

## The phonology of pharyngeals

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A phonologically pharyngeal segment is a consonant or vowel which is implemented in the phonetics with supraglottal articulation in the postvelar region of the vocal tract, with the exception of segments that lack that articulation but whose phonological patterning indicates they are phonologically pharyngeal (Bessell & Czaykowska-Higgins 1991, McCarthy 1994). Pharyngeals have either primary postvelar articulation, as do, e.g., ʁ and ʕ, in which case they are ‘guttural’, or secondary postvelar articulation, as do, e.g., d (IPA d ʕ ) and ε, in which case they are ‘retracted’/‘emphatic’ if they are consonants, and ‘atr’/‘rtr’ if they are vowels. Research on the phonology of pharyngeals has focused on phonological inventories, representation, distribution, postvelar harmony, first language acquisition, sociophonology, language disorders, and historical development. Data have been drawn from languages from the Afro-Asiatic, Austro-Asiatic, Austronesian, Eskimo-Aleut, Indo-European, Kartvelian, Khoisan, Macro-Ge, Na-Dene, North Caucasian, Niger-Congo, Nilo-Saharan, Salishan, Sin-Tibetan, and Wakashan language families. We survey the research, and compare recent frameworks for understanding postvelar phonology (Watson 2002, Shahin 2002, Przewdziecki 2005, Bin-Muqbil 2006, Bellem 2007). Areas in need of further attention are identified, including the consonantal vs. vocalic nature of pharyngeal features and related predictions regarding phonological systems (Shahin 2002); phonetics-phonology mismatch, in light of the clarifications since Esling (1996) regarding the phonetics of pharyngeal (epiglottal) articulation; and phonologisation and gradience (Meyers 2000), uvular-to-pharyngeal shifts in particular (Jacobsen 1969, Carlson & Esling 2003, Blevins 2007, Flynn & Fulop 2005, Shahin forthcoming). We also identify languages from which, based on Maddieson (1984), data are still needed to further our understanding of the nature and function of pharyngeals in sound grammar.

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