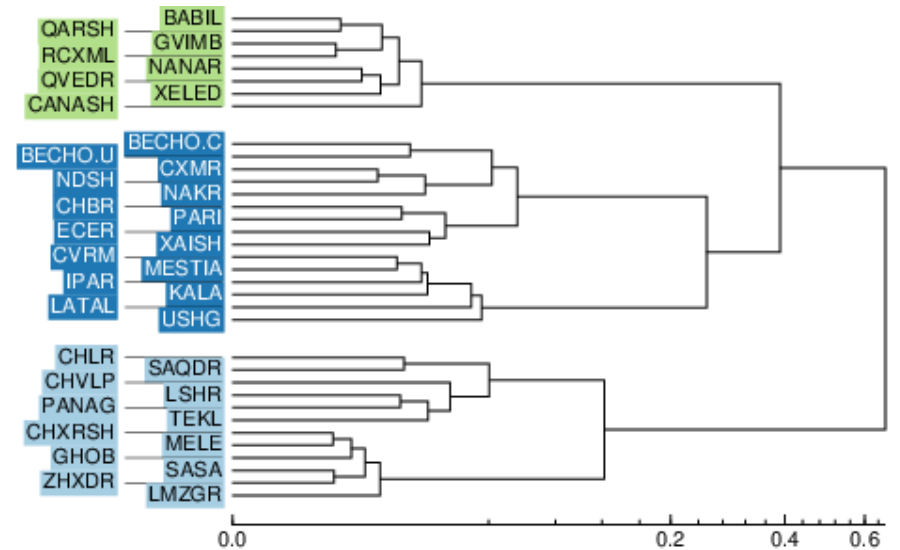
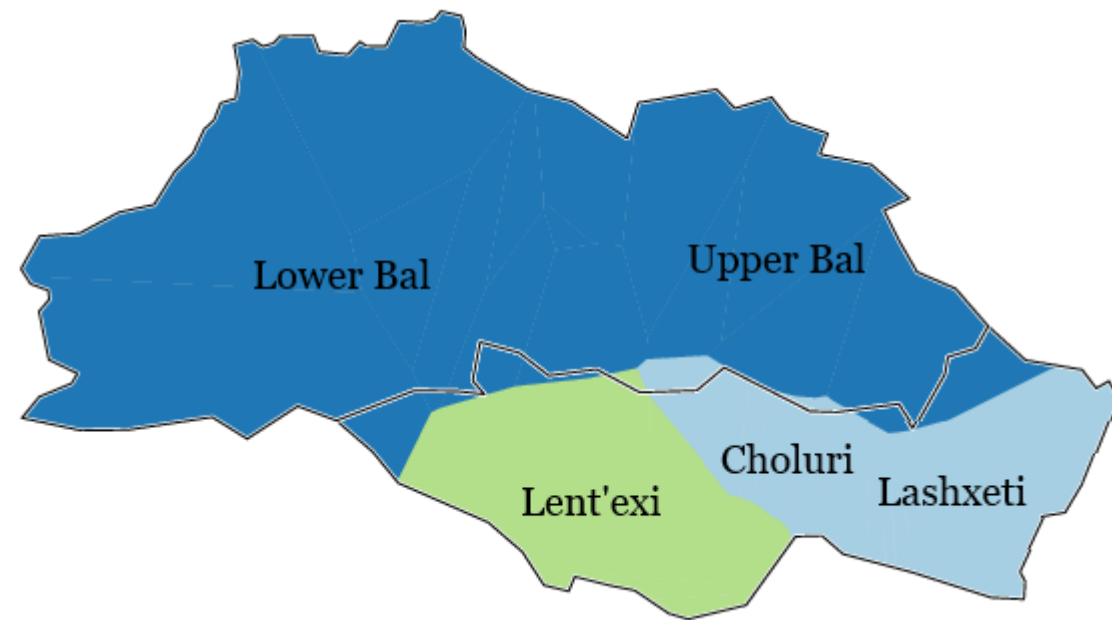


Phonological results

Ward's Method, 3 clusters

- In a 3-cluster configuration, the Lent'exi varieties in the SW differentiate themselves from the major area in the North.

Meanwhile, the network of Upper Svaneti varieties stands as a cohesive group.

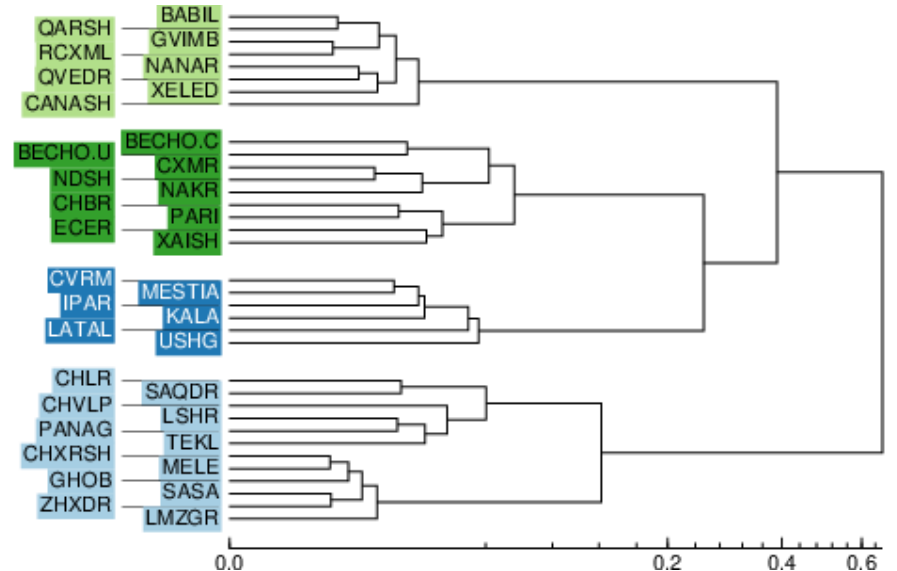
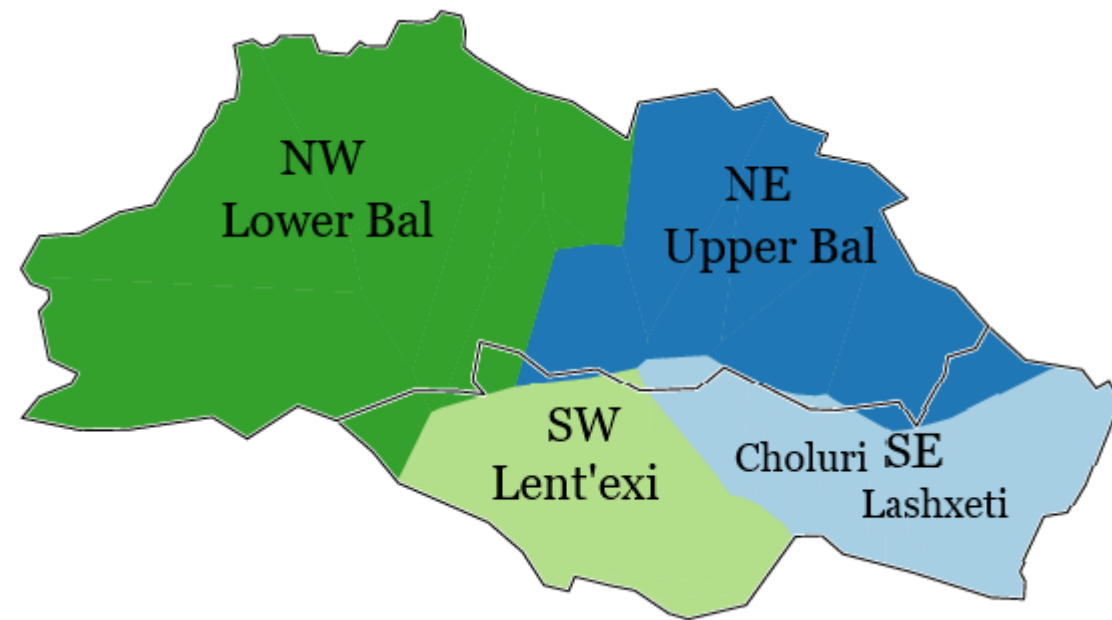


Phonological results

Ward's Method, 4 clusters

- At four-cluster level, we observe the well-known fourfold dialect pattern, consistent with the traditional taxonomy of Svan dialects.
- Upper Svaneti is divided into two areas and a four-*modality* model emerges:
 - NW - Lower Bal
 - NE - Upper Bal
 - SW - Lent'exi
 - SE - Lashxeti + Choluri

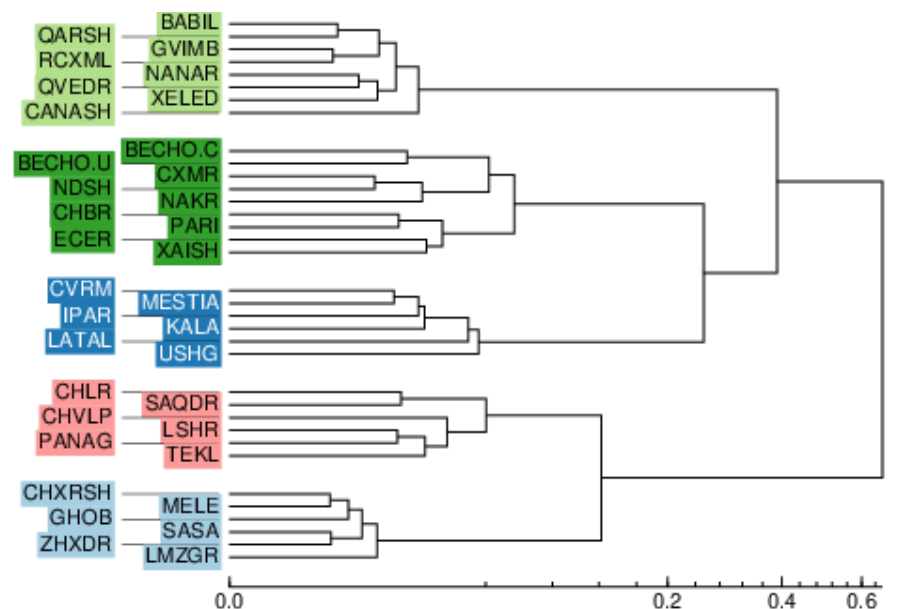
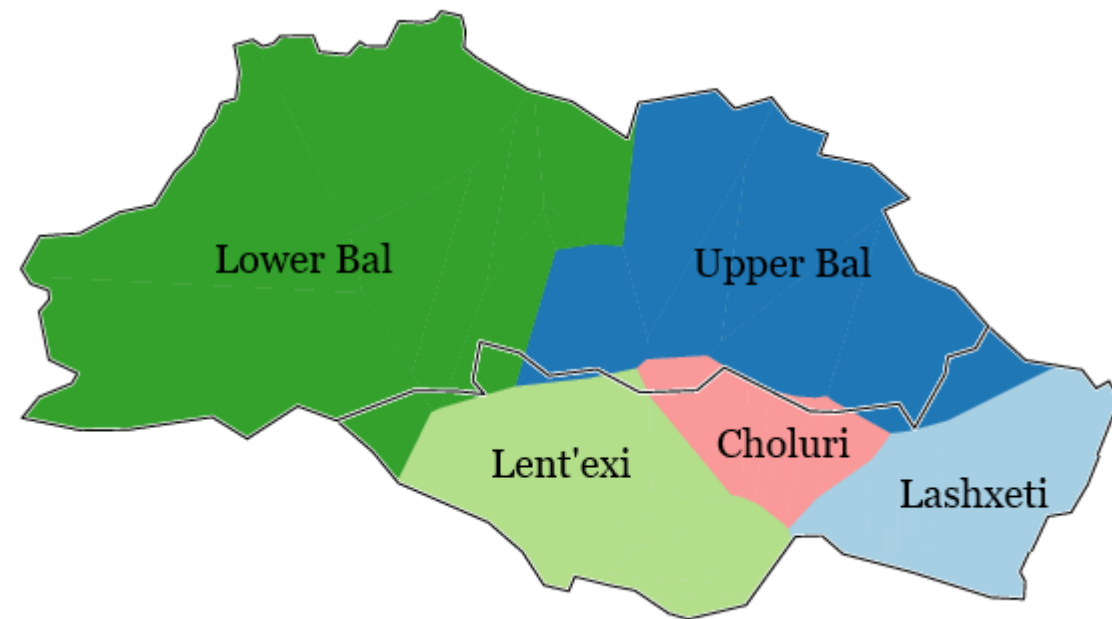
(*modalities*, or *modalidades*, according to Don Ricardo's model, cf. Carballo Calero 1976, Dubert-García 2021)



Phonological results

Ward's Method, 5 clusters

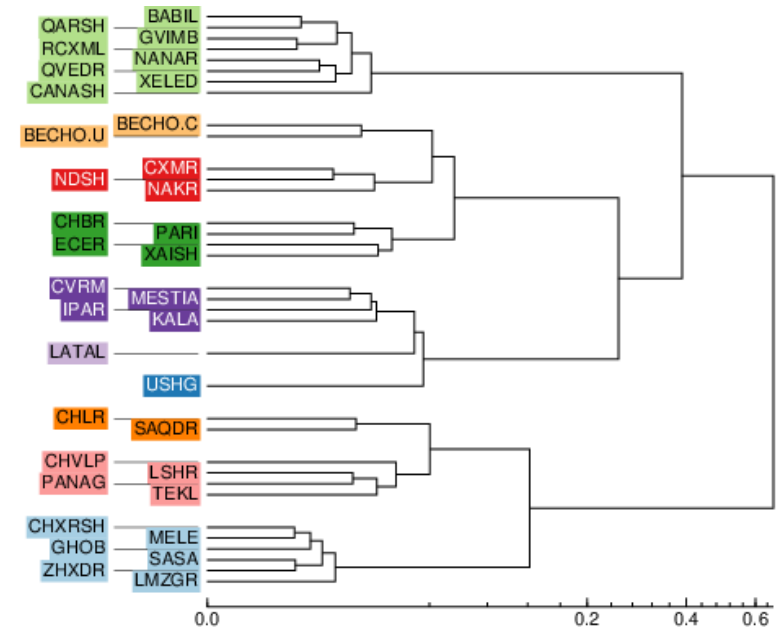
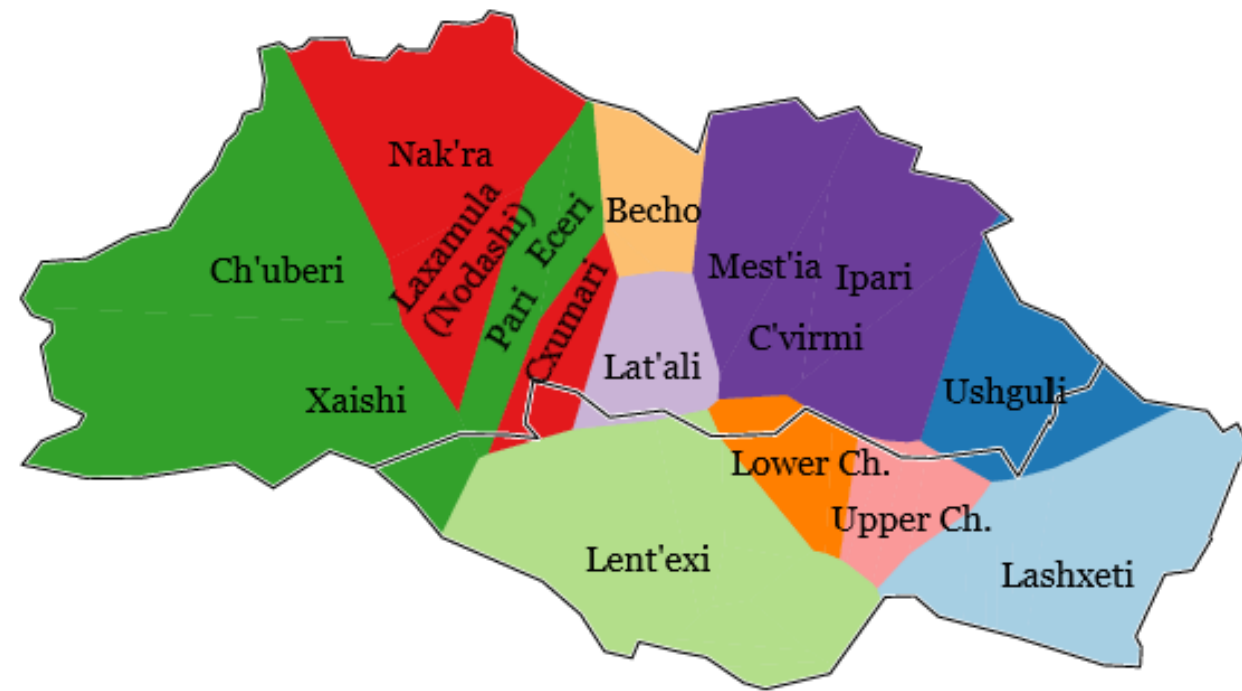
- At five-cluster level, the area corresponding to the Cholur varieties splits from the SE.
- The clustering results suggest that the Choluri and Lashx varieties form two sub-dialects within the SE. This observation aligns, to some extent, with the views of Varlam T'op'uria (2008), who doesn't consider Choluri as a main dialect but associates it with Lashx as a sub-dialect.



