

# Expecting the unexpected

(Re)discovered variation in Albanian phonetics

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— IPS Kolloquium, 6 May 2021

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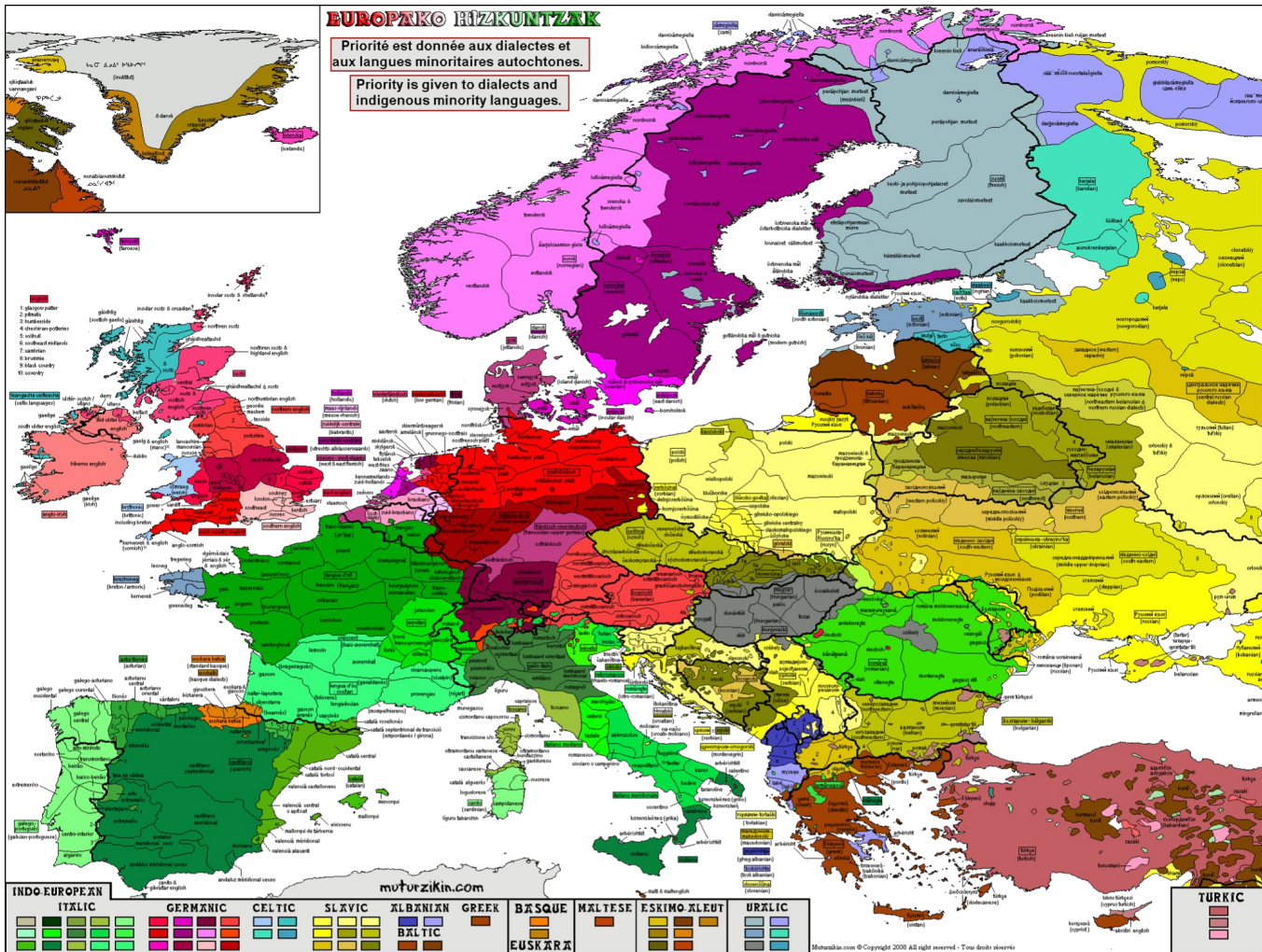
# Linguistic diversity and variation



# EUROPAKO HIZKUNTZAK

Priorité est donnée aux dialectes et aux langues minoritaires autochtones.

Priority is given to dialects and indigenous minority languages.



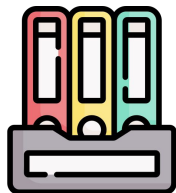
INDO-EUROPEAN

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ITALIC				GERMANIC				CELTIC		SLAVIC		ALBANIAN		GREEK		BASQUE		MALTESE		ESKIMO-ALEUT		URALIC		TURKIC	
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# Documentary and descriptive linguistics



Language documentation



Language description

# **International Phonetic Association**

# Illustrations of the IPA



The *Phonetic Teacher's Association* is born in France.

*Dhi Fonètik Tîtcer*  
Paul Passy



1886



The *Phonetic Teacher's Association* is born in France.

*Dhi Fonètik Tîcər*  
Paul Passy



1887

1886



Articles about “general phonetics”.

*dhə fɔnetik tîcər*

The *Phonetic Teacher's Association* is born in France.

*Dhi Fonètik Tîtcər*  
Paul Passy

First version of the *International phonetic alphabet*.

*ǎə fonetik tîtcər*



1887



1886

1888



Articles about “general phonetics”.

