Phonetics Colloquium at UdS

on Wednesday, 14 January 2026, 12:00 **(unusual time)**

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Velar ~ uvular contrast in terms of the Laryngeal Articulator Model

The study investigates the implementation of contrast between velar and uvular consonants in four typologically non-related languages in which velar and uvular stops are phonemes: Alutor (Chukotko-Kamchatkan), Chukchi (Chukotko-Kamchatkan), Mehweb (East Caucasian), Shughni (Southeastern Iranian < Indo-European). Following Laryngeal Articulator Model (LAM, Esling, 2005; Esling et al., 2019), clear differences in coarticulatory processes are expected to occur in velar and uvular environments due to the retraction of the tongue in the production of the latter; uvulars in the languages in which pharyngeal/epilaryngeal consonants are present (Alutor and Mehweb) are expected to share the common properties and behave as post-velars in contrast to the inventories without epilaryngeals (Chukchi and Shughni). An acoustic study included the properties of the target consonants connected to the place (spectral moments and spectral peaks) and manner of articulation (durations of subsegmental parts, change of intensity across the sound), static and dynamic properties of vowels. Random Forest classification tool was used to confirm the results.

Results suggest that velars and uvulars are differentiated based on coarticulatory patterns and manner cues; whether epilaryngeals are present or absent in an inventory does not seem to be the sole explanation of this change. Rather, the typological relationship between languages (Alutor and Chukchi) seems to trigger the patterning.

Esling, J. H. (2005). There are no back vowels: The larygeal articulator model. Canadian Journal of Linguistics/Revue canadienne de linguistique, 50(1-4), 13–44.

Esling, J. H., Moisik, S. R., Benner, A., & Crevier-Buchman, L. (2019). Voice quality: The Laryngeal Articulator Model. Cambridge University Press.