Phonological results

Ward's Method, 10 clusters

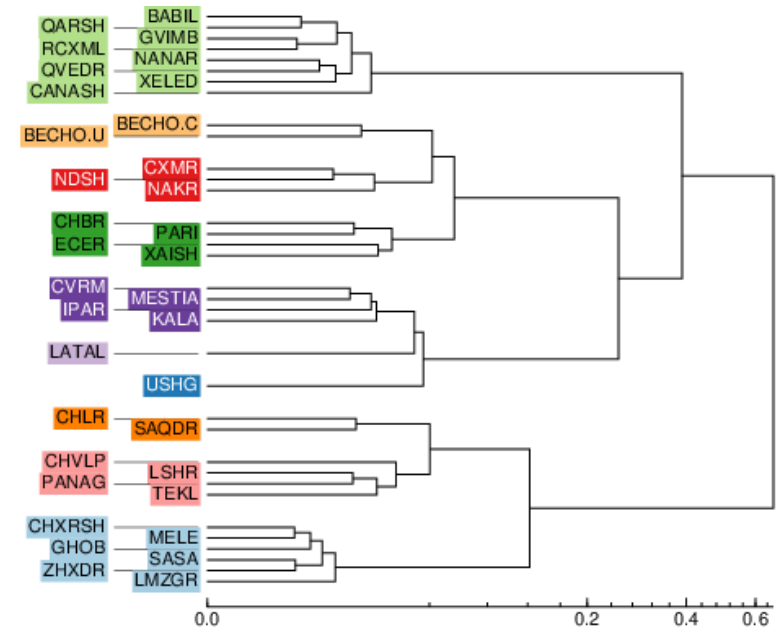
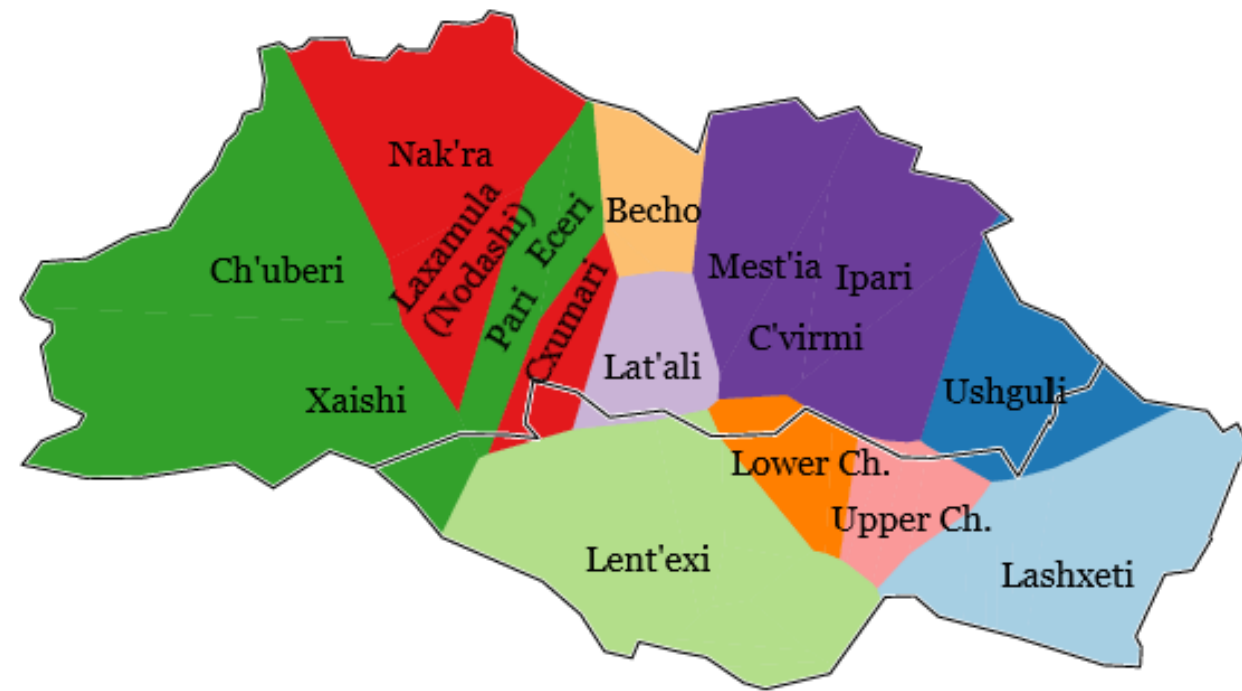
- The 10-cluster configuration further reveals intricate sets of sub-dialects within each modality.
- In the NE, Mest'ia looks like a *feature pool* in the central zone of the Upper Bal. This central zone stands in contrast as compared to two peripheral sub-dialects: Lat'al and Ushgul.



Phonological results

Ward's Method, 10 clusters

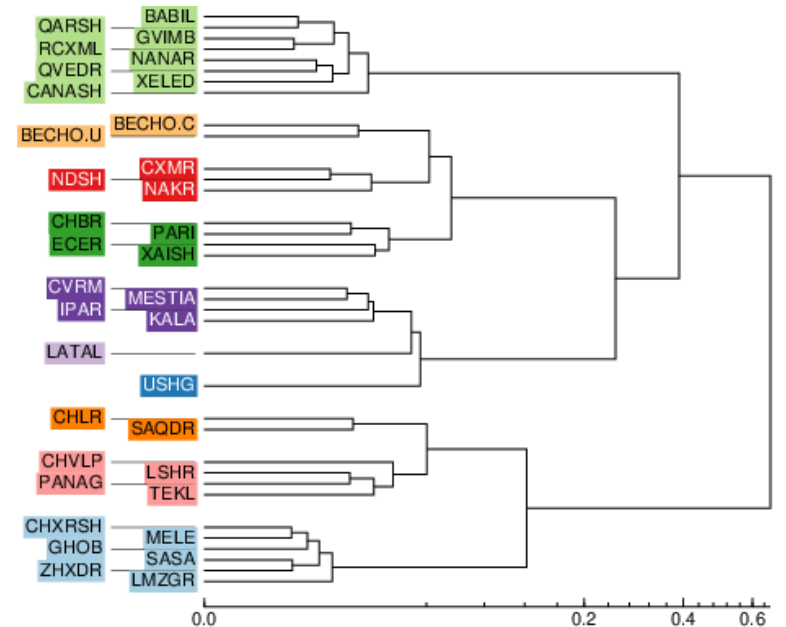
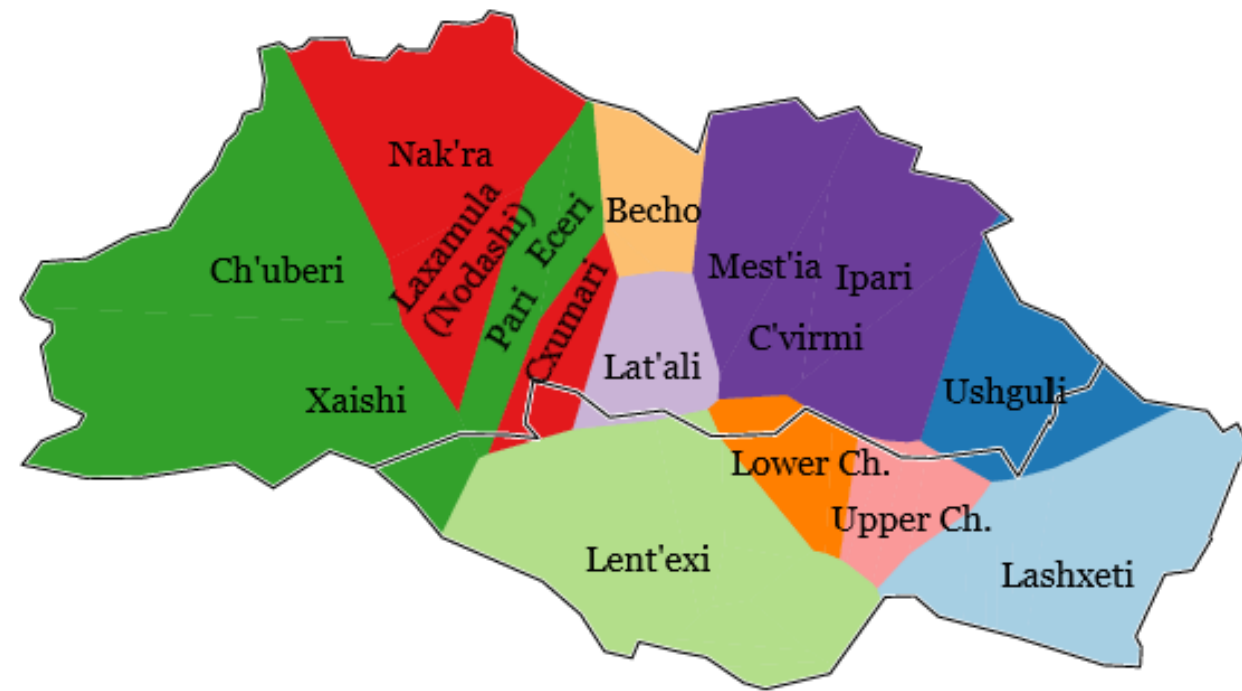
- The NW dialect network is more complex. Three sub-dialects can be distinguished:
 - 1) The varieties spoken in central villages, such as Eceri and Pari, and the varieties spoken in Ch'uberi and Xaishi in the west, constitute the central sub-dialect of Lower Bal.
 - 2) The varieties spoken in the former peripheral areas around the center of Lower Bal, such as Laxamula, Nak'ra and Cxumari, constitute a distinct sub-dialect.
 - 3) The varieties spoken in Becho, in the buffer zone between NE and NW, also constitute an independent sub-dialect, as a singleton/outlier.



Phonological results

Ward's Method, 10 clusters

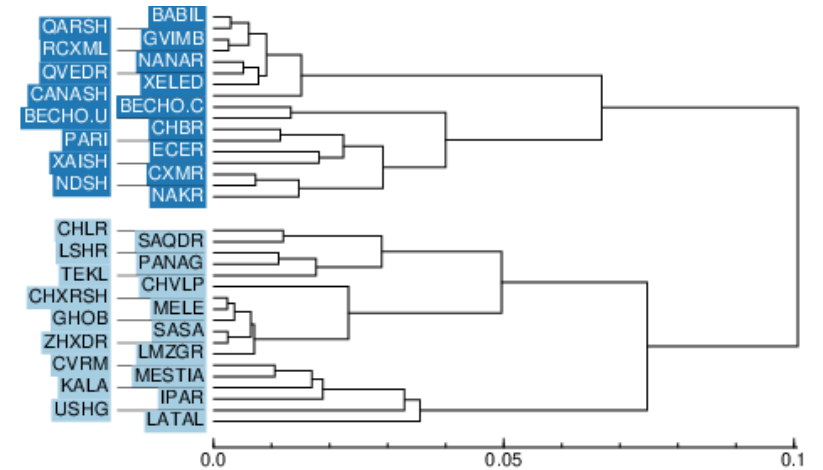
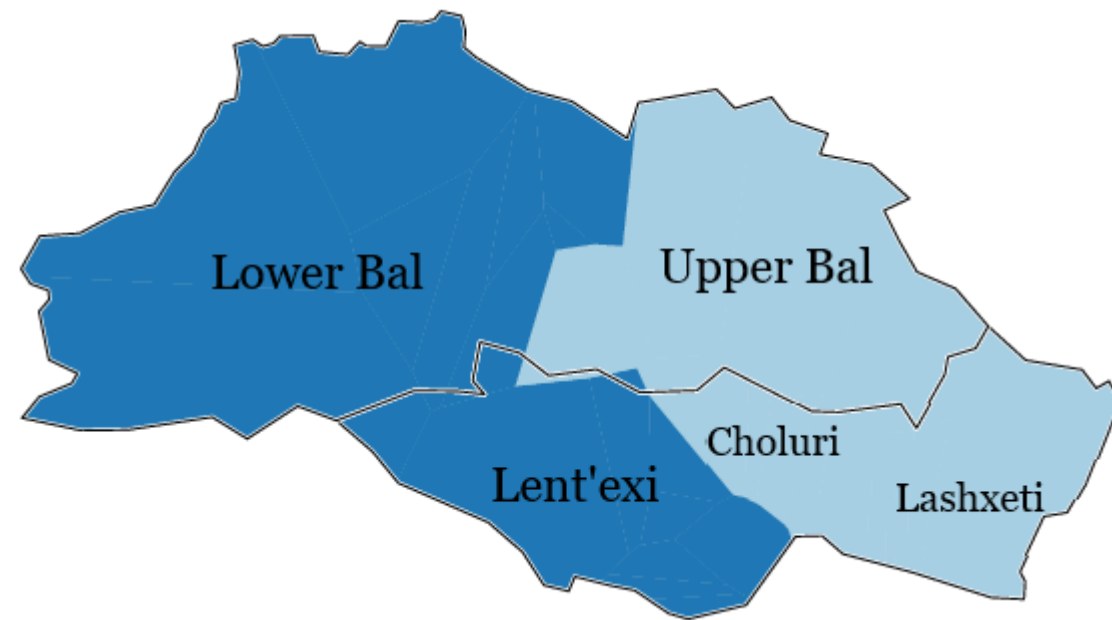
- In SE, the Cholur varieties are subdivided into two groups: Upper Cholur and Lower Cholur, in line with Ak'ak'i Shanidze's findings (Shanidze 1925/1981: 321, as cited in Tuite 2023).
- SW presents as a relatively homogeneous network, with no discernible sub-dialects at the 10-cluster level.



Phonological results

Complete Link, 2 clusters

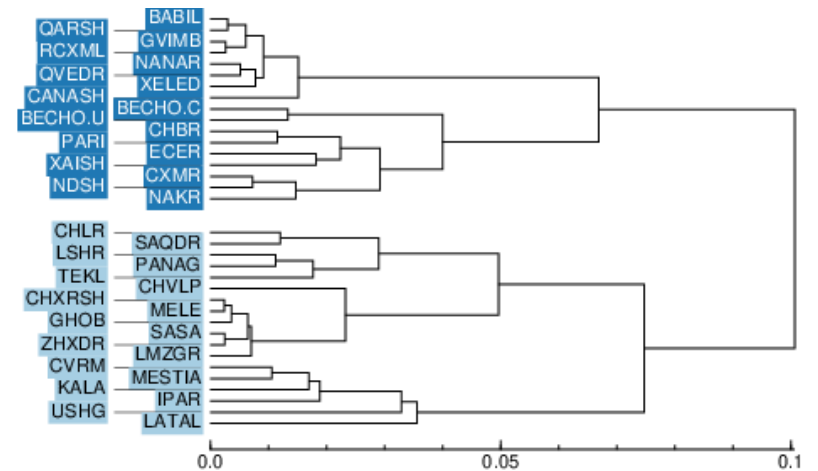
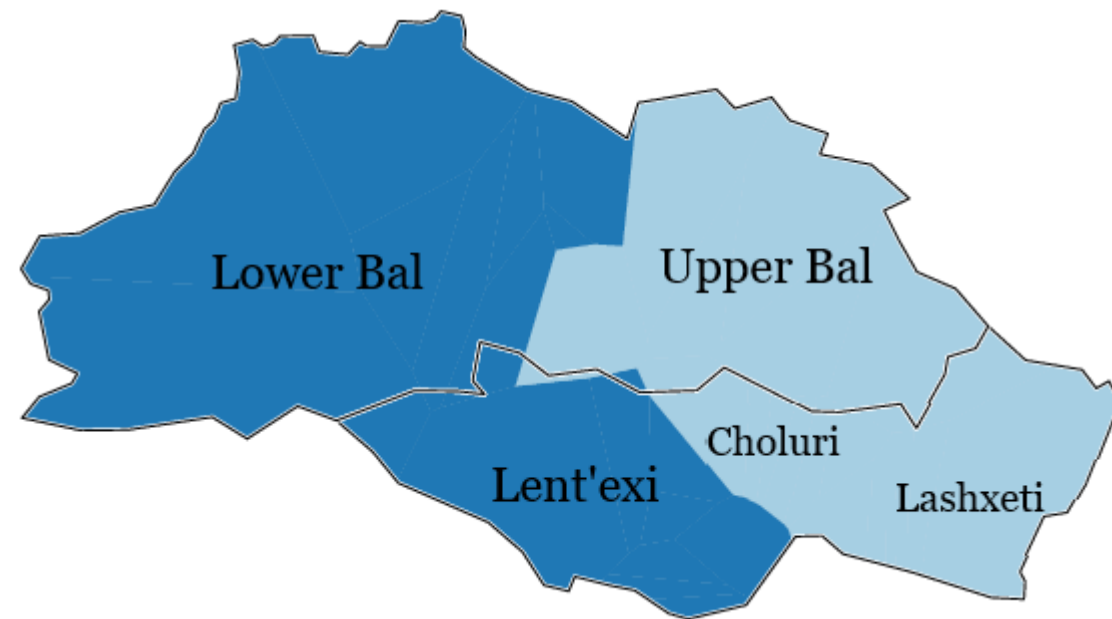
- Complete Link, which is a more reductionist ('lumping') algorithm compared to Ward's Method (more 'splitting'), offers heuristic insights into the depth structures of the dialect network.
- When applied to the Svan dialect network, the results from Complete Link diverge notably from those yielded by Ward's Method, especially concerning major divisions.