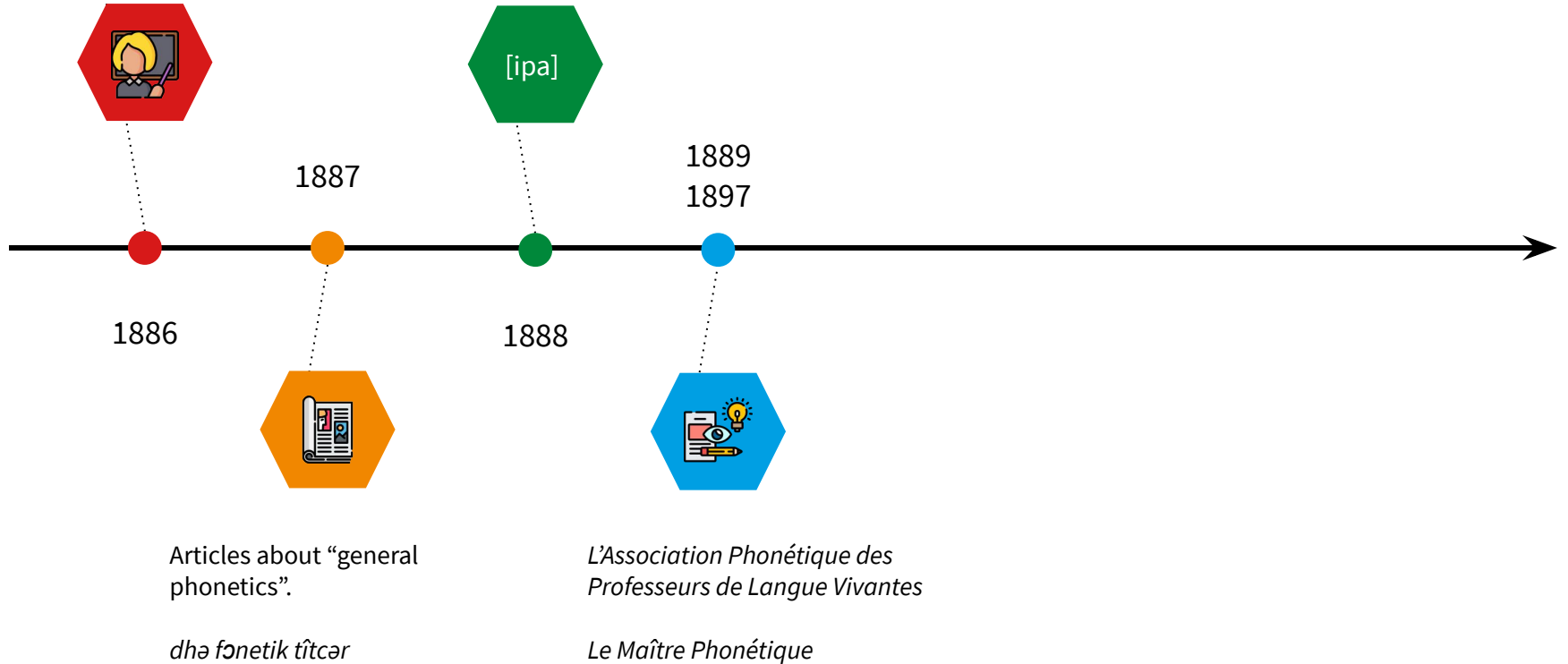
*dhə fɔnetik tîtcər*

The *Phonetic Teacher's Association* is born in France.

*Dhi Fonètik Tîtcər*  
Paul Passy

First version of the *International phonetic alphabet*.

*ðə fonetik tîtcər*

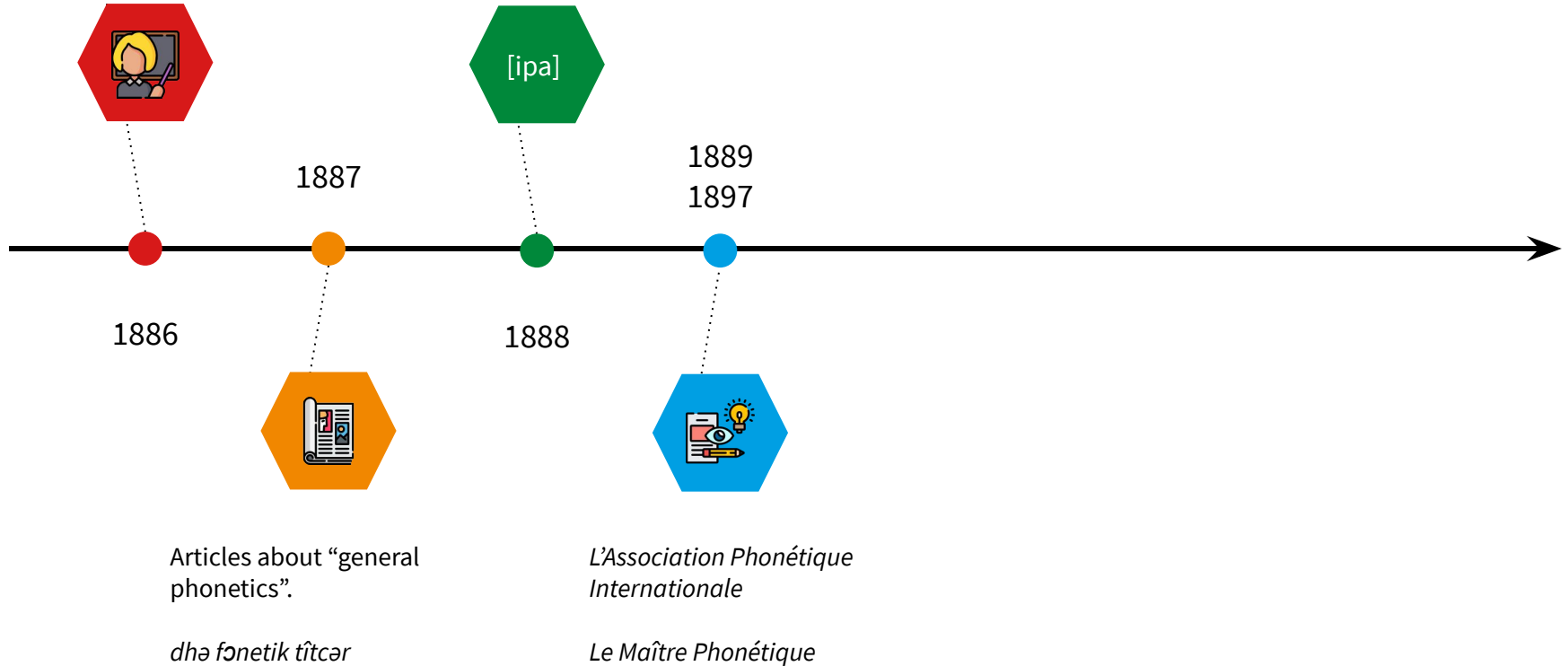


The *Phonetic Teacher's Association* is born in France.

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First version of the *International phonetic alphabet*.

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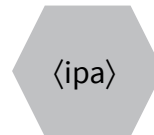
First version of the *International phonetic alphabet*.

*ðə fonetik tîtcər*



1889  
1897

*The Journal of the International Phonetic Association*.



1969  
1971

1886

Articles about “general phonetics”.

