Analogical change in progress: accent shift in Yanbian Korean

Yanbian Korean (north-eastern China) has a distinctive accent: H vs. L for monosyllabic nouns, HL, LH, LL for disyllabic nouns. In native simplex nouns, the default accent class is final H: H and LH. Underlying unaccented class (L, LL) appears with final accent in isolation forms, thus resulting in the neutralization of two accent classes in this environment.

In this study, we investigate accentual patterns of monosyllabic/disyllabic native simplex nouns from c. 20 native male/female speakers who were born between 1933 and 1988, and examine how they have changed over (apparent) time statistically.

The correlation between analogical change and type-frequency is discussed in previous literature (Bybee 1995 and references cited, Albright to appear), and a generalization emerging from the literature is that higher type-frequency classes tend to attract words from lower type-frequency classes. Given the default accent class and the tonal neutralization in Yanbian, we expect that in the younger generation, more words will shift to the default accent class, in particular from unaccented class. Also in order to confirm the effect of token-frequency, a frequency judgment by naïve native speakers was conducted for all the words in this study and the average scores among all speakers were encoded into the statistical model.

As a reference point for the conservative accent, we take into account Middle Korean (MK, 15th-16th C) accent. The regular correspondence between Middle Korean and Yanbian is straightforward: MK H → Yanbian H, MK L → Yanbian L, MK HL → Yanbian HL, MK LH → Yanbian LH, MK LL → Yanbian LL. In MK, the unaccented class (L, LL) is highly underrepresented when the final syllable weight is light, whereas penultimate accent (HL) is overrepresented when penultimate syllable is heavy.

Our major findings that are statistically significant are as follows:
(1) Many words that are from the MK unaccented class (L, LL) shifted to the final accent class (H, LH) in the younger generation of Yanbian speakers.
(2) Among the four different generations (old: 1930-1940's, old-mid: 1950's, mid: 1960-1970's, young: 1980's), significant differences are observed between young and old, young and old-mid (for monosyllabic words), but no significant difference between young and mid for this change. (Figure 1)
(3) Among the words that correspond with MK unaccented class, high-frequency words tend to retain the conservative unaccented class. (Figure 2)
(4) Syllable weight effect is confirmed: when the final syllable is light, more words changed to the final accent class (H, LH), reflecting the biased distribution of MK. In disyllabic words with a final light syllable, no word appears with LL for the younger generation any more. When the penultimate syllable is heavy in disyllabic words, more words changed to HL.
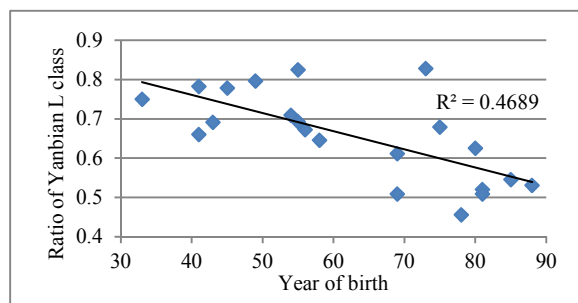(5) Sex difference is slightly significant: males are more conservative than females.
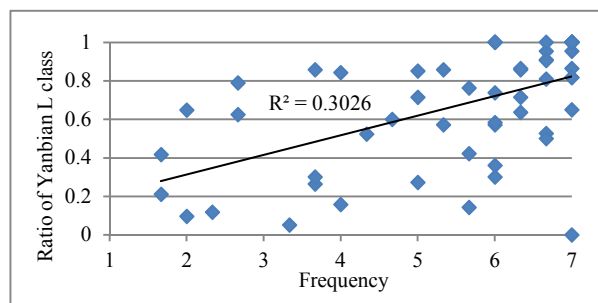

Figure 1: Correlation between age and conservativeness   Figure 2: Correlation between frequency and conservativeness

References: Bybee, J. 1995. Regular morphology and the lexicon. *Language and Cognitive Processes* 10: 425-455.   Albright, A. to appear. Modeling analogy as probabilistic grammar. In Analogy in Grammar: Form and Acquisition, ed. J. Blevins. Oxford University Press.