Phonological results

Complete Link, 2 clusters

- In a two-cluster configuration, a clear west/east dichotomy emerges. This major level of division involves vowel quantity. All western varieties have lost their long vowels, while eastern varieties have retained the long vowels originating from Proto-Svan.
- *Based on our ethnographic survey conducted in 2023, the affinity between Lower Bal and Lent'exi might have been strengthened due to migratory movements during Svaneti's feudal era. For instance, Svans from Lower Bal settled in the Xeledi valley, which is located in the western part of Lent'exi. Additionally, patrilineal connections between Upper Bal and Lashxeti have been identified through an analysis of the distribution of Svan surnames. These extralinguistic factors have probably had an impact on the Svan dialect network.

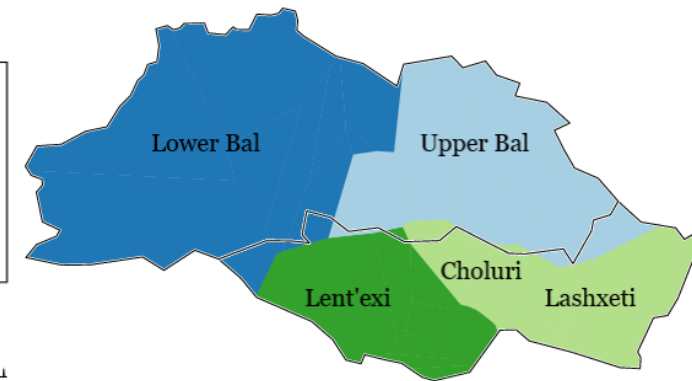
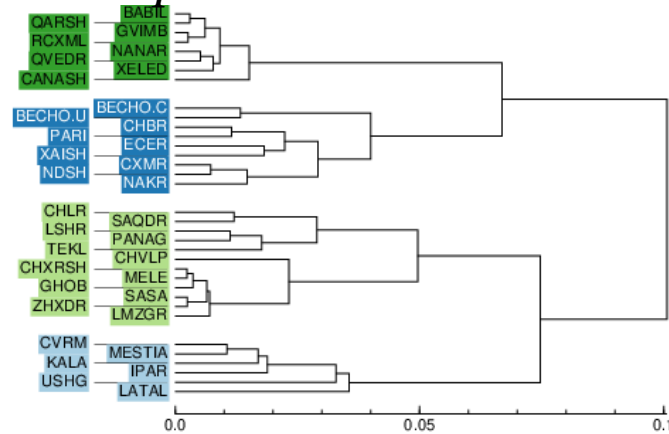


Phonological results

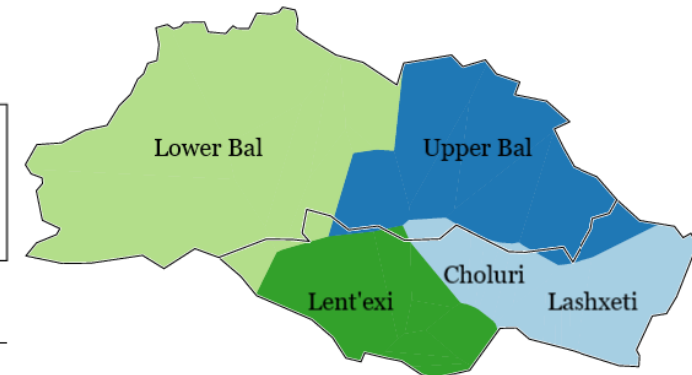
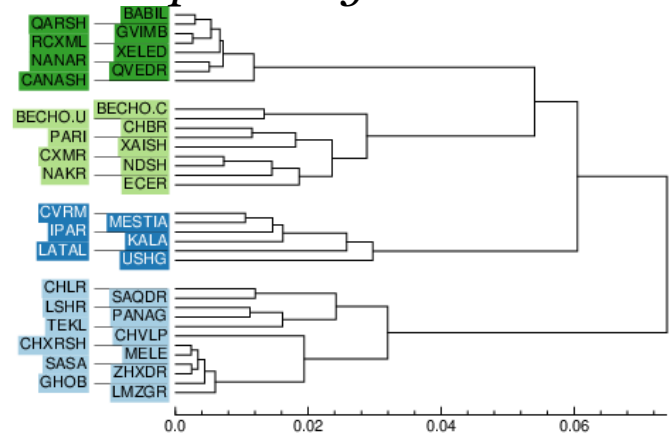
Complete Link, Group Average, 4 clusters

- In the four-cluster configuration, the two reductionist algorithms, *Complete Link* and *Group Average*, produce similar divisions to Ward's Method. The fourfold division of the Svan dialect network turns out to be robust.

Complete Link

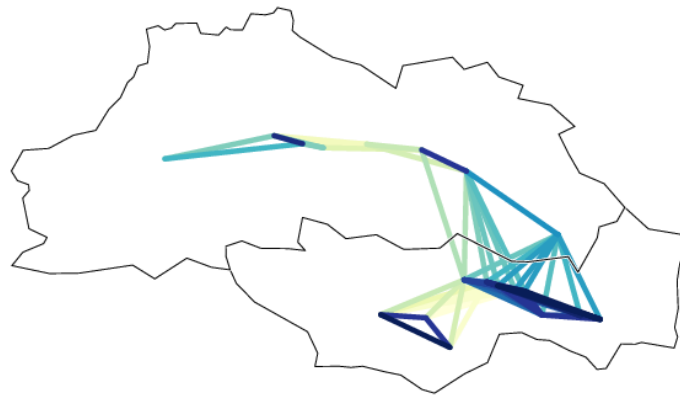
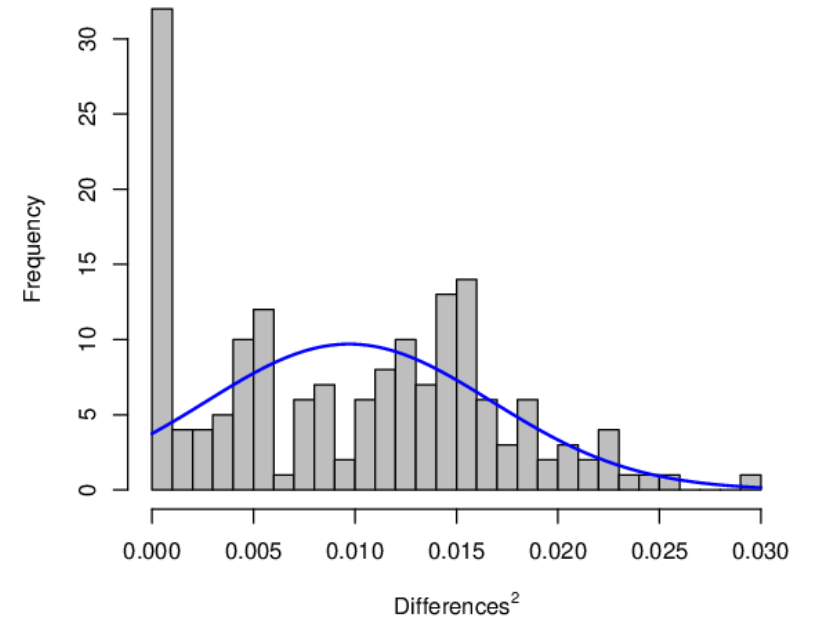


Group Average

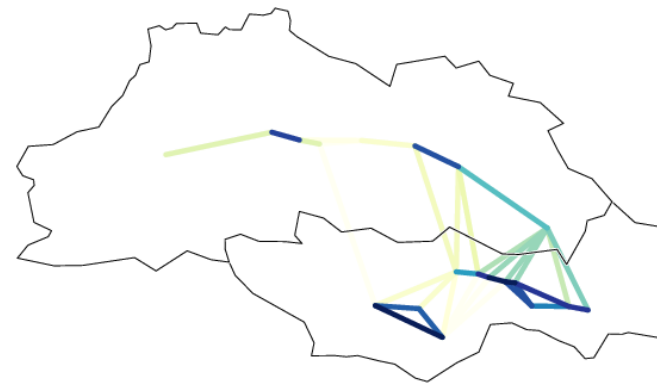


Morphological results

- The distribution of the data is less close to a Gaussian curve than that of the phonological data, mainly because of the verbal stems. However, Cronbach's alpha index remains reassuring (> 0.7).



Linked/associated networks



Kernel networks

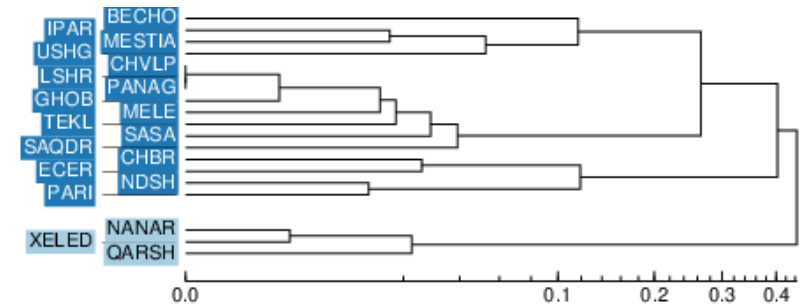
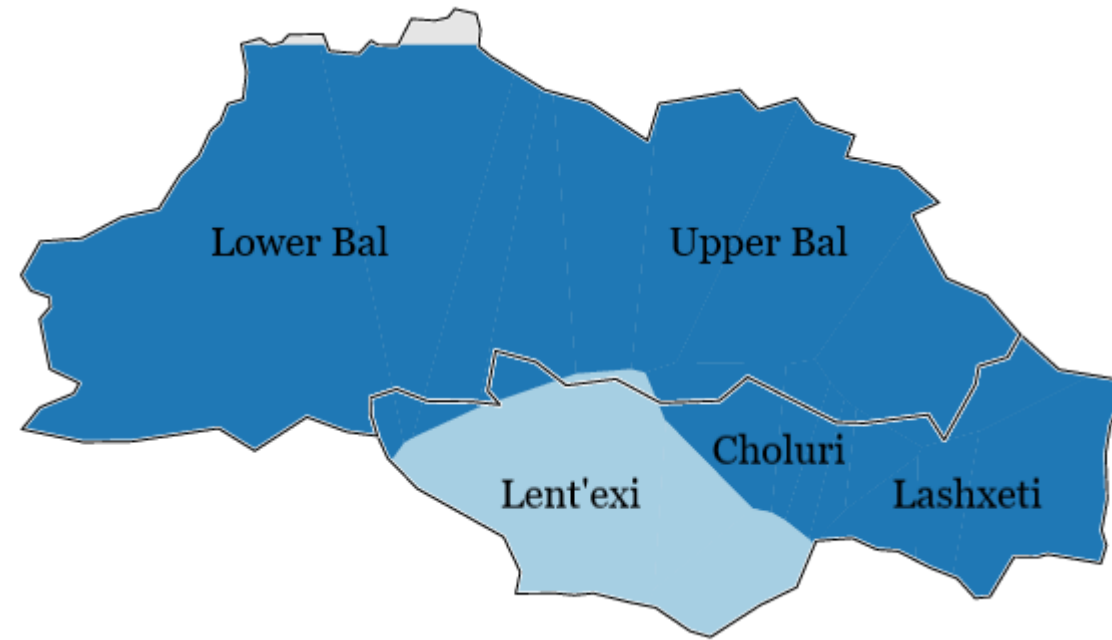
Method: String Edit Distance —
Tokenized
Local incoherence: 0.46
Cronbach's alpha: 0.94

Morphological results

Ward's Method, 2 clusters

- Interestingly, the morphological results also distinguish asymmetrical areas, but this time it's the NW (Lent'ex) t is opposed to the rest of the Svan dialect network.
- The process of atonic syncope undoubtedly plays an important role at this major level of division. Verbal forms of varieties of Lent'exi are much less affected by atonic syncope than those of other varieties.
- For example,

PS *xw-a-xaṭaw-i	> NE/NW xw-a-xṭāw-i ; SE xw-a-xṭaw-i ; SW xw-a-xatāw-i	'I paint'
PS *m-e-laṭ-í	> NE.NW m-e-lṭ-l ; SE m-e-lṭ-ī ; SW m-e-laṭ-i	'I will love'
PS *ad=a-xáṭaw-e	> NE/NW/SE ad=xaṭwe ; SW ad=a-xaṭwe	'he painted'
PS *ád=x-a-xaṭaw-e	> NE/NW at=xaṭāw ; SE at=xaṭaw ; SW at=a-xaṭaw(=xes)	'you painted'

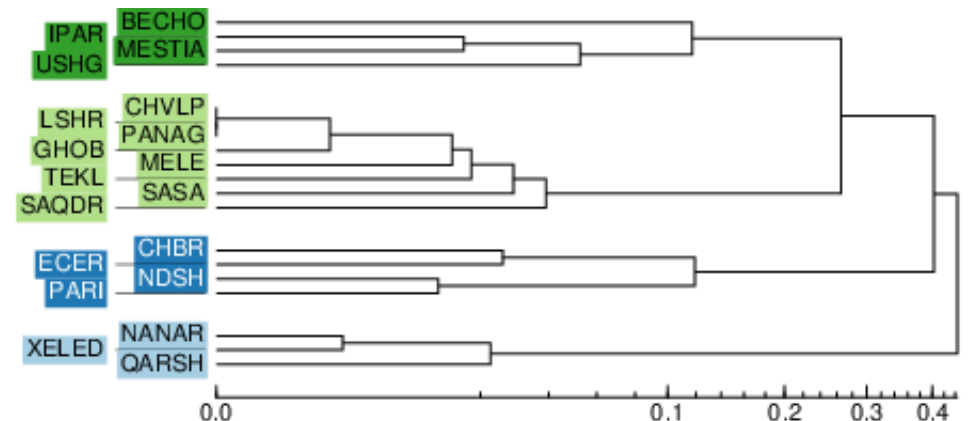
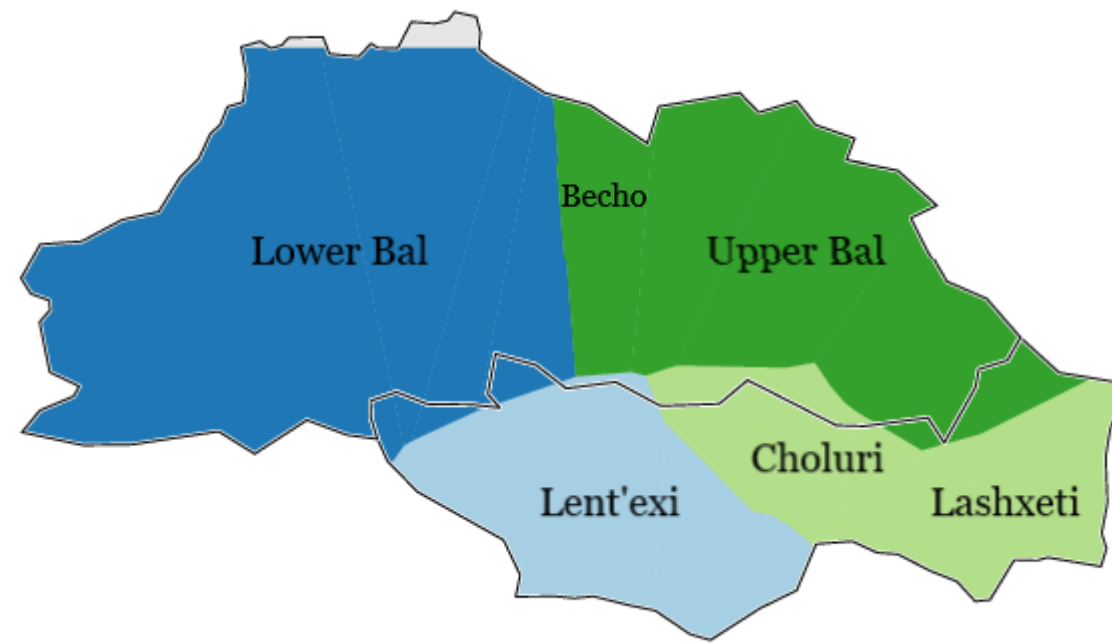


In this case, morphophonological phenomena are (again) the determining factor in the clustering process.