*dhə fɔnetik tîtcər*



1888

*L'Association Phonétique Internationale*

*Le Maître Phonétique*



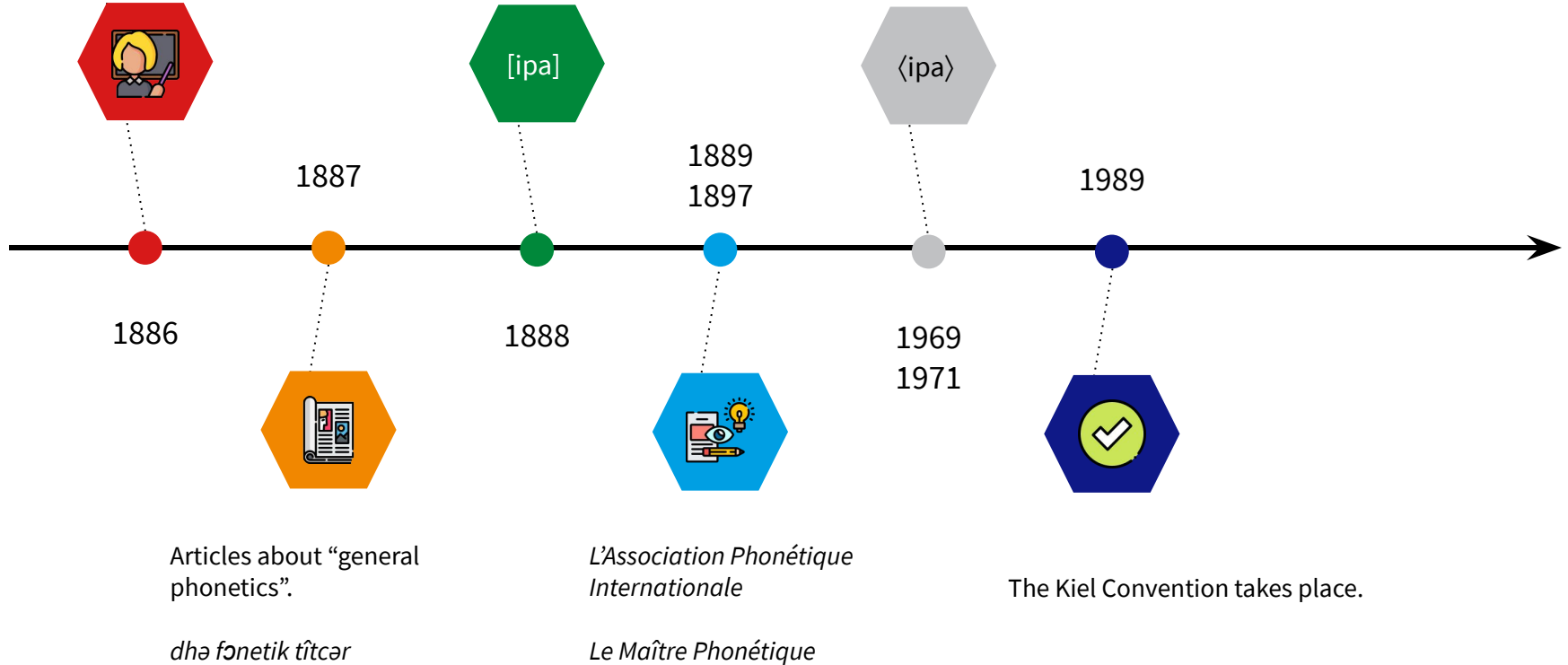
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Paul Passy

First version of the *International phonetic alphabet*.

*ðə fonetik tîtcer*

*The Journal of the International Phonetic Association*.



# Principles of the IPA

## Phonemic

/b/

[β] - [b]

