Towards a description of the rhotic sounds of Northern Tosk Albanian

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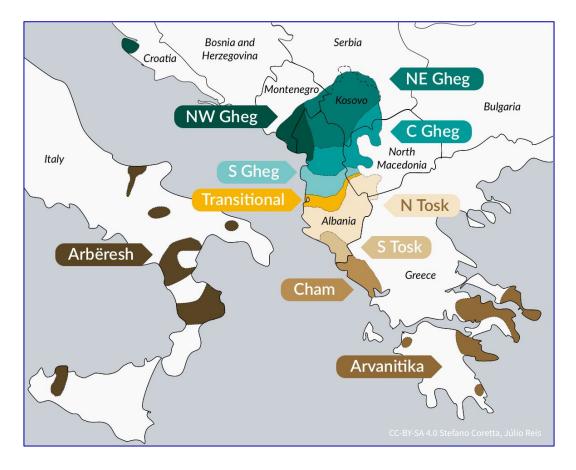
Established by the European Commission

Introduction

- Preliminary acoustic data for the rhotics of Northern Tosk Albanian
 - Intended to inform a more targeted future study
- Traditionally described as having two phonemes, written **(r)** and **(rr)**
 - We found that **(rr)** was all but invariably an alveolar trill
 - Whereas **(r)** had a range of non-trill realisations
- Current data from a wider project which includes an IPA Illustration

https://osf.io/mb2hg/

Albanian and (Northern) Tosk



Consonant phoneme inventory

	Dilohial	Labio-	Dentel	Alucelon	Post-alveolar		Detrofley	Deletel	Malar	Clattal
	Bilabial	dental	Dental	Alveolar	Apical	Laminal	Retroflex	Palatal	Velar	Glottal
Plosive	рb			t d					k g	
Affricate				ts dz	t∫dʒ	tí d3				
Nasal	m			n				'n		
Trill				r						
Flap							r			
Fricative		fv	θð	S Z		∫3				h
Glide								Ĵ		
Lateral			[¥	Į						

Rhotics of Northern Tosk

• Traditionally described as having two rhotic phonemes (e.g. Gjinari et al. 2007)

$\langle \mathbf{r} \rangle$	rashë	'I fell'	45
	peri	'thread'	
	puro	ʻcigar'	
	por	'but'	
〈rr〉	rrapi	'oak tree'	
〈rr 〉	rrapi korrik	'oak tree' 'July'	
〈rr〉			

• However, previous work does not agree on their phonetic realisation

Rhotics of Northern Tosk

- Simpson (1996) and Dodi (2004):
 - Normative pronunciation for **(r)** is an alveolar tap **[r]**
 - For **(rr)**, this is an alveolar trill **[r]**
- Belluscio (1994, 2014), Jubani (2005), Hysenaj (2009):
 - Tosk speakers tend to realise *both* either as a retroflex flap [r] or as an alveolar approximant [J]
- Belluscio (2014) also describes (r) as tending to be realised as tapped/flapped pre-consonantally and as [J] elsewhere
- We are not aware, however, of any discussion of voicing

Research question

What are the **place** and **manner** of articulation of the

consonants **(r)** and **(rr)** in Northern Tosk Albanian?

Methodology

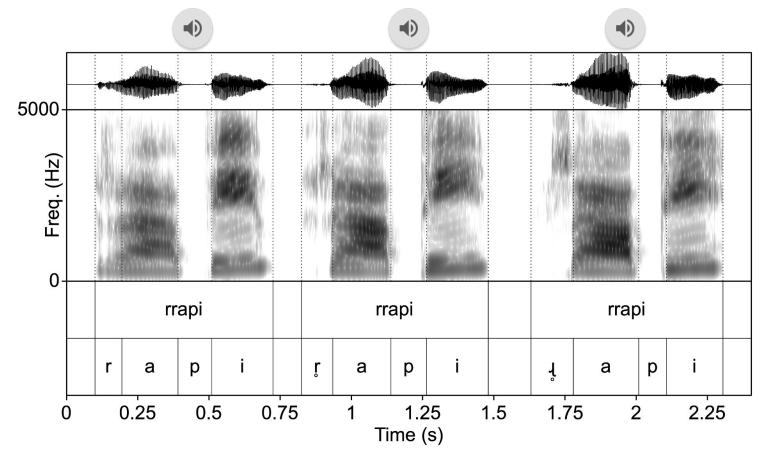
- 5 native speakers of Northern Tosk (3F, 2M; aged 25–33)
 - Word list, sentence list, short text
 - *

- Elicited items also included words without target consonants
- Target consonants coded for place and manner by 3 analysts based on visual
 - inspection of the spectrogram and waveform and auditory judgements