Morphological results

Ward's Method, 4 clusters

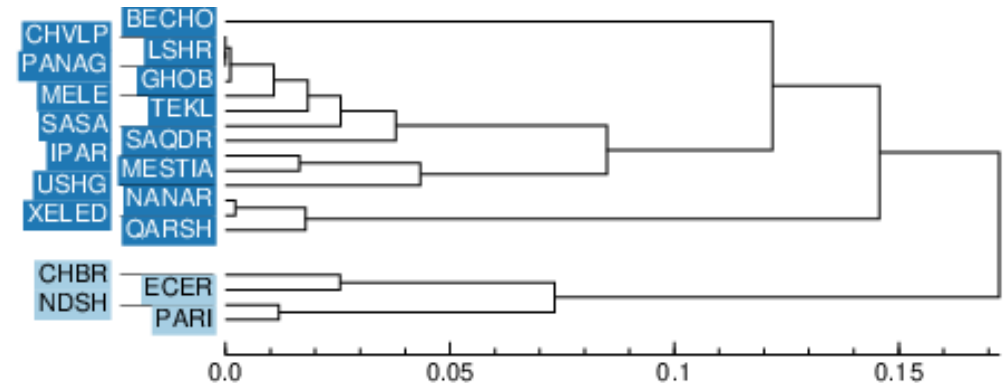
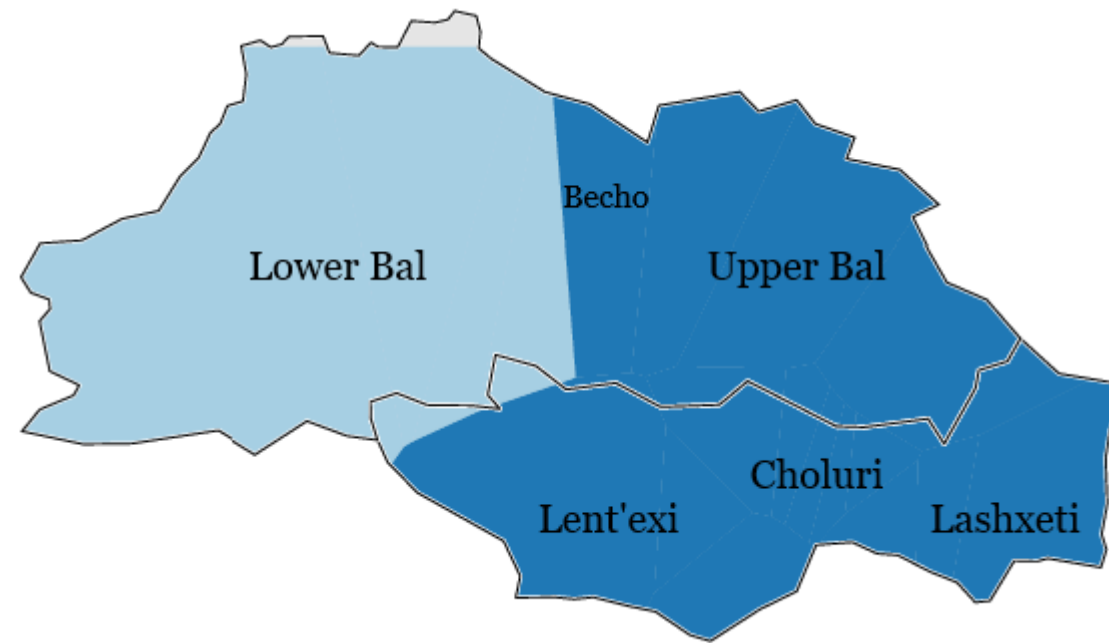
- In a 4-cluster configuration, the divisions among the main dialects once again align with our four-modality model.
- However, a noteworthy distinction this time is the positioning of the Becho variety. Instead of being closer to the NW (Lower Bal) as before, it now aligns more closely with the NE (Upper Bal), standing as a singleton within the NE. This confirms Becho as a buffer zone.



Morphological results

Complete Link, 2 clusters

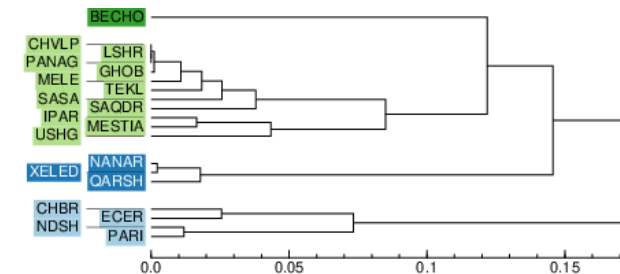
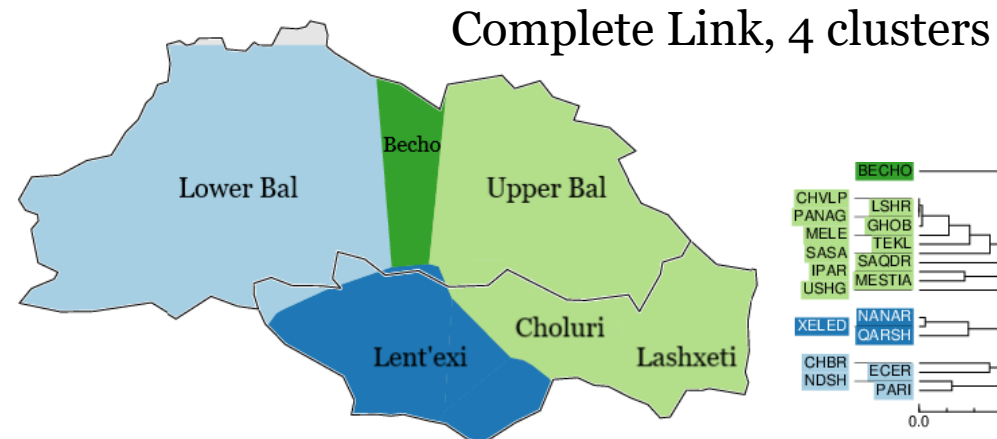
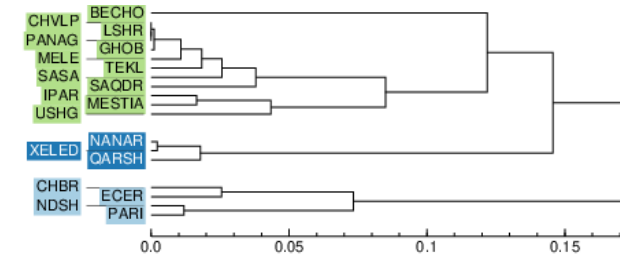
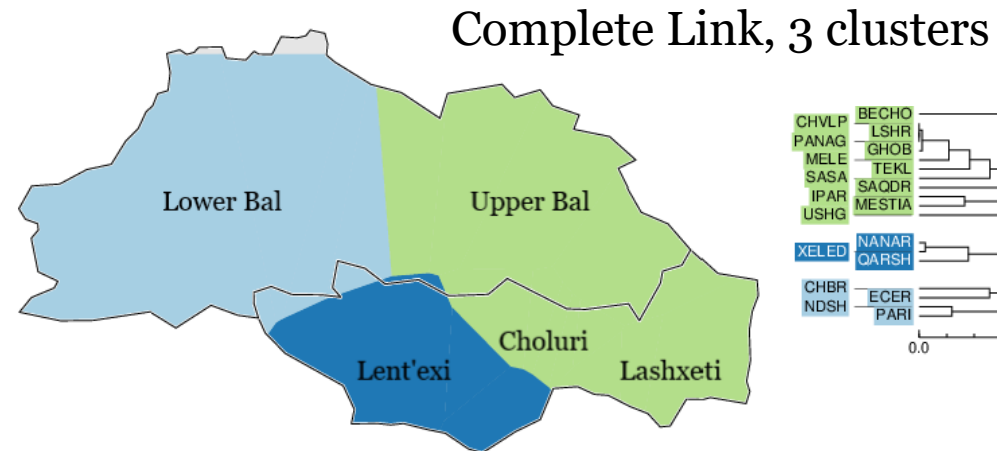
- In terms of major divisions, the Complete Link algorithm distinctly contrasts the NW from the remainder of the Svan dialect network. With this reductionist algorithm, morpho-lexical factors were finally brought to the fore.
- The verbal paradigms of the NW varieties set themselves apart from other Svan dialects, specifically in the usage of conditional and imperfect markers,
- *E.g.*, NW *-iw* vs NE/SE *-ōl* and SW *-ol*
- Tuite (2023) notes that the western varieties of Lower Bal are distinguished by conservative lexical or morphological features. Consequently, he posits that a northwestern Svan group separated from the remaining Svan communities at an early period. Thus, the major divisions, as suggested by Complete Link which underscores depth structures, aligns well with Tuite's (2023) hypothesis.



Morphological results

Complete Link, 3 et 4 clusters

- Let's consider three- and four-cluster configurations. According to verb inflectional morphology data, NW and NE are grouped into a singular eastern block, with the variety of Becho as the singleton of this block.
- This reflects that, historically, innovations originating from the center of NW, *i.e.*, Mest'ia-Lenjeri-Mulaxi, affected not just the buffer zone of Lower Bal, which includes Becho, but also extended their influence on the adjacent lowland areas of Lashxeti and Choluri.



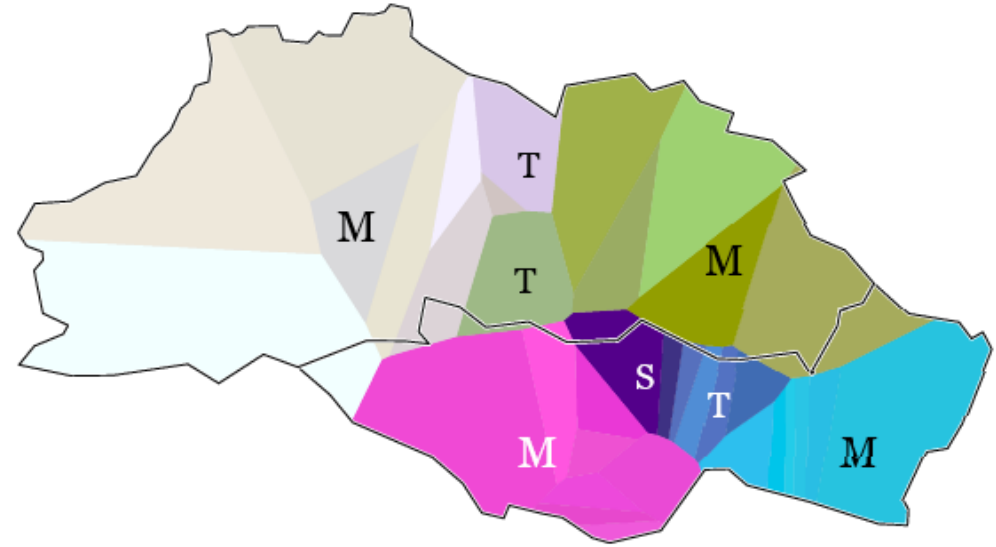
Multidimensional Scaling (MDS)

- MDS is a statistical technique that unfolds the dialectal granting us a holistic perspective of the dialectal network.
- In the two MDS maps displayed on the right, we have marked
 - *modalities* (M),
 - *transition zones* (T) and
 - *singletons/outliers* (S).

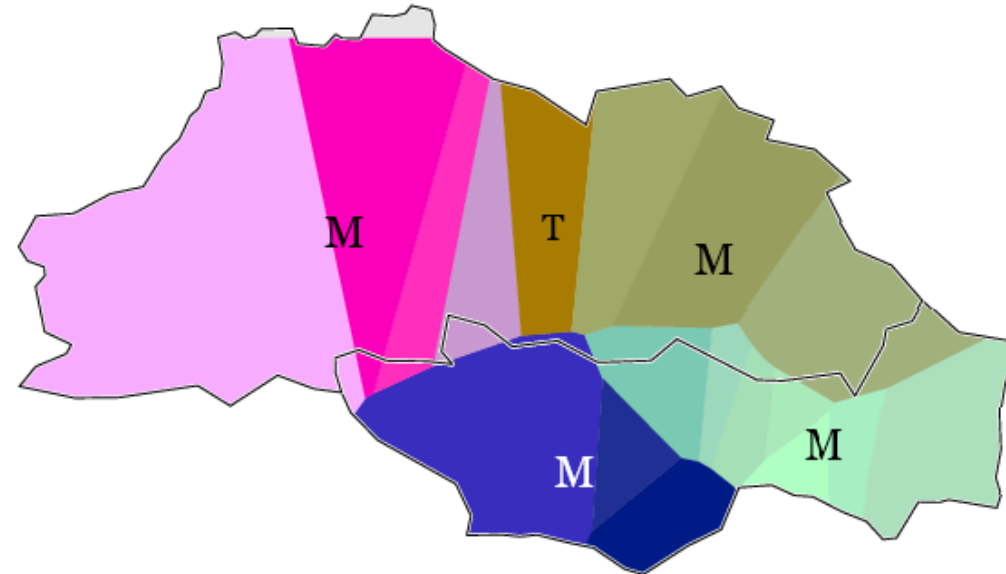
(cf. Don Ricardo's model, Carballo Calero 1976, Dubert-García 2021)

M	$\left\{ \begin{array}{l} +homogeneous \\ +robust \\ +expansive \end{array} \right.$	T	$\left\{ \begin{array}{l} -homogeneous \\ -robust \\ -expansive \end{array} \right.$	S	$\left\{ \begin{array}{l} +homogeneous \\ +robust \\ -expansive \end{array} \right.$
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Phonology



Inflectional morphology



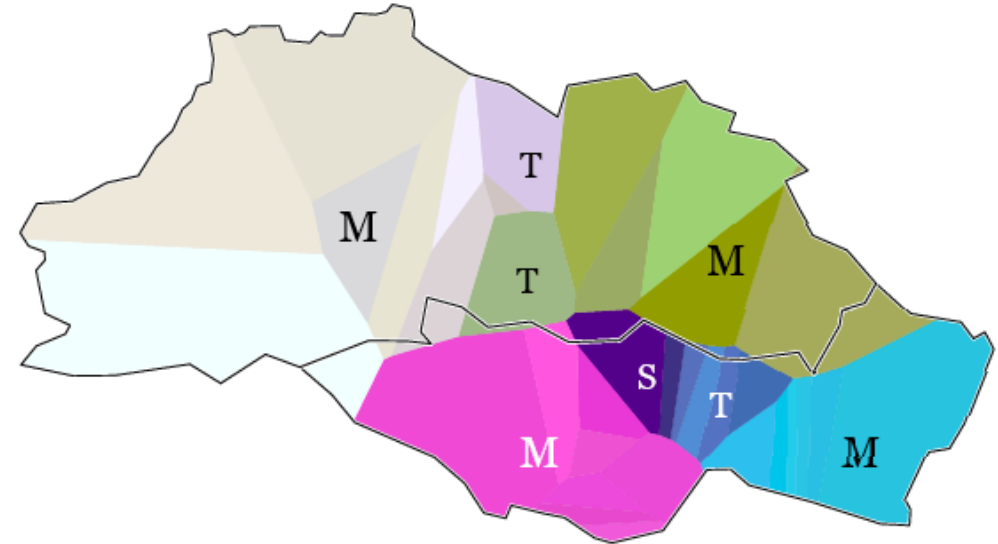
Multidimensional Scaling (MDS)

- Four modalities with clear-cut boundaries (geographical factors; historical socio-political divisions; depopulation in former buffer zones)

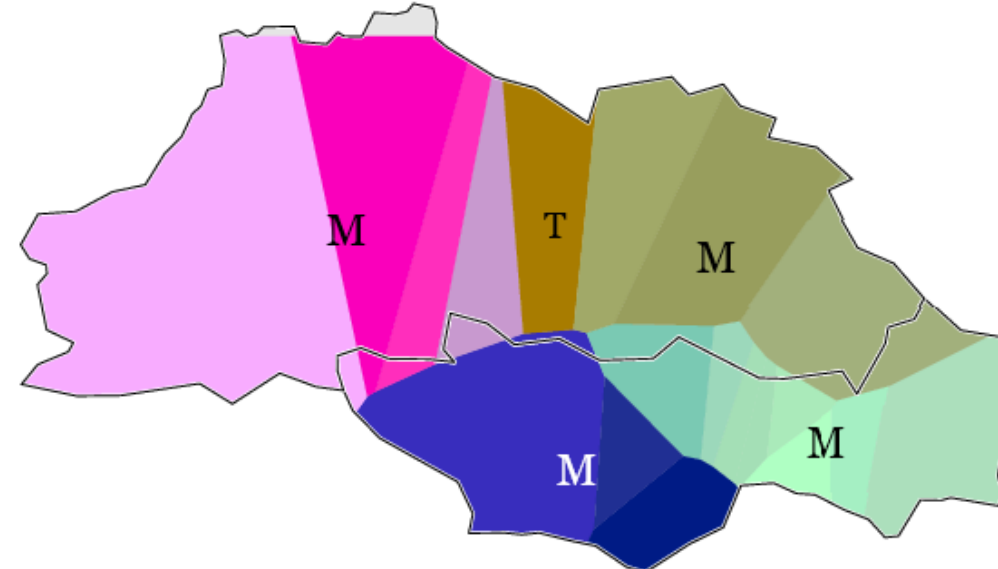
$$\begin{array}{ll}
 \text{NW} \rightarrow \text{M} \begin{cases} +\text{complex} \\ +\text{centrifugal} \end{cases} & \text{NE} \rightarrow \text{M} \begin{cases} +\text{complex} \\ -\text{centrifugal} \\ -\text{peripheral} \end{cases} \\
 \text{SW} \rightarrow \text{M} \begin{cases} -\text{complex} \\ -\text{centrifugal} \\ -\text{peripheral} \end{cases} & \text{SE} \rightarrow \text{M/S} \begin{cases} -\text{complex} \\ -\text{centrifugal} \\ +\text{peripheral} \end{cases}
 \end{array}$$

- *In the SE, the Lower Cholur varieties have notably integrated specific morphophonological features from the SW, yet they maintain a significant linguistic distance from SW varieties. Consequently, Lower Cholur stands as a singleton within the SE, while Upper Cholur acts as a transition zone bridging Lower Cholur and Lashx.

Phonology*



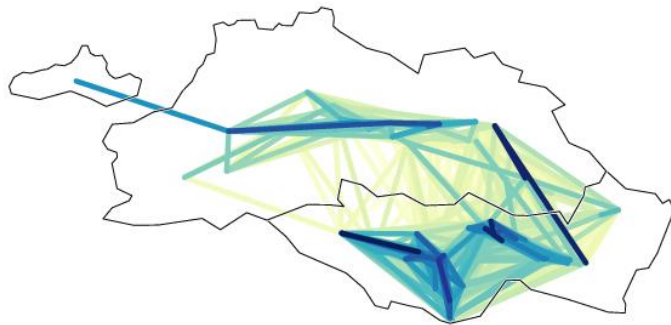
Inflectional morphology



Excursus: Svan surname distribution – 77 localities

Database: A list of Svan surnames extracted from the archives of the Georgian Electoral Commission (2002) and digitized by Georgian historian Rezo Xucišvili.

