

Tonal coarticulation in Northern and Southern Vietnamese
Phonetics, sociophonetic variation

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Vietnamese tones vary considerable across dialects. For example, Northern Vietnamese has a complex six tone system that combines pitch contours with voice quality, while Southern Vietnamese only has five tones that are not accompanied by voice quality contrasts but have more rigid pitch contours.

We know that in East and Southeast Asian tone languages, the exact phonetic realization of tone contours depends, on intonation and consonantal environment, but also on the shape of the preceding and following tones (Gandour 1994; Seitz 1986; Shen 1990). Previous research has shown that in Northern Vietnamese, the beginning of a tone is more affected by its environment than its end and that some part of the tone contours are more resistant to coarticulation than others (Brunelle 2003; Han and Kim 1974). This paper examines the differences between tonal coarticulation in Northern and Southern Vietnamese.

The differences between the two dialects suggest two contradictory predictions. On the one hand, since the northern dialect has one more tone, each of its tones should occupy a more restricted area of the pitch space. On the other hand, since this dialect also has voice quality distinctions, which introduces an additional tonal dimension, the role of pitch should be less central and each tone should have the possibility of varying more in terms of pitch without intruding in the phonetic space of its neighbors.

In order to test these two conflicting predictions, recordings of six speakers of each dialect were made in Hanoi and Ho Chi Minh City. The subjects read frame sentences designed to test the interactions between tones while keeping all intonational and segmental factors constant. Preliminary results suggest that there is much more variation in the realization of tone in Northern than in Southern Vietnamese. This is evidence that pitch plays a more limited role in the tone system of this dialect because of its voice quality distinctions (cf. Phạm 2001; 2003). These findings are supported by recent perceptual results (Brunelle, forthcoming).

The fact that pitch can vary more freely in Northern than Southern Vietnamese because of its more limited contrastive function has interesting implications for sociophonetics and diachrony: although no systematic variationist study has been conducted yet, there seems to be more socially-conditioned tonal variation in Northern than in Southern Vietnamese. Some of the variants found in the Hanoi dialect will be presented.

References

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