## Typographical

/rouver/

/ɾouvr̩/

**Albanian**

**Shqip**



# Albanian



# After WWII



# Socio-political context



# Spacio-urban policies



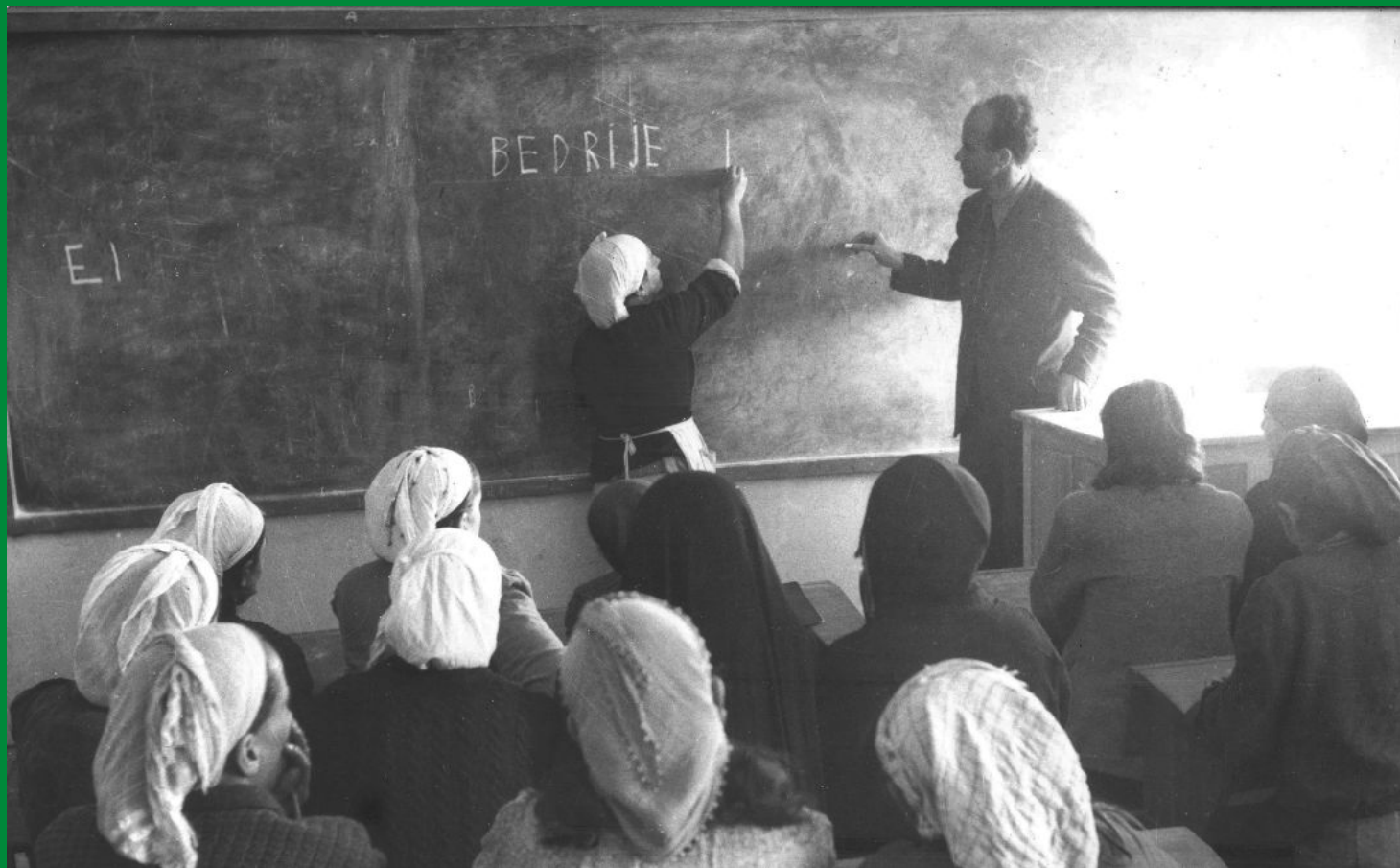
# Tirana up to the 1970s



# Congress of Orthography (1972)



# Literacy for All



# July 1990 - German Embassy





# Tirana Now

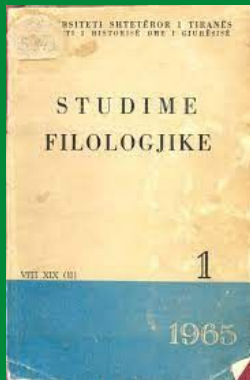


# Pazari i Ri (“Viktualien Markt”), 1959 & 2017

*Albanien. Tirana. Markt.  
Skypnië. Pazari i Tiranës.*



# Phonetics/Phonology in Albanology



20 articles since 1960

JPhon	0
LabPhon	0
JASA	0

- All impressionistic
- Standard normative
- Historical grammar
- Dialectology

## That said ...

- Grammatical descriptions of all varieties of two main dialects
- Review here previous peer-reviewed work

# Northern Tosk Toskërishtja veriore



# Methods



5 speakers of Northern Tosk (+1 excluded)



Word list + Sentences + Era e Veriut dhe Dielli ('The North Wind and the Sun')










Auditory impressions

Acoustic measurements

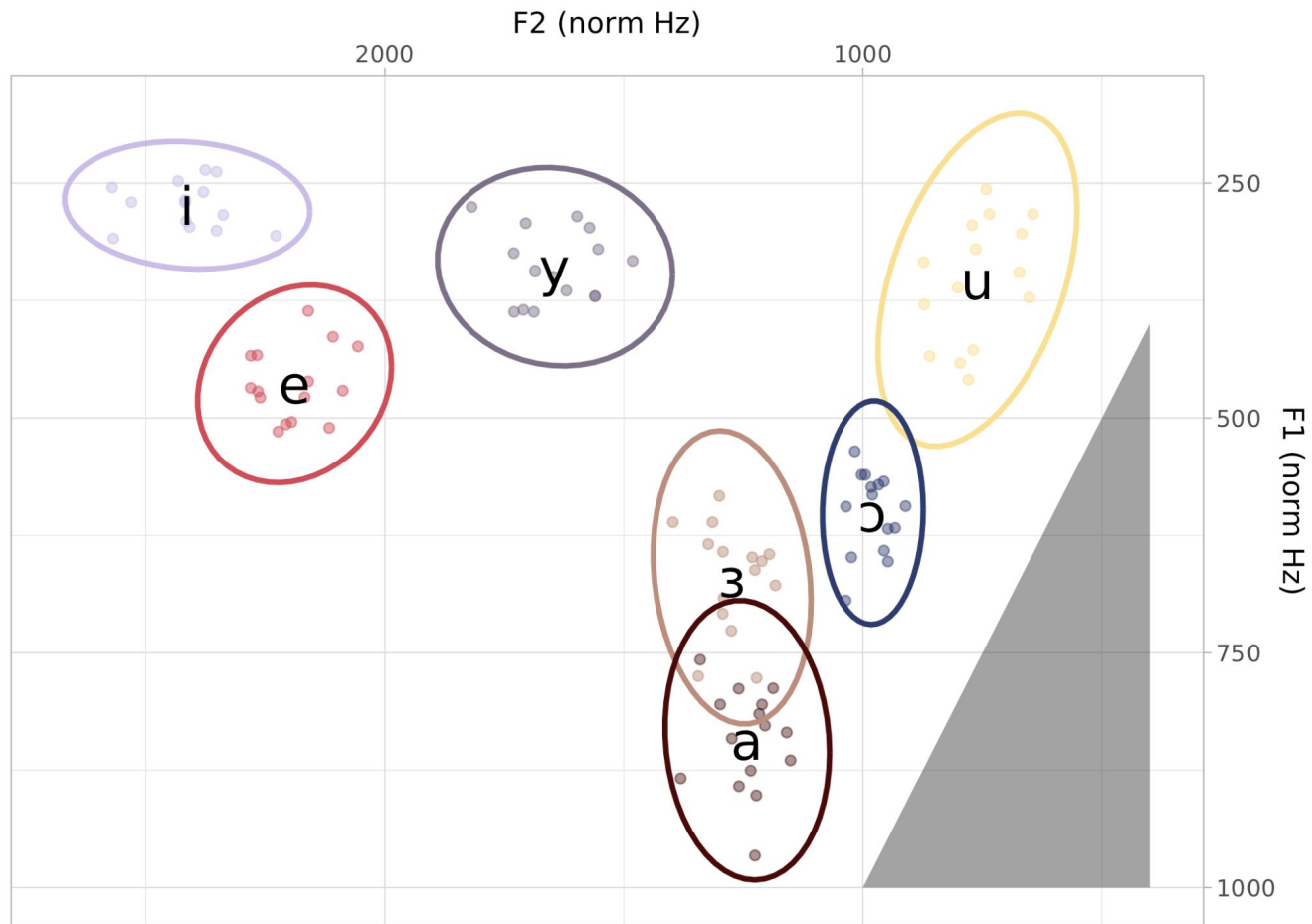
Palatography + Labiography + UTI (1 speaker)

