Neutralization in Taiwan Southern Min Tone Sandhi

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Phonologists have long assumed that tone sandhi in Southern Min is neutralizing, both across prosodic positions (e.g., juncture yangqu vs. context yinping) and within prosodic positions (context yinping vs. context yangping). Yet phonetic studies of other phonological processes often find that neutralization is only incomplete. Thus we had native speakers of Taiwan Southern Min read aloud pairs of sentences identical except for morphemes expected to be neutralized by tone sandhi. Speakers were recorded in two pragmatic conditions to test if the degree of neutralization is under speaker control. Neither across-position comparisons nor within-position comparisons showed statistically significant differences in f0 height or slope, though there were effects on syllable duration. This null result is consistent with complete neutralization for a number of reasons: the statistical method used is the most powerful and reliable currently available, f0 slopes did not preserve the putatively underlying tone contours, there was no effect of pragmatic context on f0, and the raw differences in f0 were much smaller than those found in other tone languages where neutralization has been claimed to be incomplete. Tone sandhi in Taiwan Southern Min thus seems to involve categorical phonological units, just as has long been assumed.

Key words: Southern Min, tone sandhi, incomplete neutralization