

Registrogenesis in Bunong

Registrogenesis in Southeast Asian languages commonly occurs due to a loss of contrast as the result of the devoicing of historically voiced onset consonants (Wayland and Jongman 2002). In a register system, this contrast is maintained on the vowels and is expressed by any number of phonetic features, including pitch, phonation type, vowel height, diphthongization, etc., each of which is likely linked to the position of the larynx (Brunelle 2005). Languages are usually described as using one or two prominent phonetic cues to distinguish register contrasts over the entirety of the vowel inventory, accompanied by other secondary articulations

Bunong (Mnong), a Mon-Khmer language spoken in Vietnam and Cambodia, is in the process of registrogenesis. In Bunong, instead of the expected across-the-board salient phonetic cues, my data show that the phonetic manifestation of register varies by the phonological height of vowels. Historically high vowels [**i, *u*] presently show a phonation contrast (indicated by $\Delta H1 - H2$), such that following historically voiced (**voiced*) onsets, they are breathy, and following **voiceless* onsets, they remain modal. Additionally, **high* vowels following **voiceless* onsets lowered and diphthongized. **Mid* vowels [**e, *o*] following **voiced* stops raised, and **mid* vowels following **voiceless* onsets diphthongized (1). Finally, the low vowel [**a*] diphthongized to [*ea*] following **voiced* stops, but following **voiceless* stops, it did not.

Based on previous phonetic studies of register, the manifestation of the majority of these features is predictable. Breathly voice, vowel raising and diphthongization have all been associated with historically voiced stops. However, the finding that **high* vowels following **voiceless* stops have diphthongized is unpredicted. I propose that this change occurred not due to phonetic manifestations of the position of the larynx but instead as a reaction to the changes of the F1 of **mid* vowels following **voiced* onsets and of **high* vowels following **voiceless* onsets, which resulted in near identical F1 and F2 values at their release (1).

In summary, I present evidence that the phonetic realization of a register system can vary within a language, depending upon its phonology (specifically vowel height), and further that registrogenesis can produce phonetically unpredicted systems due to a need to maintain contrast.

(1) Avg. F1 and F2 values of **high* and **mid* vowels / $_C_{[alv]}$ for one Bunong speaker

