

Nasal consonants in Malayalam

Almost all the world's languages have at least one voiced nasal in their phonemic repertoire. Having more than three or four nasal consonants in a language, however, is uncommon. One such exception is Malayalam, a Dravidian language spoken predominantly in the southern state of Kerala in India. The other languages of the Dravidian family have between three and five nasals. The proto-Dravidian inventory consisted of four nasals and later the other Dravidian languages, such as Old Tamil, which is arguably the parent language of Malayalam, had five nasals and Old Telugu had four nasals. While modern Tamil and Telugu have only three nasal phonemes, Malayalam has maintained a large number of nasal sounds in its phonemic inventory.

There is little agreement on whether Malayalam has six or seven nasal phones in its inventory: bilabial /m/, dental [ɲ], alveolar [n], retroflex /ɳ/, palatal /ɲ/ and velar /ŋ/, and a seventh place of articulation- palatovelar [ɲʲ]. The six way contrast, interestingly, is not seen across all the nasal places of articulation, except for in a particular vowel context (a_i). In other instances, they form subgroups of two/three contrastive pairs: /m/-/n/; /m/-/ɳ/; /ɲ/-/n/; /ɲ/-/ɳ/; /ɲ/-/ɲʲ/; /ɲ/-/ŋ/-/ɳ/; /n/-/ɳ/; /ɳ/-/ɲ/-/ɳ/. In addition, the nasals in Malayalam are also characterized by singleton-geminate contrasts in the same intervocalic-medial position. This relatively limited distribution of nasals in Malayalam and the lack of minimal pairs raises interesting questions about the phonetic cues that L1 Malayalam speakers use to maintain the rich nasal repertoire and our understanding of what constitutes a 'phonemic contrast'.

The present paper is based on the preliminary results of one part of a larger work-in-progress with 12 speakers (6 male and 6 female) in three regions of Kerala- Kozhikode, Kottayam and Thiruvananthapuram, representing the north, central-south and south regions respectively. A 53-token wordlist of the target tokens was elicited from participants who are between 55 to 65 years of age. The tokens were digitally recorded for further phonetic analysis.

Preliminary auditory and acoustic observations suggest that durational differences are important in distinguishing the geminate and singleton contrast. In addition, the nasals that form contrasting subgroups appear to be predominantly distinguished based on secondary articulation cues, a pattern seen among the liquids in Malayalam. Given that the lexical contrast among all the 6/7 nasals is infrequent and the distribution of nasal contrast is limited, secondary articulations may be playing an important role in maintaining a crowded sound system. This also draws attention to the importance of having a broader understanding of what phonemic contrast means in languages.