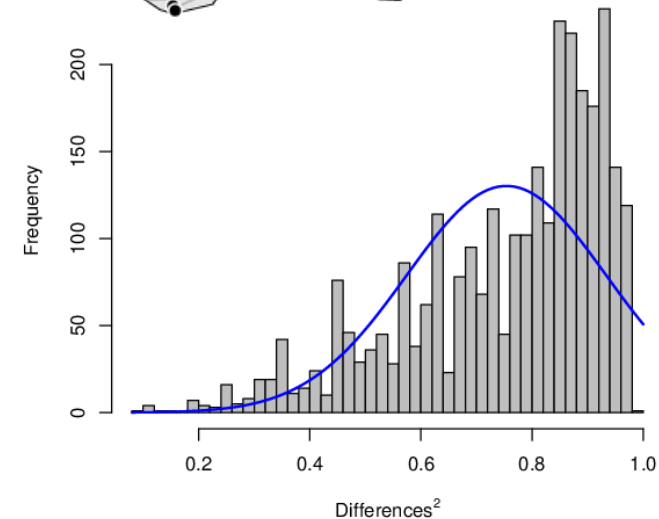
(http://www.geogen.ge/ge/surnames/families/surnames_svaneti/)



Linked/associated networks



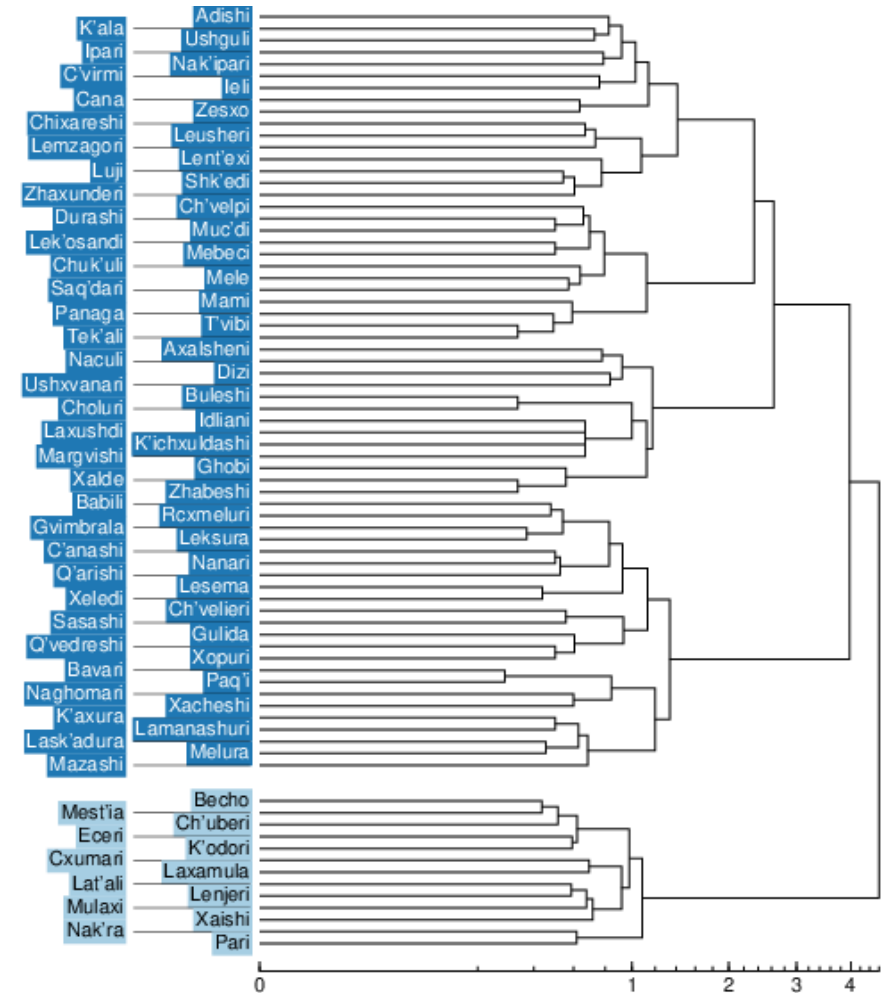
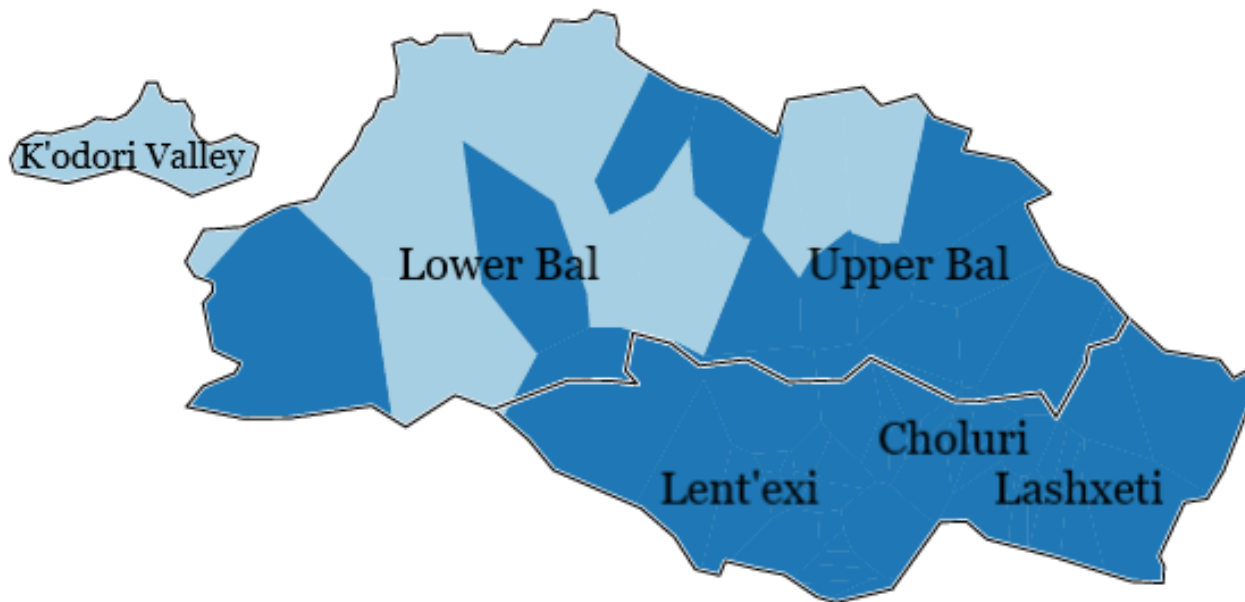
Kernel networks



Local incoherence: 3.29

Excursus: Svan surname distribution – 77 localities

Ward's Method, 2 clusters



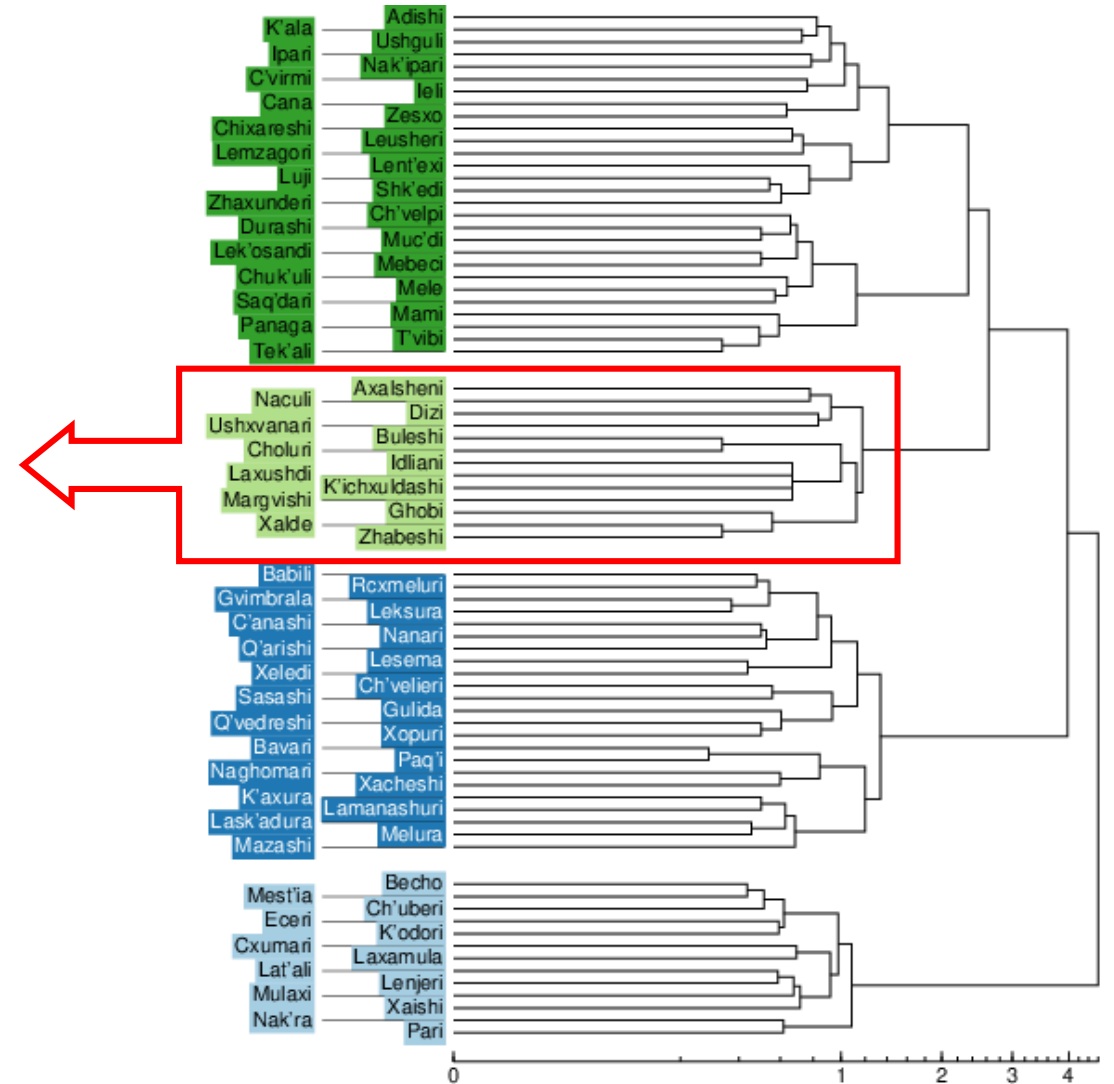
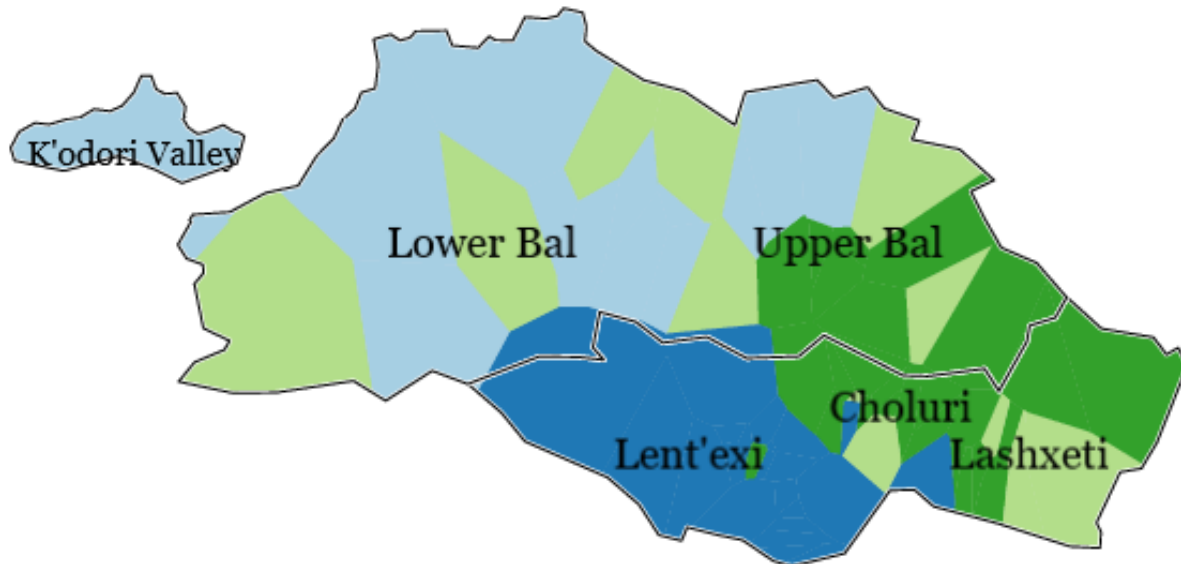
Excursus: Svan surname distribution – 77 localities

Ward's Method, 4 clusters

Interference from small settlements

→ *pseudo-endemism*

Except for Ušxvanari (a village linked to Bečo), which has nine separate clans, and Dizi (near Laxamula) with three clans, all other localities of this cluster are home to just one or two clans.

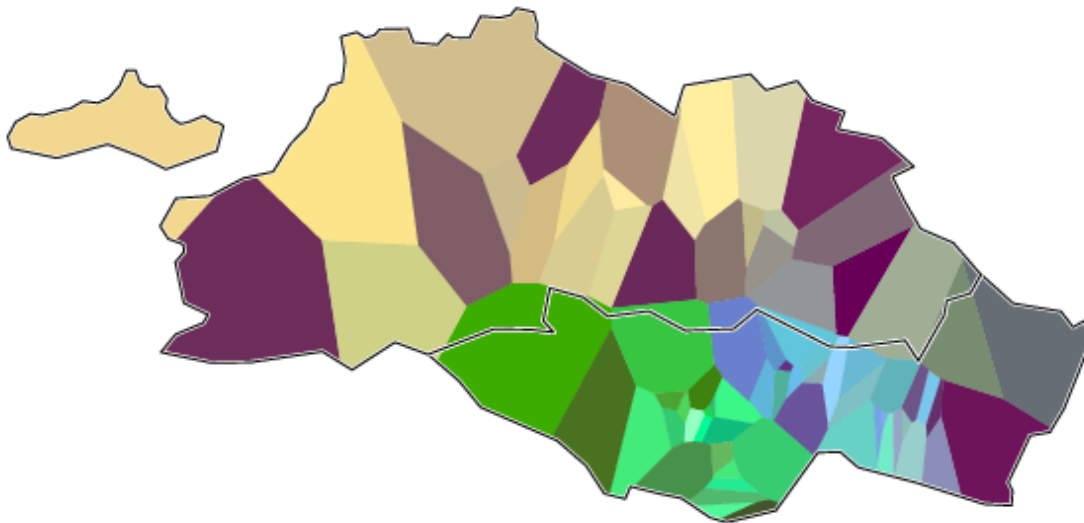


Excursus: Svan surname distribution – 77 localities

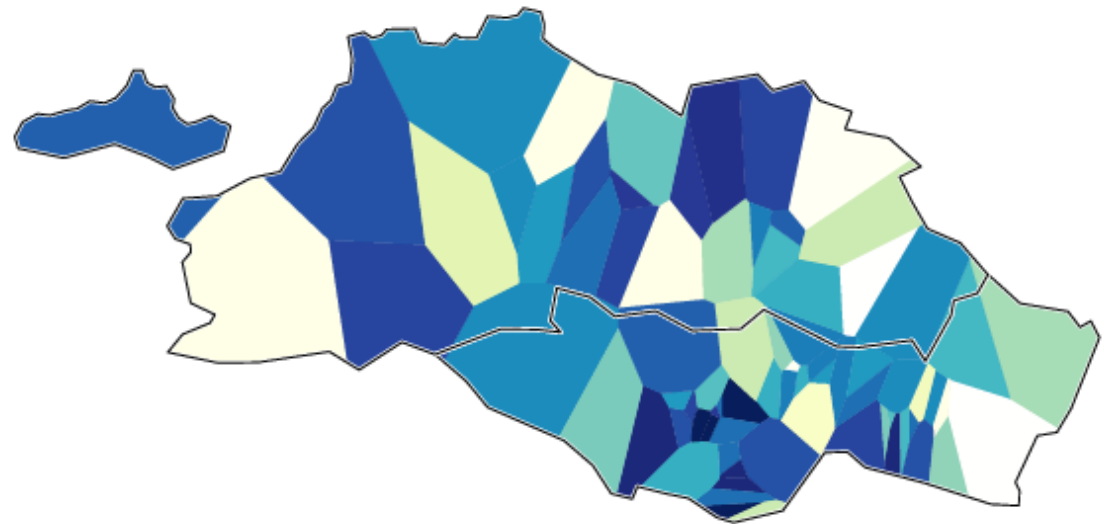
MDS maps

Interference from small settlements

→ *kaleidoscopic endemism*

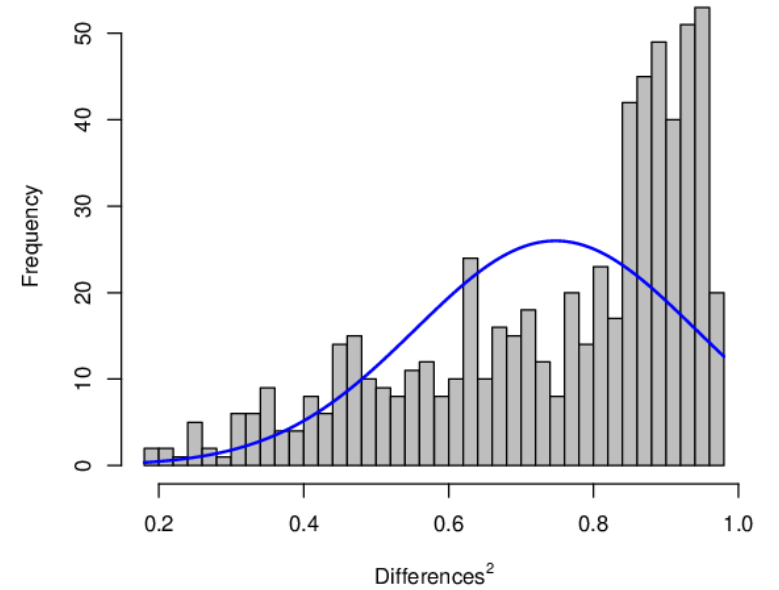


$r = 0.75$



2^{nd} dimension: $r = 0.29$
2 dimensions: $r = 0.71$
2 dimensions: $stress = 0.76$

