

Longyou (Wu) Tones and Tone Sandhi

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Longyou is a Southern Wu dialect spoken in Zhejiang province, China (Longyou county: population 400,000, located circa 375 km southeast of Shanghai). This paper analyzes the tones and tone sandhi processes based on a corpus of data elicited from two female native speakers.

Tonal inventory There are 8 lexical tones in Longyou. Our data suggest that Longyou is quite conservative: we find that Longyou tones correspond regularly to the eight tones of Middle Chinese (henceforth MC; based on MC reconstructions from Baxter & Sagart 2014).

	upper register				lower register			
MC	level	rise	fall	entering	level	rise	fall	entering
Longyou	445	45	53	5	211	313	131	2
example	ɕu	mei	t ^h ie	p ^h ieʔ	lɔŋ	lau	fæn	leʔ
gloss	‘book’	‘beauty’	‘shop’	‘pen’	‘dragon’	‘old’	‘rice’	‘six’

Normalized pitch curves of our data cleanly separate the eight tones into upper and lower regions of the pitch space, as found in many other Wu dialects. The major Longyou innovation is that the MC rising and falling tones of the lower register have become complex tones with internal turning points: 313 and 131.

Present study Our corpus consists of 76 lexical items recorded in isolation (citation) and frame sentence contexts, and set of 64 **A+B** nominal compounds recorded in the same manner. The compounds reveal three major sandhi changes, which we describe in detail below.

Sandhi 1: $A_{313} \rightarrow A_{31}$ The dipping 313 tone loses its rise to become 31 in the first position of the compound, as in (1). This process parallels the so-called half-tone sandhi of Standard Mandarin.

- (1) a. *lao*₃₁₃ ‘old’ b. *wəʔ*₅ ‘house’ c. *lao*₃₁ *wəʔ*₅ ‘old house’

Sandhi 2: $A_{45} \rightarrow A_{31}$ The upper register rise 45 changes to lower register fall 31 when the following syllable’s tone is drawn from the upper register, as in (2). This process can be analyzed as a dissimilation for register that changes 45 > 313 followed by the first sandhi change to 31. A comparable sandhi in the Taiwanese Hakka dialect Sixian (Hsiao 2008) bears a striking resemblance to this Longyou process.

- (2) a. *dzi*₄₅ ‘paper’ b. *p^hie*₅ ‘piece’ c. *dzi*₃₁ *p^hie*₅ ‘scrap of paper’

Sandhi 3: $B_{313} \rightarrow B_{131}$ The final major sandhi in Longyou changes the dipping 313 to the dome-shaped 131 in the second position of the compound by raising its inflection point from a valley to a peak, as in (3). It is blocked when the first syllable has tone 131 — an OCP effect, shown in (4).

- (3) a. *g^hɔ*₄₄₅ ‘high, top’ b. *çhjɔ*₃₁₃ ‘school’ c. *g^hɔ*₄₄₅ *çhjɔ*₁₃₁ ‘college’

- (4) a. *ze*₁₃₁ ‘vocation’ b. *çhjɔ*₃₁₃ ‘school’ c. *ze*₃₁ *çhjɔ*₃₁₃ ‘vocational college’

Implication Our overall conclusion is that Longyou tonal contrasts as well as sandhi processes support the Chinese tonal model proposed by Bao (1999) which provides a formal representation of both register and contour — the two hallmarks of Chinese tone. Our findings contribute to the phonetic documentation and phonological analysis of understudied Chinese dialects.

References: Bao, Zhiming. 1999. *The Structure of Tone*. Oxford UP. * Baxter, William & Laurent Sagart. 2014. *Old Chinese: A New Reconstruction*. * Hsiao, Yuchau E. 2008. Yinping tone sandhi in two Hakka dialects.