# Vowels

i	/pikɜ/	<i>pikë</i>	‘drop, dot’	
y	/pykɜ/	<i>pykë</i>	‘head (of a hammer)’	
u	/puɾɔ/	<i>puro</i>	‘cigar’	
e	/peɾi/	<i>peri</i>	‘thread’	
ɜ	/pɜɾ/	<i>për</i>	‘for’	
ɔ	/pɔɾ/	<i>por</i>	‘but’	
a	/paɾa/	<i>para</i>	‘before’	

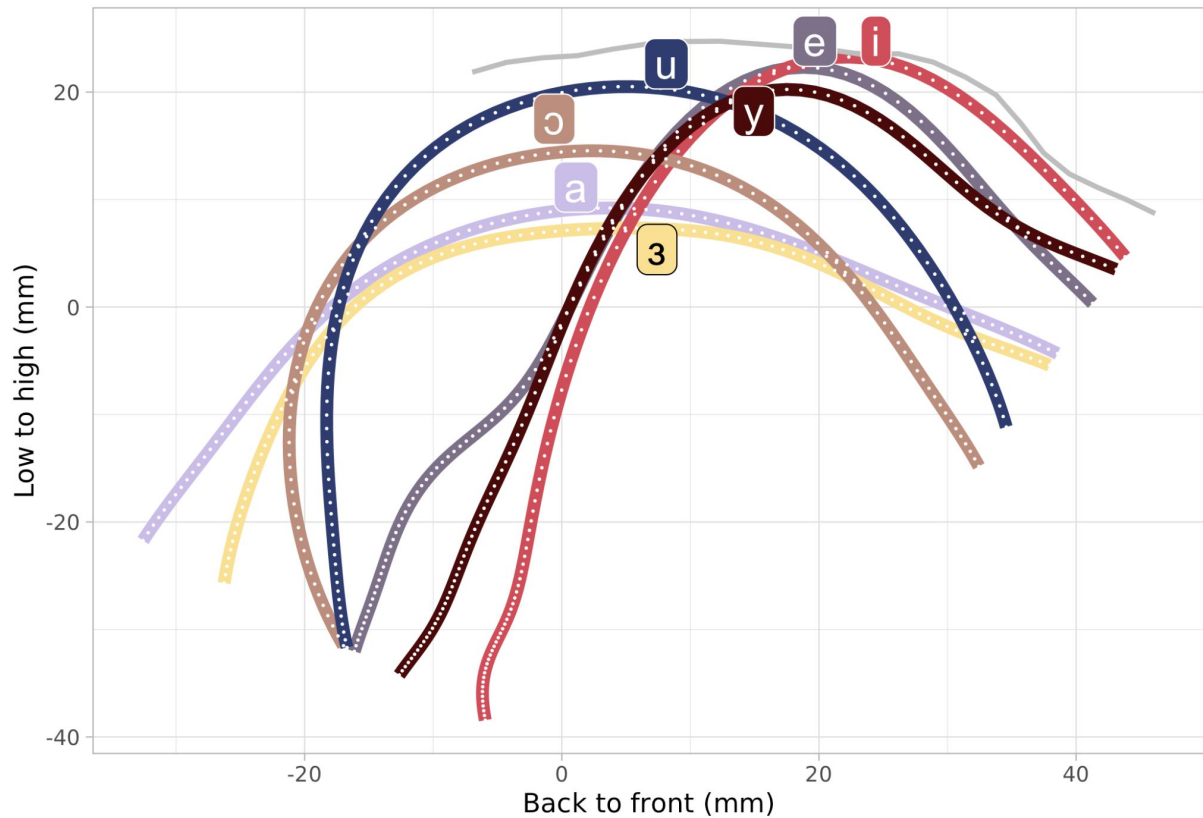
(partly based on Beci 2004)