Excursus: Svan surname distribution – 36 localities

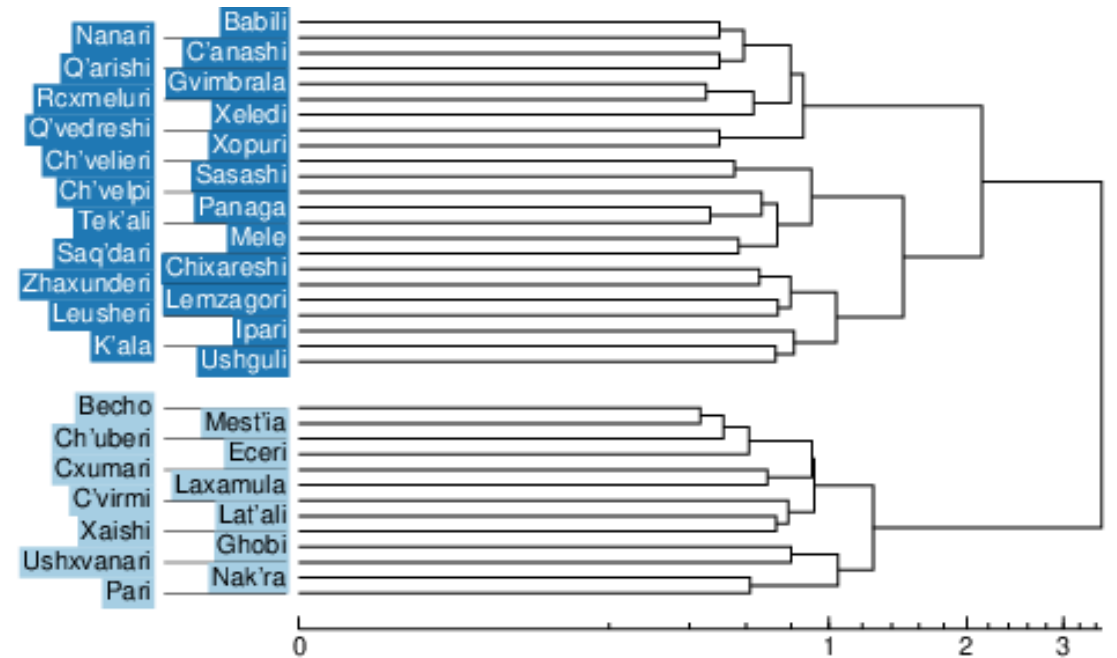
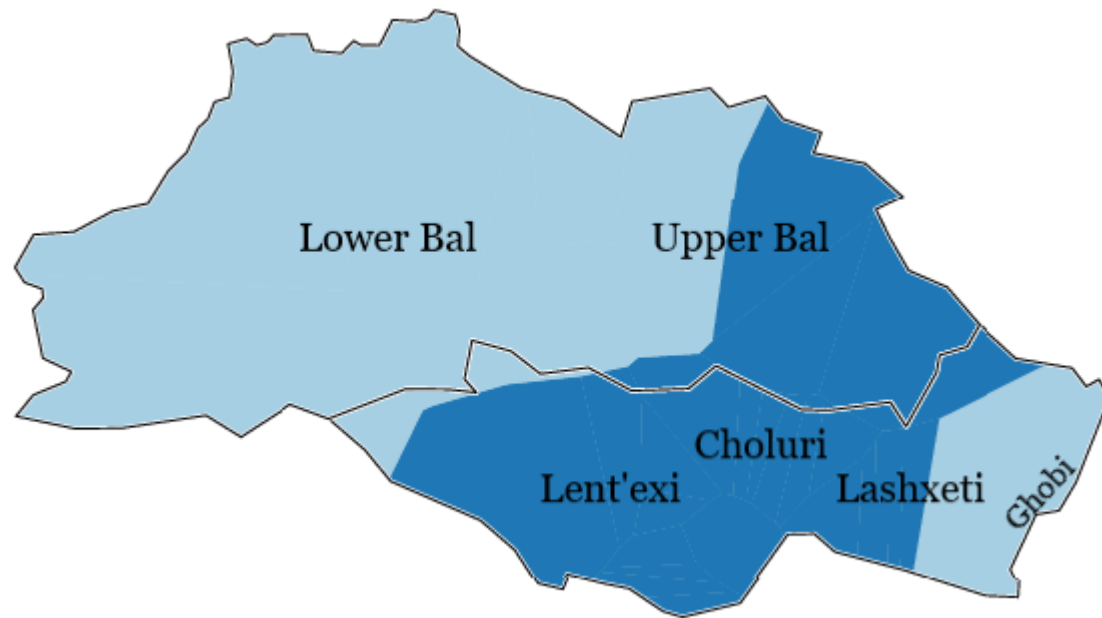


36 localities – Local incoherence: 1.10
(vs 77 localities – Local incoherence: 3.29)



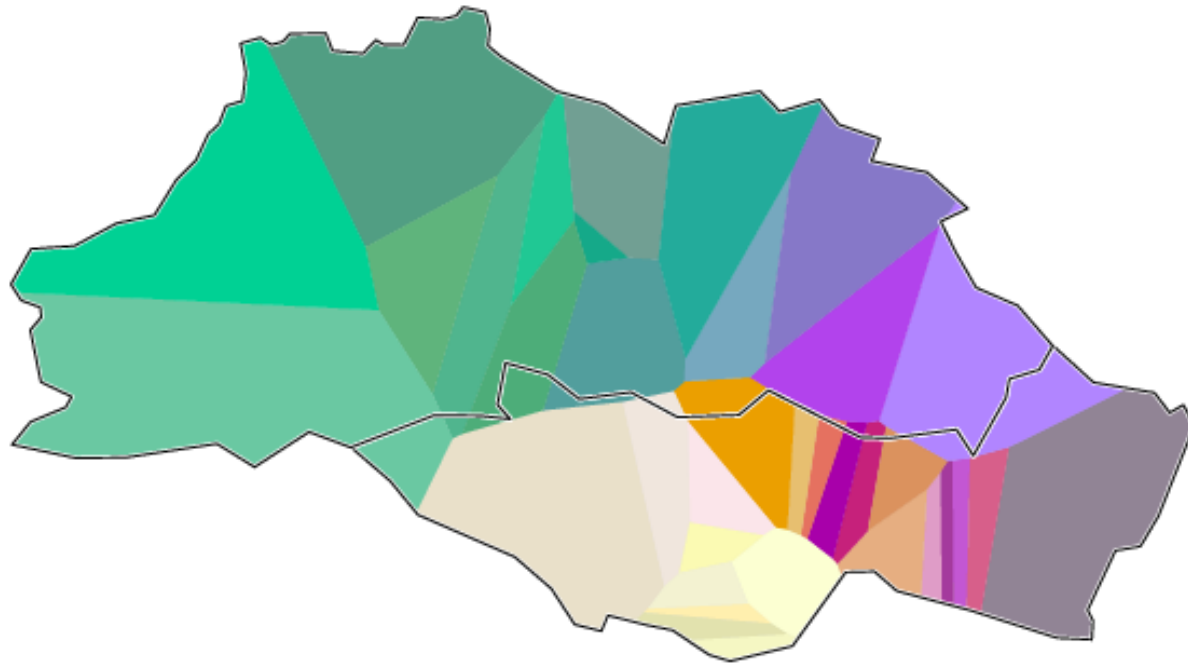
Excursus: Svan surname distribution – 36 localities

Ward's Method, 2 clusters



Excursus: Svan surname distribution – 36 localities

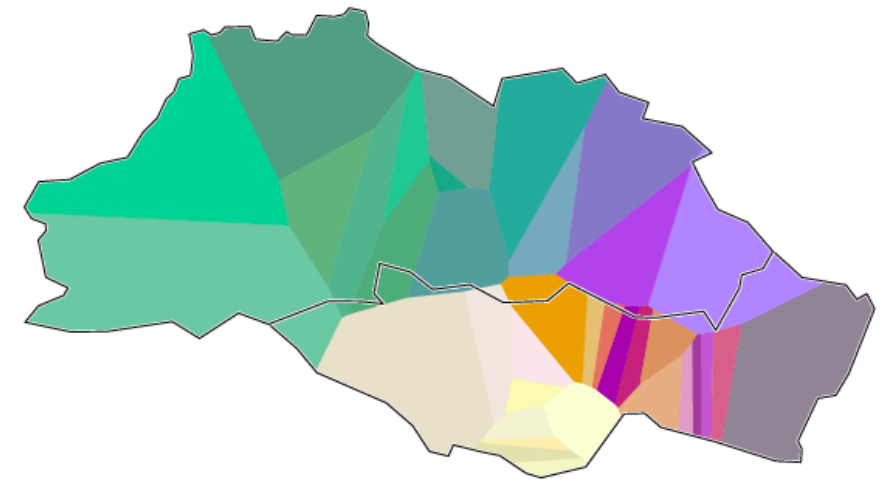
MDS maps



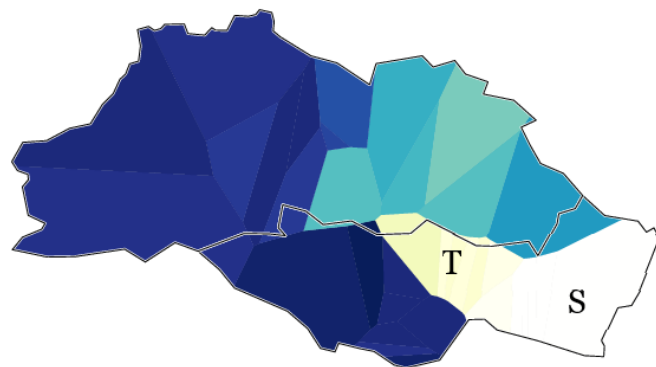
$r = 0.78$

Multidimensional Scaling (MDS): Dialect networks *vs* clan distribution

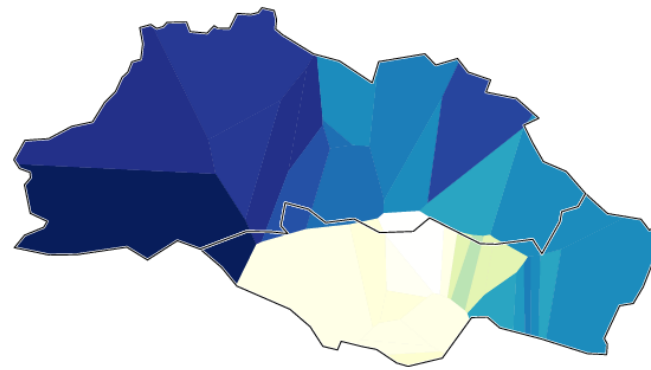
- The maps presented in the previous slides are classic three-dimensional MDS maps. Let's also consider phonological MDS maps that represent a single dimension at a time.



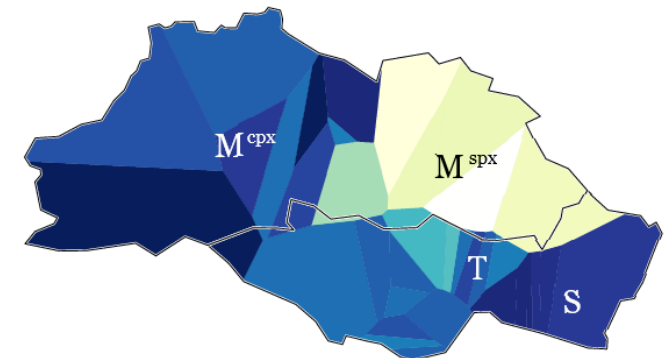
MDS map of Svan surname distribution



1st dimension: $r = 0.83$
1 dimension: $stress = 0.58$



2nd dimension: $r = 0.44$
2 dimensions: $r = 0.93$
2 dimensions: $stress = 0.37$



3rd dimension: $r = 0.22$
3 dimensions: $r = 0.98$
3 dimensions: $stress = 0.19$

Stochastic clustering MDS

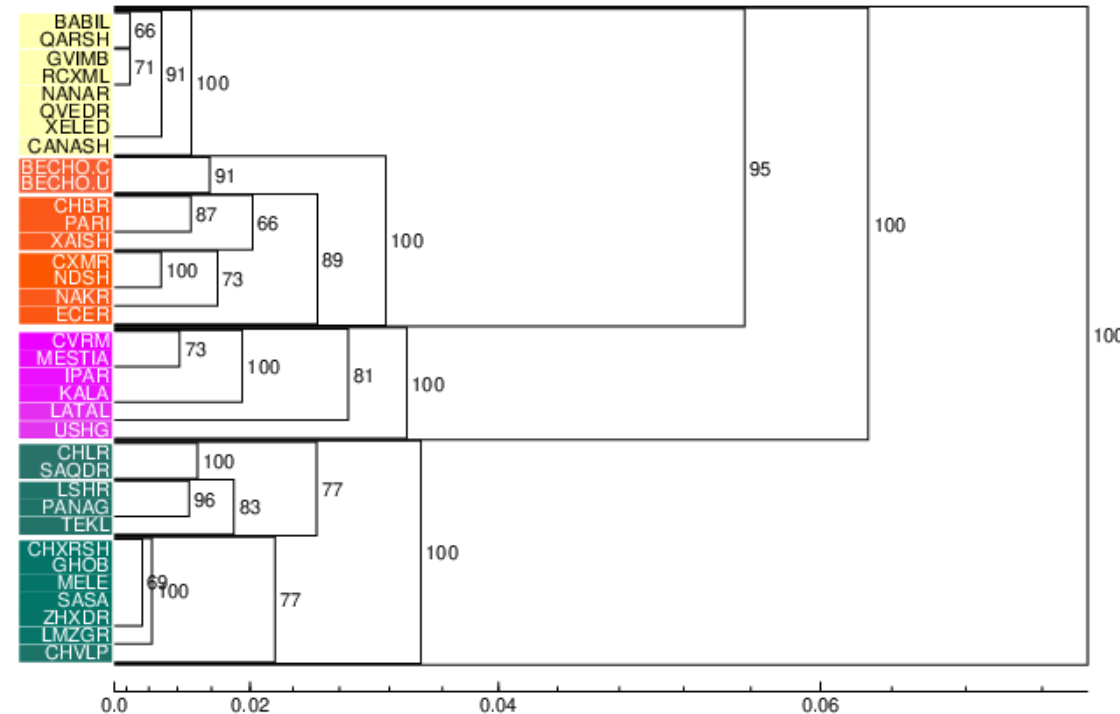
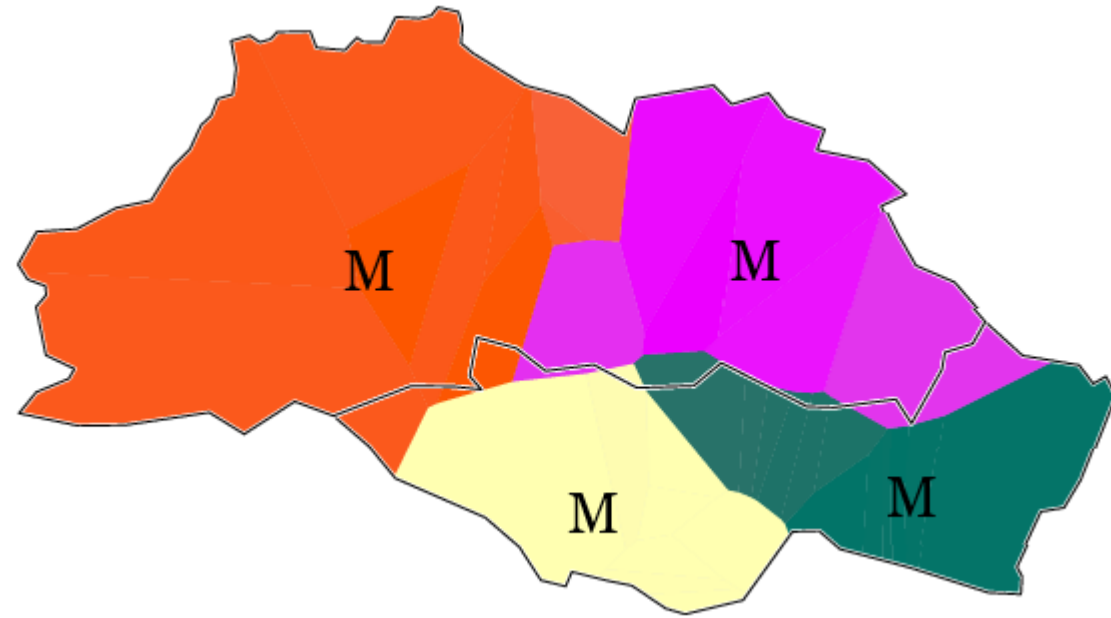
Noise: 0.2