<rr>>esults

- In our data, **(rr)** was all but invariably a voiced alveolar trill **[r]**
 - There were two instances of devoicing
 - One of which, also shows a more approximant-like realisation

<rr>>esults



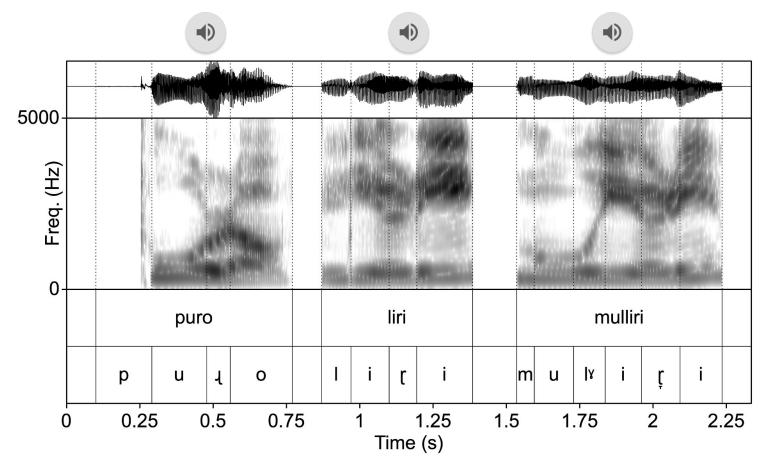
<rr>esults

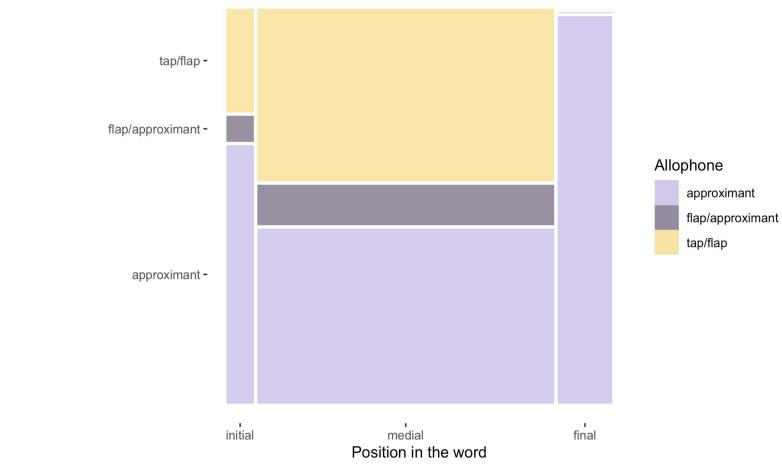
- It has been reported that the opposition between <rr>
 and <r>
 is becoming neutralised among younger speakers (Jubani 2005; Hysenaj 2009; Jubani-Bengu 2012; Belluscio 2016)
 - We do not see this in our data
 - This may in part be due to a task effect
 - Recall that (rr) is prescriptively a trill and distinct from (r)
 - However, this could also be an artefact of an unbalanced corpus

<r>esults

- **(r)** showed a great deal of variation (see also e.g. Belluscio 2014)
 - Retroflex flap [r]
 - Retroflex approximant [1]
 - (Post-)alveolar approximant [J]
 - Alveolar tap [r]

<r><r><r><r><r><r></r></r>





<r>esults

- Despite the variation, there was a general trend towards complementary distribution:
 - **[r]** was found mostly in the onset
 - [1] tended to be appear in the coda
 - However, in a small number of repetitions, word-medial onset and word-medial

coda **(r)** were realised as **[1]** and **[r]** respectively

<r>esults

- A further tendency observed was for an alveolar tap [r] to occur before [i]
 - Cf. a similar observation by Myers (2015) regarding the liquid in Luganda
- [r] was also sometimes encountered directly preceding [d]
 - This could be interpreted as assimilation of a sort
- No significant degree of devoicing was noted for **<r**>

Summary

- We found that the traditional contrast between **(r)** and **(rr)** was maintained
- **(rr)** showed little to no variation, being almost variably a trill
- In contrast, (r) showed much more variation, with a tendency for [r] in the onset and [1] in the coda
- However, with such limited data/contexts (especially for **<rr**>), we cannot take any firm conclusions or definitive generalisation
- Nevertheless, the present results with help inform future work

Ongoing and future work

- More extensive investigation of rhotics in Northern Tosk
 - Inclusion of acoustic **analysis** (e.g. formant measurements)
 - Collect **articulatory** (e.g. UTI) as well as acoustic data
- Similarly for other aspects of phonetics (e.g. affricates)
- Branch out to other varieties of Albanian
 - IPA Illustration of Gheg
 - Perceptual studies
 - Sociolinguistic aspects

Faleminde[r~r]it! Thank you!