# Vowels





# Vowels



Polar GAM smoothing,  $k = 8$

# Vowels

/i/



/ɔ/



/e/



/u/



/a/



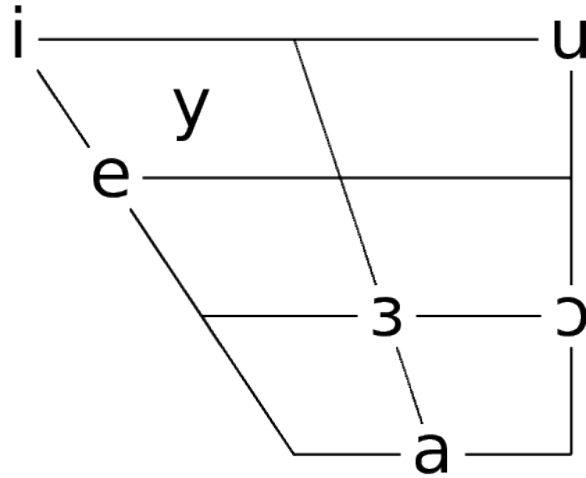
/ɜ/



/y/



# Vowels

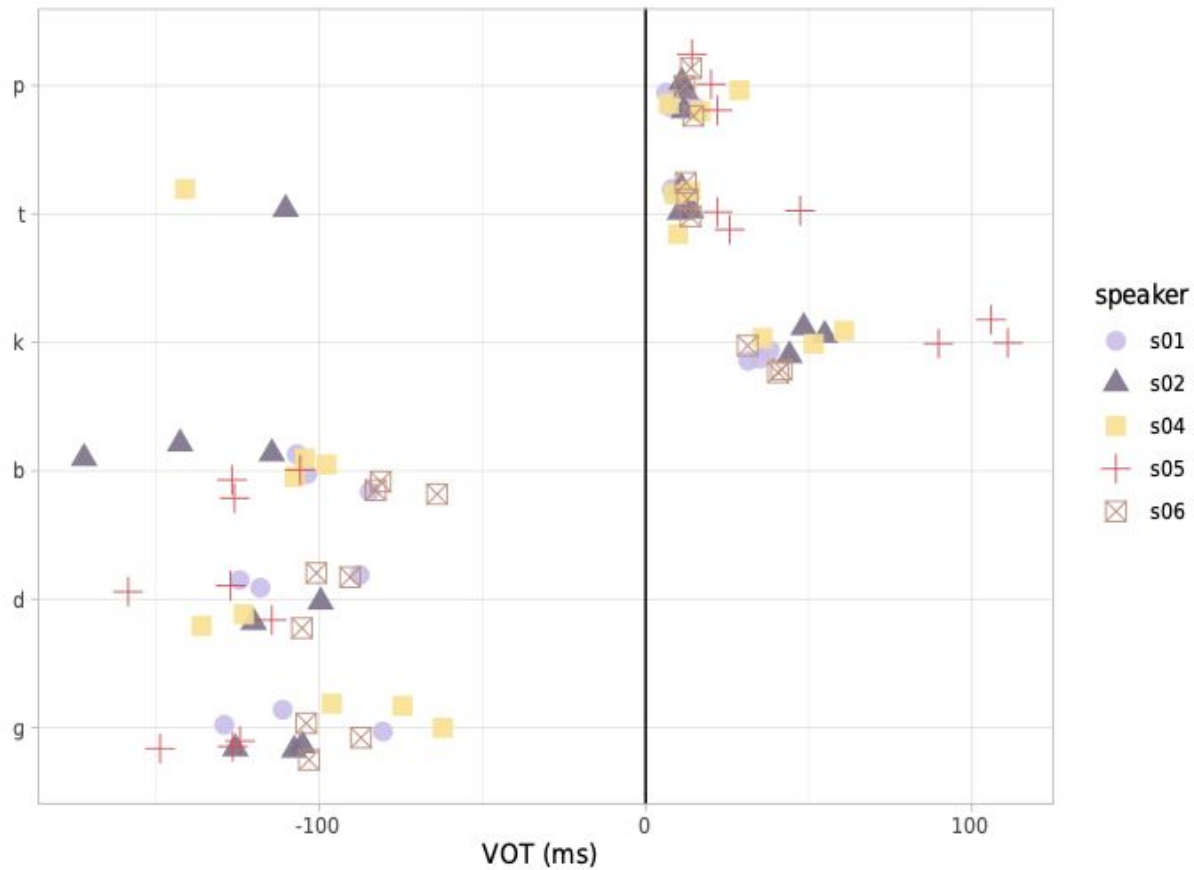


- Unstressed vowels (e.g. Belluscio 2014)
- Vowel sequences (e.g. Beci 2002)

# Consonants

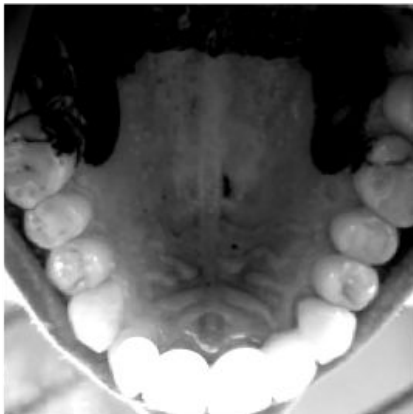
	Bilabial	Labio-dental	Dental	Alveolar	Post-alveolar		Retroflex	Palatal	Velar	Glottal
					Apical	Laminal				
<b>Plosive</b>	p b			t d					k g	
<b>Affricate</b>				ts dz	tʃ dʒ	tʃ̺ dʒ̺				
<b>Nasal</b>	m			n				ɲ		
<b>Trill</b>				r						
<b>Flap</b>							ɾ			
<b>Fricative</b>		f v	θ ð	s z		ʃ ʒ				h
<b>Approx.</b>								j		
<b>Lateral</b>			ɬ	l						