Limit: 60 %

Exponent: 1.5

Method: Group Average + Weighted Average

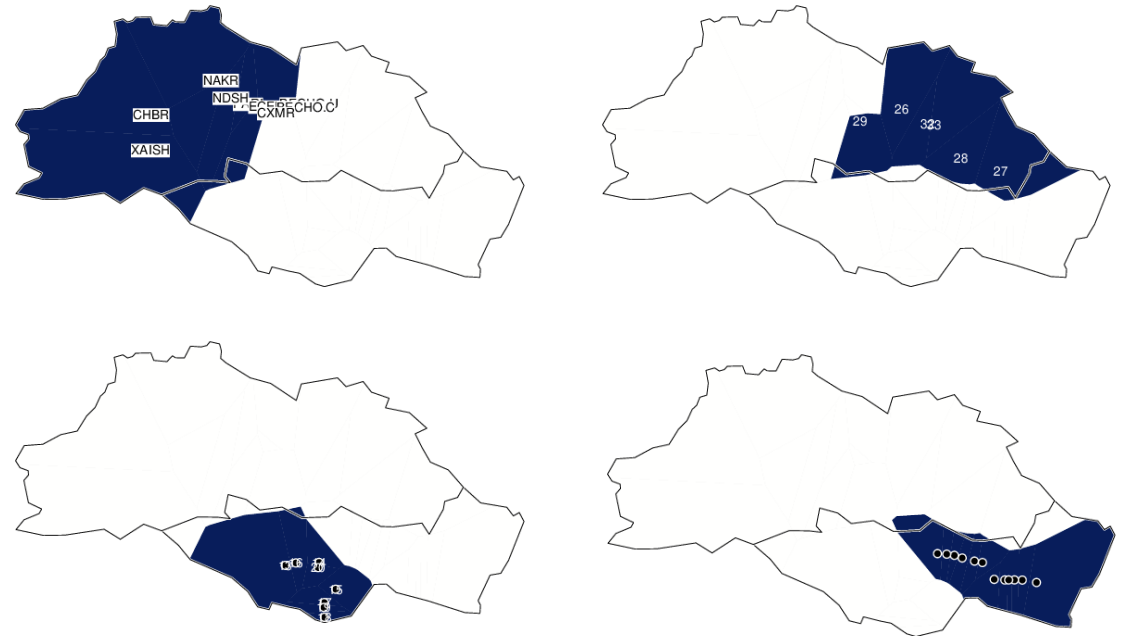
- A salient and robust four-modality model (all indices rise to 100).



Shibboleths

- *Shibboleth detecting* algorithm (Prokić, Çöltekin & Nerbonne 2012) can identify the most characteristic features of a group, namely *shibboleths*.
- Based on Levenshtein's (1966, as cited in Prokić, Çöltekin, and Nerbonne 2012) distance algorithm, the shibboleth score reveals the degree of representativeness and distinctiveness of the examined feature within the group.
- A positive score means that the feature examined is indeed characteristic of the group in question. The higher the score, the more characteristic the feature is of the group. On the other hand, a negative score suggests that the feature examined is characteristic of another group.

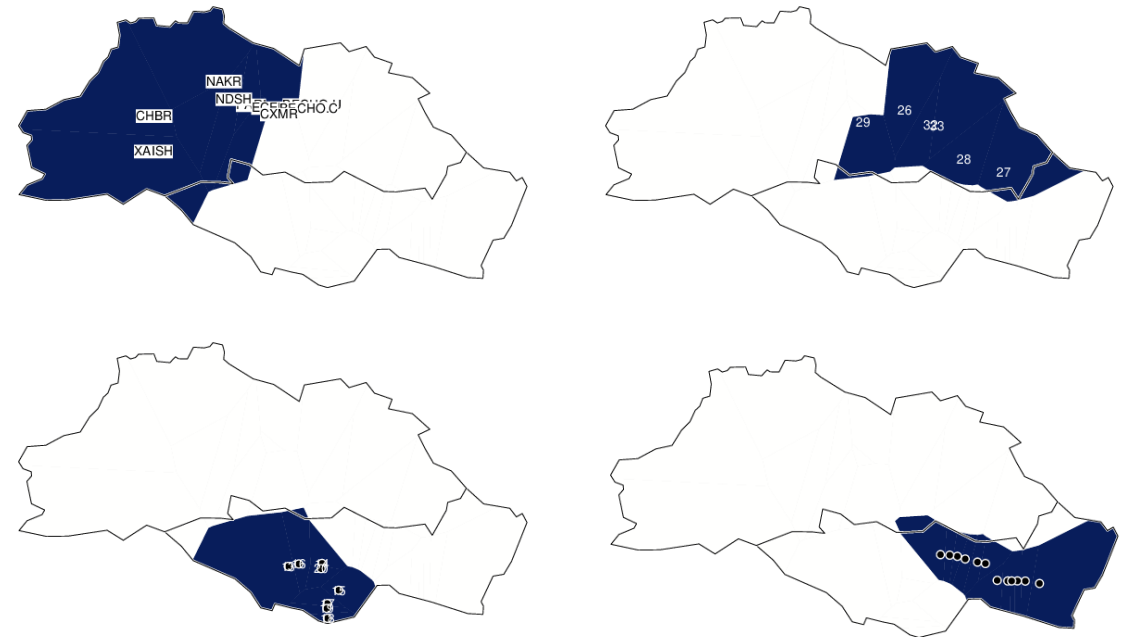
NW (Lower Bal)	NE (Upper Bal)	SW (Lent'ex)	SE (Cholur + Lashx)
2.045456 <i>kaḵ</i> (nut)	2.152290 <i>caš</i> (Thursday)	2.457249 <i>klätxi</i> (high)	2.248548 <i>žay</i> (avalanche)
1.537222 <i>šdim</i> (ear)	2.060368 <i>čaž</i> (horse)	2.077807 <i>tebedi</i> (warm)	2.152290 <i>cāš</i> (Thursday)
1.535777 <i>(w)oxušd</i> (five)	1.613334 <i>žwēdias</i> (far)	2.032199 <i>liqwešne</i> (cough)	2.074546 <i>čaž</i> (horse)
1.532068 <i>čaž</i> (horse)	1.521000 <i>bäsḡ</i> (strawberry)	1.994996 <i>yulä</i> (knee)	2.027904 <i>bad</i> (net)
1.387598 <i>mere</i> (cloud)	1.395053 <i>žäh</i> (avalanche)	1.983360 <i>luḵwäreme</i> (frozen)	2.003558 <i>qan</i> (ox)



Shibboleths







- As we have observed the robustness of the four-modality model of the Svan dialect network, the shibboleth analysis is based on Ward's Method clustering with four clusters.
- The five most characteristic lexemes of the four modalities are shown in the table at top right.
- The four maps at bottom right illustrate the distribution of the most characteristic lexeme for each of the four modalities. As we can see, the distribution of these four selected shibboleths coincides exactly with the classification of the four main dialects of the Svan domain.

NW (Lower Bal)	NE (Upper Bal)	SW (Lent'ex)	SE (Cholur + Lashx)
2.045456 <i>kaḵ</i> (nut)	2.152290 <i>caš</i> (Thursday)	2.457249 <i>klätxi</i> (high)	2.248548 <i>žay</i> (avalanche)
1.537222 <i>šdim</i> (ear)	2.060368 <i>čaž</i> (horse)	2.077807 <i>tebedi</i> (warm)	2.152290 <i>cāš</i> (Thursday)
1.535777 <i>(w)oxušd</i> (five)	1.613334 <i>žwēdias</i> (far)	2.032199 <i>liqwešne</i> (cough)	2.074546 <i>čaž</i> (horse)
1.532068 <i>čaž</i> (horse)	1.521000 <i>bäsḡ</i> (strawberry)	1.994996 <i>yulä</i> (knee)	2.027904 <i>bad</i> (net)
1.387598 <i>mere</i> (cloud)	1.395053 <i>žäh</i> (avalanche)	1.983360 <i>luḵwäreme</i> (frozen)	2.003558 <i>qan</i> (ox)



Shibboleths

- As some linguists tend to regard the varieties spoken in Choluri - namely, Cholur - as a different main dialect from Lashx, we are also interested in the shibboleths of Cholur and those of Lashx.
- As shown in the comparative table on the right, while the shibboleths of Lashx can distinguish Lashx from cholur (at least from the Lower Cholur varieties), none of the shibboleths of Cholur can distinguish Cholur from the Lashx varieties. This further supports the view that, rather than being classified as main dialects, Cholur is rather a sub-dialect of SE.

SE (Cholur)		SE (Lashx)	
Shibboleth	Distribution	Shibboleth	Distribution
1.783331 <i>žay</i> (avalanche)		2.270159 <i>ķāde</i> (axe)	
1.706989 <i>cāš</i> (Thursday)		2.177305 <i>pur</i> (cow)	
1.645330 <i>čāž</i> (horse)		2.057454 <i>žog</i> (herd)	
1.589028 <i>qan</i> (ox)		1.853893 <i>kwēr</i> (cold)	
1.572751 <i>xat</i> (icon)		1.851565 <i>bad</i> (net)	

Conclusion: convergences with traditional taxonomy

- **Robustness of the Svan Dialect Network's Quadripartition:** All of our dialectometric analyses have corroborated the quadripartition of the dialect network. This observation aligns with the perspective held by most Svan language specialists.
- **At the Sub-dialect Level in the NE,** the structuring of the dialects aligns with classical taxonomy, showcasing Mest'ia as a feature pool (cf. Léonard 2022, Gudschinsky 1958) and contrasting it with the peripheries, represented by the two sub-dialects: lat'al and ushgul.

Conclusion: convergences with traditional taxonomy

- Regarding the SE dialect network and the question surrounding the status of Cholur, our dialectometric findings offer valuable insights that help bridge the perspectives of Shanidze (1925) and T'op'uria (2008).
- Shanidze's view positions Choluri as a transitional area between Lent'exi and Lashxeti, asserting that Lower Cholur varieties are closer to Lent'ex, while Upper Cholur varieties are more akin to Lashx. Conversely, T'op'uria contends that all Choluri varieties bear a closer resemblance to Lashx.
- Our analysis of the MDS maps shows that Lower Cholur does share some of the morphophonological features with lent'ex, yet this has made it a singleton of SE. And Cholur varieties and Lashxet varieties constitute two SE sub-dialects.

Conclusion: divergences from traditional taxonomy

In contrast to the Upper Svaneti/Lower Svaneti dichotomy according to certain specialists, our dialectometric analyses suggest different major divisions:

- While the term *Upper Svan* (ზემო სვანური) remains relevant, as in the phonological results, NW and NE are combined in the same macro-area, the term *Lower Svan* (ქვემო სვანური) turns out to be less linguistic than geographical, since the two modalities SW and SE present a very significant linguistic distance.

Conclusion: divergences from traditional taxonomy

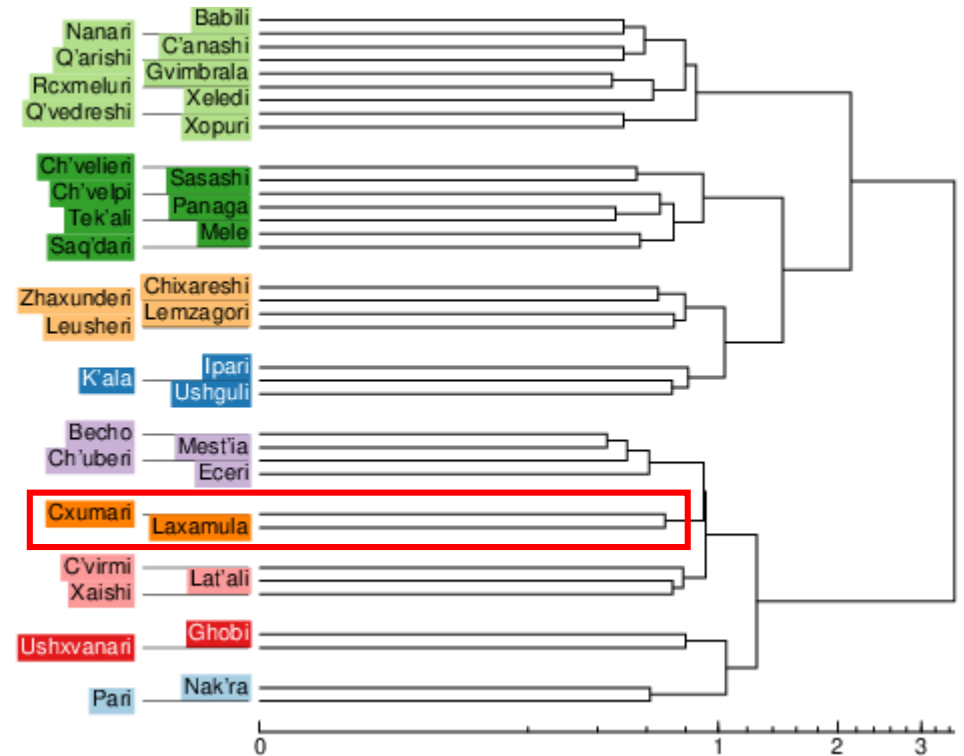
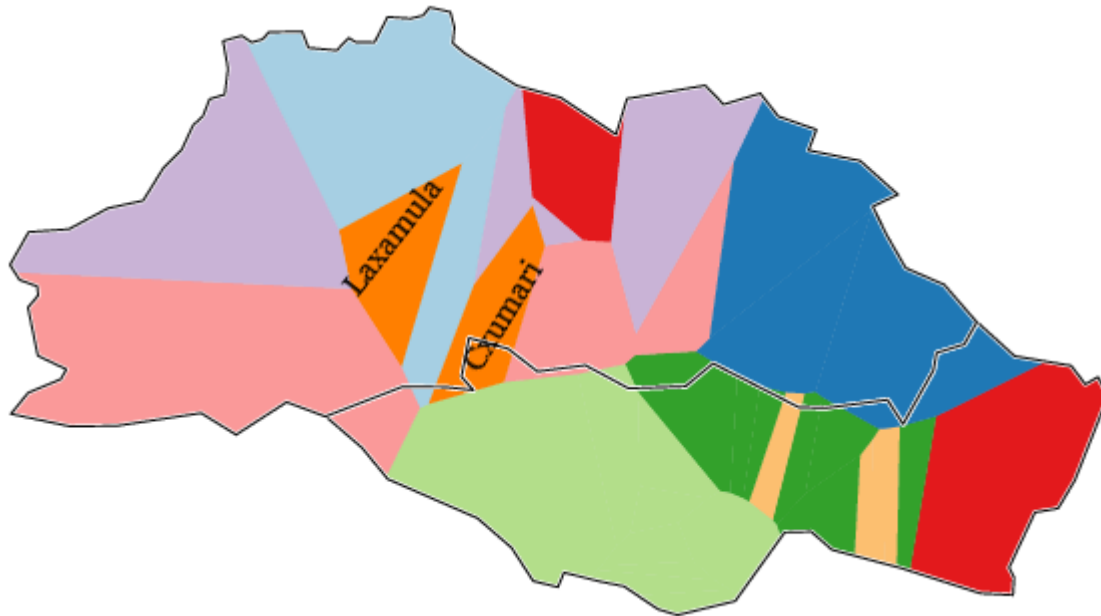
- One of the main discrepancies between traditional taxonomy and our dialectometric results lies in the structuring of the NW dialect network.
- Traditionally, four sub-dialects are distinguished within NW (Lower Bal):
 - 1) The so-called central variety, spoken in central villages such as Eceri and Pari, as well as in the Nak'ra and Ch'uberi valleys in the west ;
 - 2) To the west of Eceri, the variety of Laxamula, used in Laxamula and Xaishi ;
 - 3) To the east of Eceri, the variety of Cxumari;
 - 4) In the area bordering NE, the Becho variety.
- However, our dialectometric analyses reveal three sub-dialects:
 - 1) The varieties of the western villages Nak'ra and Ch'uberi, established in the 19th century, are associated with the varieties of Eceri and Pari, i.e., the central variety of the Lower Bal;
 - 2) The varieties spoken in Laxamula, Cxumari and Nak'ra, *i.e.*, the former peripheral areas of Lower Bal, constitute a single dialect.
 - 3) In the east, the Becho variety retains its status as an independent sub-dialect and as a singleton.

Conclusion: divergences from traditional taxonomy

The main differences between these two taxonomies of the NW dialect network can be summarized in two points:

- 1) the relationship between the variety of Laxamula and that of Cxumari ;
- 2) the classification of the variety of Xaishi and that of Nak'ra.

