

# Contrastive breathiness across consonants and vowels

## A comparative study of Gujarati and White Hmong

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### Background

Many languages exhibit a **modal vs. breathy phonation contrast**, restricted to either:

- Consonants, e.g. Indic lgs. (O83, D89, Y84)
- Vowels, e.g. Zapotec lgs. (E10a, M&L99, J&K77).

**Very few languages contrast modal and breathy voicing on consonants and vowels.**

- Khoisan lgs. (T85), Hmong, and Gujarati

While the phonetics of the breathy vs. modal contrast in Vs has been studied, **acoustic and articulatory studies of the breathy V vs. breathy C contrast are few.**

### Research questions