# Consonants

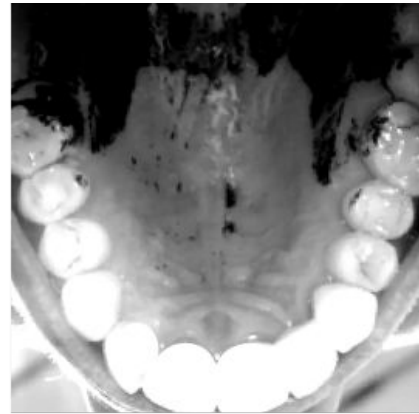


# Consonants

*/k/*



*/g/*

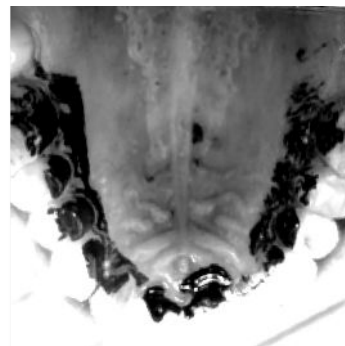


# Consonants

/t/



/d/



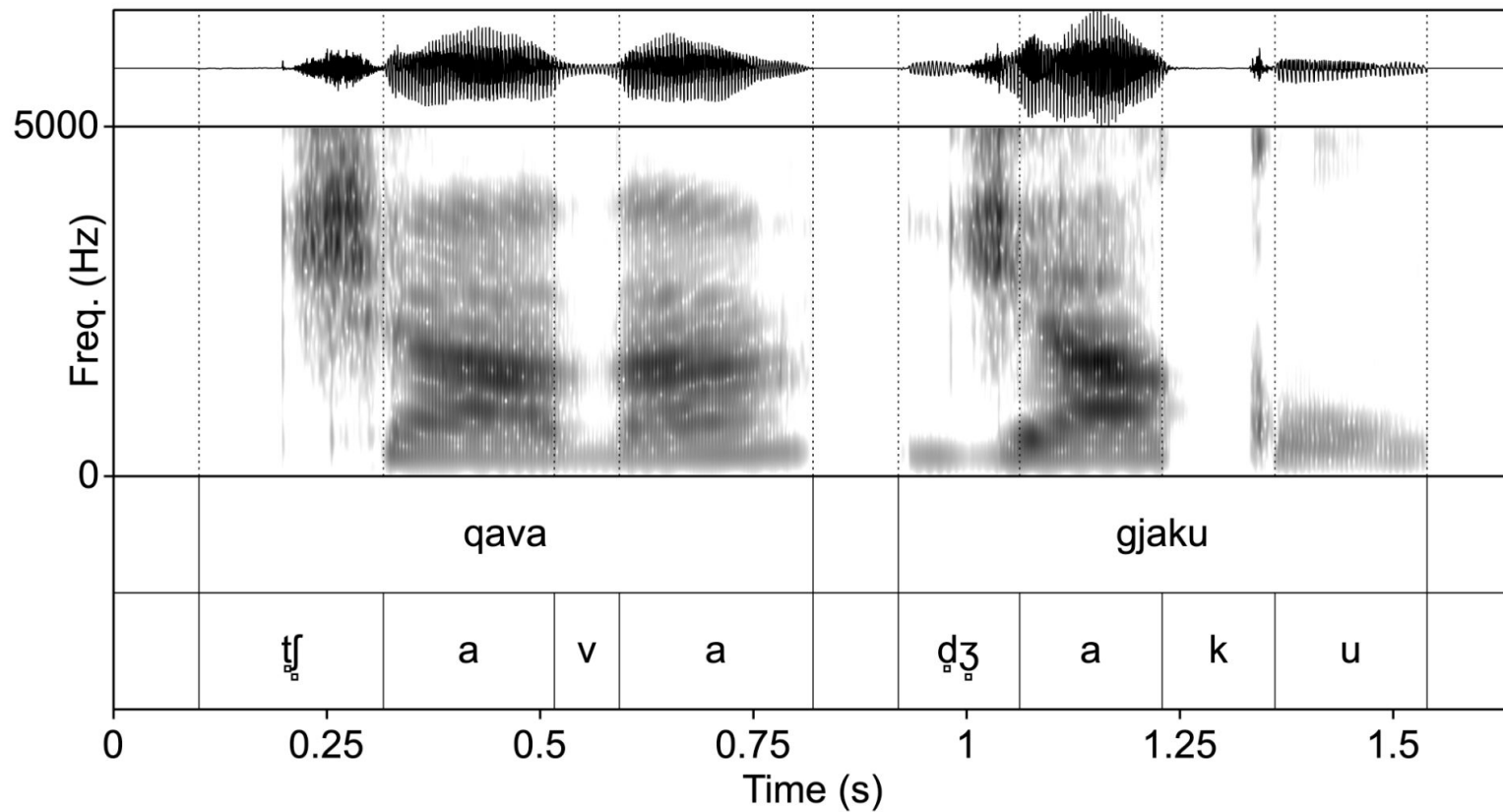
/ts/



/dz/



# Consonants



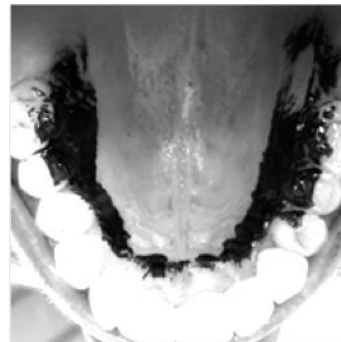


# Consonants

/tʃ/



/dʒ/



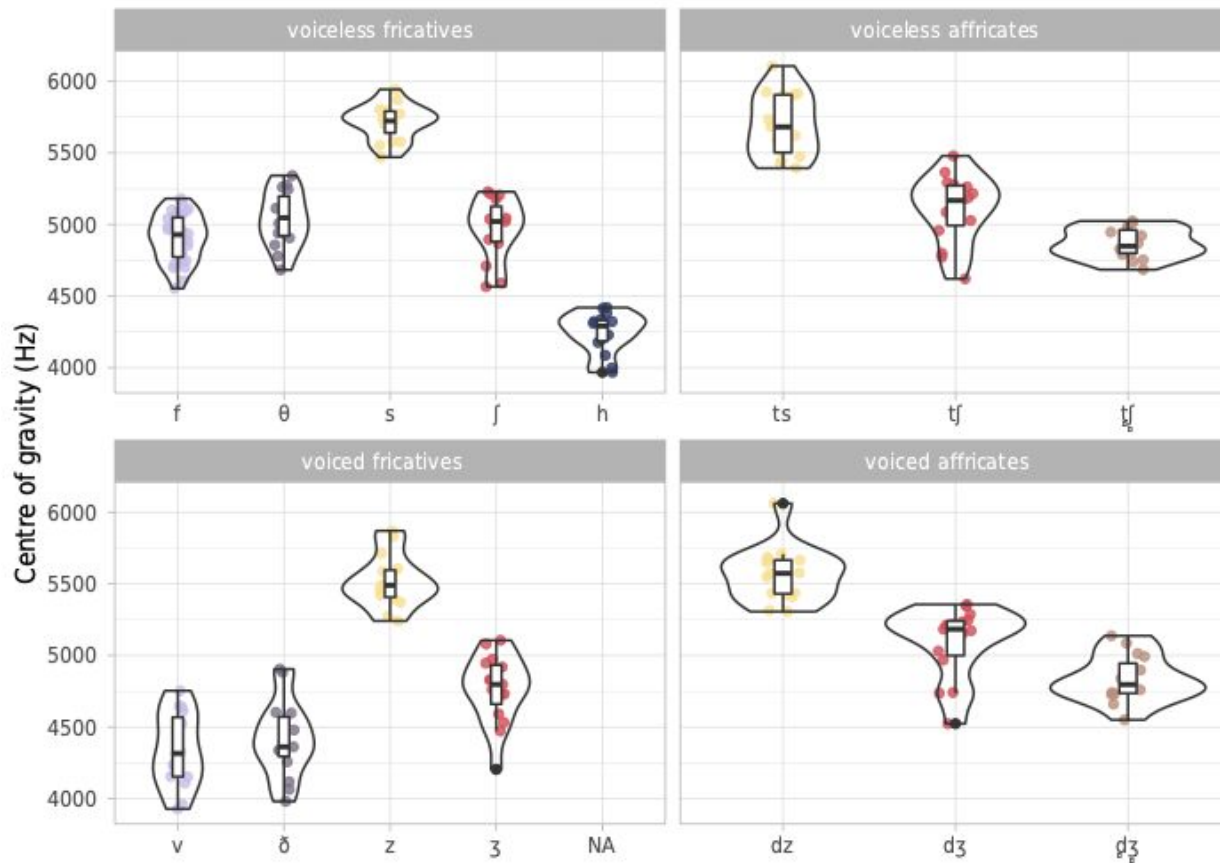
/tʃ/



/dʒ/



# Consonants



# Consonants

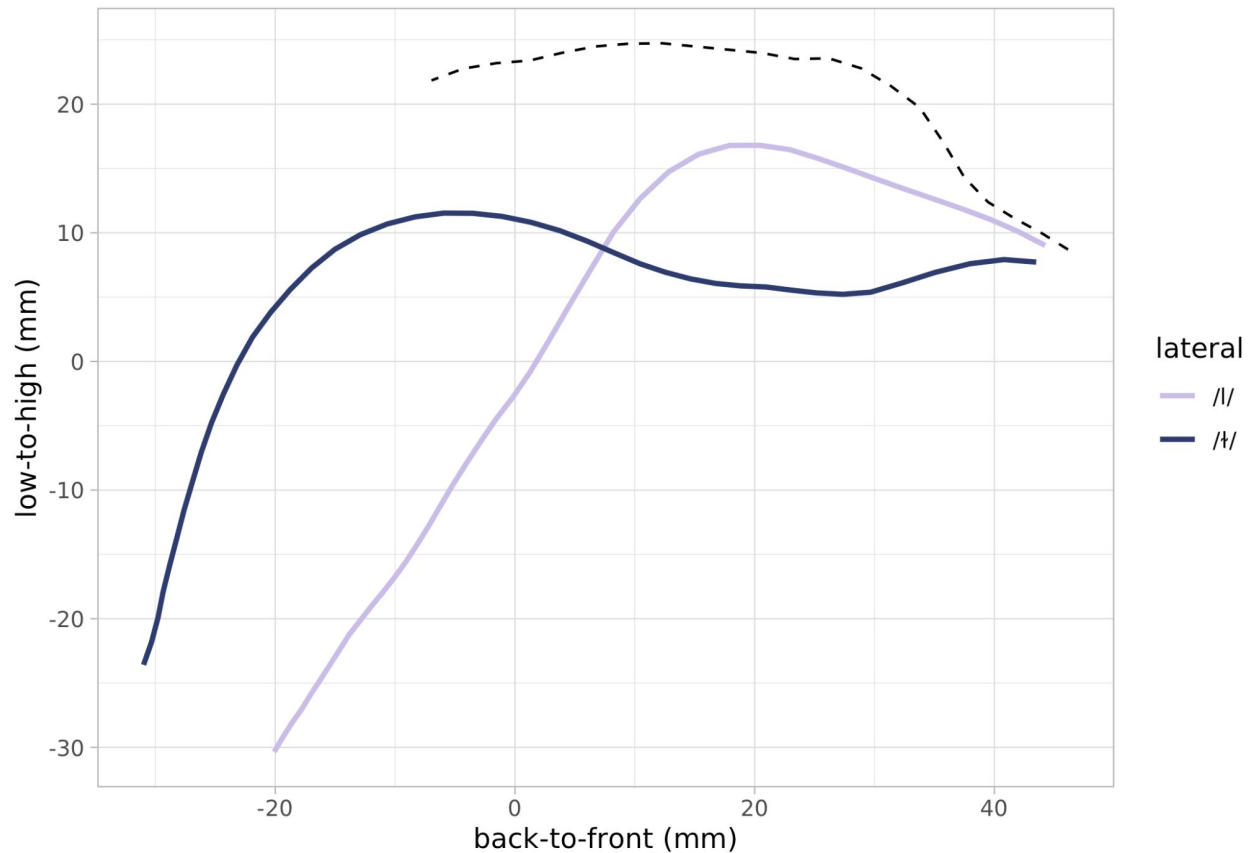
//



/r/



# Consonants



Rolling mean filter, order = 5

# Consonants

- Northern Tosk contrasts two rhotics: ⟨r⟩ and ⟨rr⟩
- In our data, ⟨rr⟩ was all but invariably an alveolar trill [r]
- Whereas ⟨r⟩ showed a great deal of variation (see also Belluscio 2014)
  - E.g. retroflex flap [ɽ], retroflex approximant [ɻ], (post-)alveolar approximant [ɹ]
  - Generally speaking, [ɻ] was found in the coda, with [ɽ] elsewhere
  - However, with limited data, we cannot yet make any definitive generalisations

**One more thing...**

**Table 3** Coverage by category for *JPhon*.

Consonant categories	Coverage	Vowel categories	Coverage	Suprasegmental categories	Coverage
VOT	30%	Formants	23%	Stress	10%
Closure duration	20%	Dispersion	6%	Length	5%
Voicing	20%	Additional features	25%	Tone or pitch accent	17%
Formant transitions	5%	Duration	23%	Intonation	8%
Fricative spectra	5%	Intensity	6%	Interactions	13%
Fricative duration	3%	Interactions	5%	Other	6%
Burst	9%	Other	20%		