Svan surname distribution, Ward's Method, 9 clusters

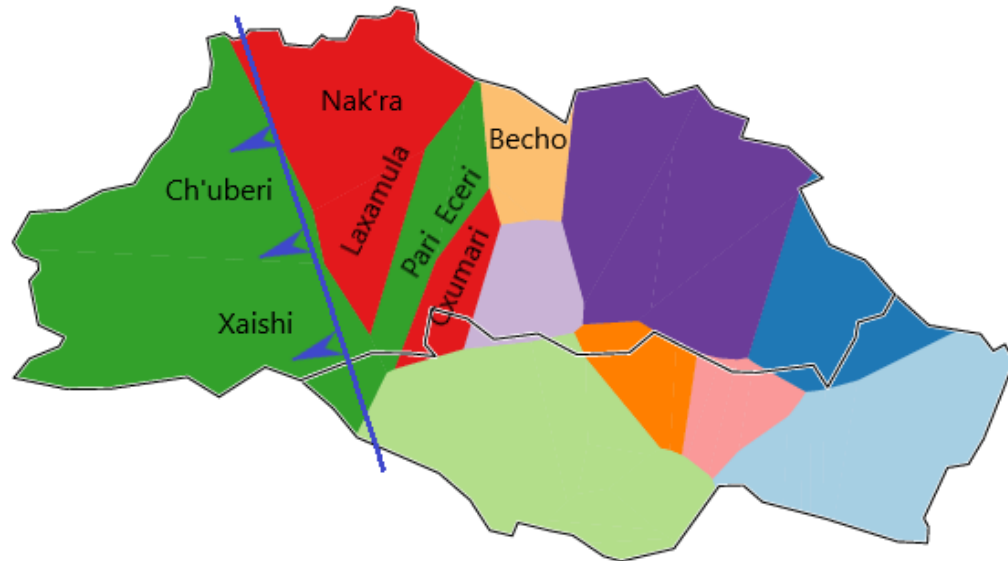


Conclusion: divergences from traditional taxonomy

The main differences between these two taxonomies of the NW dialect network can be summarized in two points:

- 1) the relationship between the variety of Laxamula and that of Cxumari ;
- 2) the classification of the variety of Xaishi and that of Nak'ra.

Phonology, Ward's Method, 10 clusters



- **Eceri** and **Pari**: central varieties
- **Cxumari**, **Laxamula** and **Nak'ra**: peripheral varieties
- **Ch'uberi** and **Xaishi** – settlements established in the second half of the 19th century (cf. Gelovani 2003): new varieties strongly influenced by central varieties

Conclusion: divergences from traditional taxonomy

- In our dialectometric results, the linguistic differences of the SW varieties have undergone a process of levelling.
- Traditionally, Svan linguists have classified Lent'ex into four distinct sub-dialects:
 - 1) the central sub-dialect is spoken in Lent'exi town and adjacent villages;
 - 2) the Xeled sub-dialect is used in the Xeledi valley, to the west of Lent'exi town;
 - 3) the Xopur sub-dialect is spoken south of Lent'exi town.
 - 4) the Rcxmelur sub-dialect is spoken in the area bordering Lechxumi.
- However, our dialectometric results suggest that the SW varieties have undergone a levelling of linguistic difference. We found an intermingling of varieties with relatively smaller linguistic distances. So, at the level of dialectal subdivisions, no sub-dialects were identified within the SW dialect network.

Conclusion: divergences from traditional taxonomy

- Since the 1980s, **Svaneti has witnessed significant eco-migration, mainly due to natural disasters** (e.g., avalanches in 1987, cf. Trier & Turashvili 2007: 9-10). **However**, with the stabilization of the socio-political landscape following the **Rose Revolution in 2003**, Upper Svaneti has experienced substantial growth in its **tourism industry**.
- **While villages in Upper Svaneti have been revitalized thanks to the tourism industry** (see Mosedale & Voll 2015; Applis 2019), the **tourism sector remains relatively underdeveloped in Lower Svaneti**. And villages in the peripheral areas of Lower Svaneti continue to lose their permanent inhabitants due to underdeveloped infrastructure. The population of Lower Svaneti fell from 11,227 in 1,989* to 3,800 in 2023**.

District	Région historique	Commune (<i>daba / temi</i>)	Recensement 2002	Recensement 2014
Basse Svanétie (District de Lențexi)	(Région de Lențexi)	Lențexi	889 (rural) + 1736 (urbain)	1523↓
		Rcxmeluri	811	443↓
		Xeledi	1 281	511↓
		Xopuri	513	280↓
Total			5 300	2 761↓
	(Région de Čoluri)	Čoluri	1 096	406↓
		Total	1 096	406↓
	(Région de Lařxeti)	Žaxunderi	1 384	686↓
		Čixareři	1 190	532↓
		Cana	88	0↓
Total			2 662	1 218↓
Total			8 988	4 386↓

(Sources: Georgian government population censuses of 2002 and 2014)

* [<https://www.geostat.ge/media/44559/I-tomi.pdf>] ** [<https://www.geostat.ge/ka/modules/categories/41/mosakhleoba>] (accessed may 17, 2023).

Conclusion: divergences from traditional taxonomy

- This **drastic depopulation** undoubtedly has an impact on the diversity of the dialect network in Lower Svaneti, particularly in the SW, where **Lent'exi town plays a central role**.
- It is very likely that the levelling out of linguistic differences in the area can be largely attributed to **sociolinguistic attrition and the centre-periphery imbalance** caused and aggravated by **demographic decline**.

District	Région historique	Commune (<i>daba / temi</i>)	Recensement 2002	Recensement 2014
Basse Svanétie (District de Lent'exi)	(Région de Lent'exi)	Lent'exi	889 (rural) + 1736 (urbain)	1523↓
		Rcxmeluri	811	443↓
		Xeledi	1 281	511↓
		Xopuri	513	280↓
	Total		5 300	2 761↓
	(Région de Čoluri)	Čoluri	1 096	406↓
	Total		1 096	406↓
	(Région de Lašxeti)	Žaxunderi	1 384	686↓
		Čixareši	1 190	532↓
		Cana	88	0↓
Total		2 662	1 218↓	
Total			8 988	4 386↓

(Sources: Georgian government population censuses of 2002 and 2014)

Conclusion: divergences from traditional taxonomy

- Firstly, almost every village in the SW experienced a **staggering 50% reduction in population in the first two decades of the 21st century**.
- Secondly, in addition to the emigrants who left Svaneti, **many Svans from the SW have chosen to settle or seek employment in the town of Lent'exi**.
- As a result, the **socio-economic disparity between the center and the periphery** has deepened, intensifying the **dependency of these peripheral areas on the center**. This collective dynamic has triggered a **reduction in diversity within the SW dialect network**.

District	Région historique	Commune (<i>daba / temi</i>)	Recensement 2002	Recensement 2014
Basse Svanétie (District de Lent'exi)	(Région de Lent'exi)	Lent'exi	889 (rural) + 1736 (urbain)	1523↓
		Rcxmeluri	811	443↓
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		Čixareši	1 190	532↓
		Cana	88	0↓
Total		2 662	1 218↓	
Total			8 988	4 386↓

(Sources: Georgian government population censuses of 2002 and 2014)

Conclusion

- A study based on the first-hand data from our recent fieldwork.
- A quantitative study of the Svan dialect network, encompassing phonological and morphological data, which proposes an alternative taxonomy of Svan dialects.



დიდი მადლობა!
იჟასუ ხარი!

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UNIVERSITÉ
PARIS 8
VINCENNES-SAINT-DENIS



THE SOUTH CAUCASIAN CHALK CIRCLE-3 (SCCC-3)

2 - 4

OCTOBER
2023



2 OCTOBER, MONDAY. G-106, ISU

Chair: Nino Doborjginidze, Tamar Makharoblidze

- 09.00 - 09.45 REGISTRATION
- 09.45 - 10.15 OPENING | GREETINGS
Rector of ISU, Professor Nino Doborjginidze, Professor Mzekala Shanidze
- 10.15 - 10.45 SIGN LANGUAGE RESEARCHES IN GEORGIA
Tamar Makharoblidze (*ISU*) & Ekaterine Nanitashvili (*ISU*)
- 10.45 - 11.15 SCOPE-MARKING IN GEORGIAN: AN INDIRECT DEPENDENCY APPROACH (ONLINE)
Tatiana Bondarenko (*Harvard*)
- 11.15 - 11.35 COFFEE BREAK
- 11.35 - 12.05 DIACHRONIC SYNTAX WITH LITTLE MEANS: AN ILLUSTRATIVE CASE FROM BASQUE
Ricardo Etxeparre (*CNRS, IKER*)
- 12.05 - 12.35 PERSON-CODING SUFFIXES AND THE SPREAD OF PERSON-BE IN GEORGIAN
Susana Bejar (*University of Toronto. Canada*) & Milan Rezac (*CNRS-IKER. France*)
- 12.35 - 13.00 PANEL INFORMATION
- 13.00 - 15.00 LUNCH
- 15.00 - 15.30 THE PROCESSING OF CAUSAL AND CONCESSIVE RELATIONS IN ARMENIAN, GEORGIAN AND RUSSIAN
Alice Blumenthal-Dramé (*University of Freiburg*) & Diana Forker (*University of Jena / Institute of Slavonic languages and Caucasus Studies*)
- 15.30 - 16.00 SOUTH CAUCASIAN CASE SYSTEMS REVISITED - A BASQUE PERSPECTIVE
Filip Larsson (*Lund University*)
- 16.00 - 16.20 COFFEE BREAK
- 16.20 - 17.20 TUTORIAL ON MORPHOLOGY
David Erschler (*Ben-Gurion University of the Negev*)
-

3 OCTOBER, TUESDAY. G-106, ISU

Chair: Tamar Makharoblidze, Lea Nash

- 09.30 - 10.00 THE DYNAMIC AREALITY OF COMPLEXITY IN LANGUAGES OF THE CAUCASUS (ONLINE)
Johanna Nichols (*University of California, Berkley*)
- 10.00 - 11.00 TUTORIAL ON LAZ
Balkiz Öztürk (*Bogazichi University*), Ömer Demirok (*Bogazichi University*) & Ömer Eren (*University of Chicago*)
- 11.00 - 11.20 COFFEE BREAK
- 11.20 - 11.50 WHEN DO COMPREHENDERS POSIT AGENTS? MAZE-TASK EVIDENCE FROM GEORGIAN
Steven Foley (*University of Southern California*), Lizi Baramidze (*Independent scholar*), Tamar Kalkhitashvili (*ISU*), Natia Poniava (*TSU*) & Irakli Salia (*TSU*)
- 11.50 - 12.20 UNIVERSAL DEPENDENCY SCHEME FOR GEORGIAN
Irina Lobzhanidze (*ISU*)
- 12.20 - 12.50 UNERGATIVE SUBJECTS MERGE BELOW VOICEP
Martha McGinnis (*University of Victoria*)
- 12.50 - 15.00 LUNCH
- 15.00 - 15.30 IS GEORGIAN AGREEMENT COMPETITION JUST A MATTER OF ALLOMORPHY AND ADJACENCY?
Daniel Harbour (*Queen Mary University of London*)
- 15.30 - 16.00 LEXICOGRAPHY – ONE OF THE MAJOR DRIVING FORCES IN THE STUDY OF MEANING
Tinatin Margalitadze (*ISU*)
- 16.00 - 16.20 COFFEE BREAK
- 16.20 - 16.50 NOVEL USES OF PLURAL MARKING IN GEORGIAN
Nino Amiridze (*TSU*), Zurab Baratashvili (*The Australian National University; Georgian National Academy of Sciences*) & Irakli Salia (*TSU*)
- 16.50 - 17.20 A BONUS ASPECTUAL VALUE: WHAT CAN GEORGIAN APPLICATIVES TEACH US?
Alexander Rostovtsev-Popiel (*JGU Mainz*), Maka Tetradze (*TSU*), Zurab Baratashvili (*The Australian National University; Georgian National Academy of Sciences*)
-

4 OCTOBER, WEDNESDAY. G-106, ISU

Chairs: Tamar Makharoblidze and Irina Lobzhanidze

- 09.30 - 10.00 FOCUS IN OV LANGUAGES: EASTERN ARMENIAN, GEORGIAN AND TURKISH
Stavros Skopeteas (*University of Göttingen*)
- 10.00 - 11.00 TUTORIAL ON PHONOLOGY
Ioana Chitoran (*Université Paris Cité*) & Caroline Crouch (*Rice University, USA*)
- 11.00 - 11.20 COFFEE BREAK
- 11.20 - 11.50 MINORITY LANGUAGES - MEGRELIAN: ANNOTATION OF MEGRELIAN TEXTS IN FLEX
Rusudan Gersamia (*ISU*) Irina Lobjanidze (*ISU*)
- 11.50 - 12.20 SVAN DIALECTOMETRY: APPLYING GABMAP TO SVAN PHONOLOGY AND INFLECTIONAL MORPHOLOGY (ONLINE)
Jean Leo Leonard (*Université Paul-Valéry Montpellier 3, France*) & Yidan She (*Université Paul-Valéry Montpellier 3, France*)
- 12.20 - 12.50 NARRATIVE SKILLS IN GEORGIAN-SPEAKING CHILDREN WITH ASD (AUTISM SPECTRUM DISORDER)
Maria Kobuladze (*BSU*), Mariam Atabagi (*Mosaic children development center*) & Dato Abashidze (*The Leibniz-Centre General Linguistics - ZAS*)
- 12.50 - 15.00 LUNCH
- 15.00 - 16.00 TUTORIAL ON SYNTAX
Lea Nash (*University Paris 8*) & Steven Foley (*University of South California, USA*)
- 16.00 - 16.20 COFFEE BREAK
- 16.20 - 16.50 CASE THEORY AND ARGUMENT STRUCTURE IN GEORGIAN
Svetlana Berikashvili (*ISU*)
- 16.50 - 17.20 REDUPLICATION ACROSS CATEGORIES: A FIRST LOOK AT NUMERALS AND VERBS IN KARATA
Jeremy Pasquereau (*CNRS & Nantes Université*)
- 17.20 - 17.50 PRE-RADICAL VOWELS AND THE CATEGORY OF VERSION IN THE KARTVELIAN LANGUAGES (ONLINE)
Kevin Tuite (*Université de Montréal*)
- 18.00 CLOSING THE CONFERENCE
-



POSTERS

NINO AMIRIDZE (*TSU*) & STEVEN FOLEY (*UNIVERSITY OF SOUTHERN CALIFORNIA*)
WHETHER VERBS ARE PLACEHELD OR PLACEHOLDED IN GEORGIAN: AN
ACCEPTABILITY STUDY

DATO ABASHIDZE (*THE LEIBNIZ-CENTRE GENERAL LINGUISTICS - ZAS*), RUSUDAN
ASATIANI (*TSU*) & ZURAB OKROPIRIDZE (*TSU*)
AMBIGUOUS PRONOUN PROCESSING IN MORPHOSYNTACTIC ERGATIVE
CONSTRUCTION: EYE-TRACKING FINDINGS FROM GEORGIAN

ALEXANDER ROSTOVTSSEV-POPIEL (*JGU MAINZ*)
IMPERFECTIVES IN MEGRELIAN: TOWARD THE UNDERSTANDING OF VERBAL ASPECT
AS A NON-BINARY CATEGORY

MARIAM ORKODASHVILI (*GAU*)
EVIDENTIALITY IN ENGLISH AND GEORGIAN

DATO ABASHIDZE (*THE LEIBNIZ-CENTRE GENERAL LINGUISTICS - ZAS*), MARIA
KOBULADZE (*BSU*), ANGELA SCHMIDT (*ZAS, BERLIN*)
THE ROLE OF SPLIT ERGATIVITY IN ANTICIPATORY LANGUAGE PROCESSING: EVIDENCE
FROM EYE-TRACKING

DIANA FORKER (*UNIVERSITY OF JENA*) & ALICE BLUMENTHAL-DRAMÉ (*UNIVERSITY OF
FREIBURG*)
APPROACHING WORD ORDER IN GEORGIAN, ARMENIAN AND RUSSIAN

SCCC3 Fall School for Linguists

DAY 1: OCTOBER 5, 2023. G-106, ISU

10.00 - 12.00	GUASTI - LANGUAGE DEVELOPMENT
12.00 - 12.20	BREAK
12.20 - 14.20	CECCHETTO & VIGANÒ – NEUROLINGUISTICS
14.20 - 16.00	LUNCH
16.00 - 18.00	POLINSKY & MEIR - TUTORIAL ON HERITAGE LANGUAGES AND GRAMMATICAL ASPECTS OF BILINGUALISM

DAY 2: OCTOBER 6, 2023. T-102 ISU

10.00 - 12.00	SALLANDRE - TYPOLOGY OF SIGN LANGUAGES
12.00 - 12.20	BREAK
12.20 - 14.20	GUASTI - LANGUAGE DEVELOPMENT
14.20 - 16.00	LUNCH
16.00 - 18.00	LAHROUCHI - MORPHOLOGY

DAY 3: OCTOBER 7, 2023. T-102 ISU

10.00 - 12.00	LAHROUCHI - MORPHOLOGY
12.00 - 12.20	BREAK
12.20 - 14.20	CECCHETTO & VIGANÒ - NEUROLINGUISTICS
14.20 - 16.00	LUNCH
16.00 - 18.00	SALLANDRE - TYPOLOGY OF SIGN LANGUAGES

DAY 4: OCTOBER 8, 2023. G-106, ISU

10.00 - 12.00	CECCHETTO & VIGANÒ - NEUROLINGUISTICS
12.00 - 12.20	BREAK
12.20 - 14.20	GUASTI - LANGUAGE DEVELOPMENT
14.20 - 16.00	LUNCH
16.00 - 18.00	SALLANDRE - TYPOLOGY OF SIGN LANGUAGES

DAY 5: OCTOBER 9, 2023. G-106, ISU

10.00 - 12.00	LAHROUCHI - MORPHOLOGY
12.00 - 12.20	BREAK
12.20 - 14.20	CLOSING

SCCC-3



Dates: 2-4 October, 2023 Location: Ilia State University, Kakutsa Cholokashvili Avenue N3/5 Tbilisi, Georgia
