Tone neutralization and tone merger in the Ikema dialect of Miyako Ryukyuan

The aims of this study are to demonstrate that the tone system of Ikema is characterized by synchronic tone neutralization and diachronic tone merger and to discuss implications that these two processes might have for phonology.

Ikema is one of the dialects of the Miyako Ryukyuan language, which constitutes one of the three subgroups of Southern Ryukyuan. Ikema has a three-tone system, where three tone classes, Types α , β , and γ , are lexically distinguished. The three-tone system of this dialect, however, exhibit variability in both synchronic and diachronic respects.

The synchronic variability is found in tone neutralization, in which the distinction between Type α and Type β is lost in many conditions, such as when the nouns are produced in isolation and when they are produced with a particle. The three-way distinction can only be observed in quite restricted conditions, including when nouns followed by one or more bimoraic particles precede a predicate.

While the realization rules of the tone system in Ikema are not yet fully understood, we argue that bimoraic feet play a crucial role in the tonal realization. For example, one-foot (two-mora and three-mora) nouns behave differently from two-foot (four-mora and five-mora) nouns. Also, the full realization of the three-way distinction requires three-foot constructions, such as one-foot nouns followed by two one-foot words (e.g. *nabi mai nyaan* 'There are no pans, either') or two-foot nouns followed by one one-foot word (e.g. *nabyaara mai* 'Sponge gourds, too'). The tone system of Ikema thus raises several questions about the relation between tone neutralization and rhythmic structure.

The diachronic variability in the tone system lies in a merger in progress of tone classes. Types α , β , and γ in Ikema show a considerable correspondence with the three tonal classes postulated in the proto-Ryukyuan, i.e., Classes A, B, and C ("keiretsu" in Matsumori's (2000) term), in which most of the Class B words correspond to Type β , and most of the Class C words to Type γ . However, most of the Class A words correspond to Type β in Ikema. Type α words are remarkably small in number (about 8.5 percent of the total nouns examined), though almost of all of them correspond to the Class A words. This indicates that Ikema is experiencing a tone merger, in which Type A is integrated into Type B. The synchronic neutralization between Types α and β might have facilitated the diachronic merger of Class A into Class B.

It should be emphasized that the tone merger in Ikema is incomplete in that it still has Types α words. The tone merger in Ikema is therefore in favor of the hypothesis of lexical diffusion (Wang 1977) that sound change is not lexically abrupt but can take a long period of time to complete the process. Words immune to the merger in progress in Ikema, i.e. Class A words which are still Type α in Ikema, exhibit a biased distribution in their semantic characteristics. They are mostly words for orientation or direction (e.g. *agai* 'east', *ii* 'west', *hai* 'south', *nsI* 'north/ right' *hidai* 'left', *ui* 'top', *aagi* 'top', *sIta* 'bottom', *tibi* 'back'), numerals (e.g. *ttaacI* 'two', *miicI* 'three', *yuucI* 'four', *mucI* 'six', *yaacI* 'eight'), and kinship words (e.g. *tuzI* 'wife', *butu* 'husband', *yumi* 'wife/ bride'). Ikema data will, therefore, shed light on the nature of tone merger and lexical diffusion.

References

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