Preaspiration	2%				
Sonorants	7%				
Other	27%				

**Table 1** Phonetic categories surveyed.

Consonants	Vowels	Suprasegmentals
✔ Voice Onset Time (VOT) Closure duration	✔ Formants Dispersion	✔ Stress
✔ Voicing/Voicing duration Formant transitions (place)	✔ Vowel features Duration	✔ Tone/pitch accent ✔ Intonation
✔ Fricative spectrum Fricative duration Burst characteristics	Intensity Interactions ✔ Other (labiography, UTI)	Interactions ✔ Other (phonotactics)
✔ Sonorants		
✔ Other (palatography, UTI)		



# Future work

- IPA Illustration of Gheg and other varieties of Albanian
- More extensive investigation of Albanian acoustics and articulation
  - Rhotics
  - Affricates
  - /ʒ/
- Perceptual studies
- Sociophonetics

eṛa e veṛiut ḏe dieḏi pɔ ziheḑin se kuḑ iḑte mɔ i fɔṛtɔ |  
kuḑ aty kalɔi nɔ uḏɔtaṛ tṣɔ kiḑte veḑuṛ nɔ paḗtɔ tɔ ngrɔhtɔ ||

ata ṛanɔ dakɔṛd tṣɔ kuḑ do ta bɔnte uḏɔtaṛin tɔ hiṭṣte paḗtɔn mɔ pɔṛpaṛa do tɔ tṣuḑej  
mɔ i fɔṛti ||

fiḗ pas kɔsaj |

eṛa e veṛiut fiḗi tɔ ḑṛynte me ḑziḑɔ futṣṣinɔ e saj |  
pɔṛ sa mɔ ḑumɔ tṣɔ ḑṛynte atṣmɔ ḑumɔ kapeḑ uḏɔtaṛi pas paḗtɔs sɔ tij |  
deṛisa mɔ nɔ fund eṛa e veṛiut u doṛɔzua ||

pastaj dieḏi lɔɔi rezet e tij tɔ ngrɔhta |  
ḏe meṛzheṛɔ uḏɔtaṛi e hoṭṣṣi paḗtɔn ||

e kɔḑtu eṛa e veṛiut u deṛyṛua tɔ pṛanɔnte tṣɔ dieḏi iḑte mɔ i fɔṛtɔ se aḑ

**Thanks!**

**Faleminderit!**

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