

The Phonological Optimization of Nicknames in Japanese: Why kids don't sing "Sachichan wa ne"

Nickname (i.e., hypocoristic) formation in Japanese commonly involves truncation of the root name to a bimoraic stem and suffixation of a diminutive morpheme, the most common of these being *chan*. Previous descriptions (Mester, 1990; Poser, 1990) of nickname formation in Japanese have identified three dominant patterns. Given a root name with the form $(C_1)V_1C_2V_2x$ where x comprises one or more syllables, these patterns are as follows.

Simple All phonetic material after the second mora is deleted (kumiko \rightarrow kumichan).

V-lengthened All phonetic material after the first mora is deleted and the stem vowel is lengthened (masahiro \rightarrow maachan).

Geminated All phonetic material after the first mora is deleted and the second mora of the stem assimilates to the suffix onset (sachiko \rightarrow sacchan).

There is some variation in the relative acceptability of these three patterns depending on the phonetic makeup of the root. Poser (1990) makes two claims regarding this variation, as follows.

- (1) For any given name, the simple form should always be possible.
- (2) For a name in which C_2 is a voiceless coronal affricate (i.e., /ch/ and /ts/) and V_2 is a high vowel, the geminated form should be preferred.

In the present research, an experiment was performed to test these two claims. In the experiment, native speakers of Japanese were given a number of names from a set of 144 attested Japanese names chosen to vary with respect to place of articulation and voicing of C_2 as well as height of V_2 . In a free-response task, participants were asked to write for each name their first choice of nickname (with *chan*) as well as any other choices.

Results show that overall the simple form is the most preferred form appearing as a first choice 49% of the time. Nevertheless, experimental results do not confirm claim (1): For 15% of the names, the simple form was never listed as either a first or other choice. The results, however, do confirm claim (2): For names with a C_2 voiceless coronal affricate followed by a high vowel, the geminated form was chosen 90% of the time, a significant effect ($\chi^2 = 65.2, p < 0.001$).

Results also revealed a second previously unnoticed effect. When C_2 was a voiceless fricative and was followed by a high vowel (e.g., yasunao), the three nickname forms were approximately equally likely ($\chi^2 = 12.9, p < 0.005$).

In order to explain these results, I present an optimality-theoretic (OT: Prince and Smolensky, 1993) account which takes advantage of variable constraint rankings (Anttila, 1997). This account is capable of capturing why more than one output form is sometimes possible for any given name. The account also partially captures the patterns of preference shown in the data. The constraint set used in the analysis are extended from those used in Tsuchida's (2001) account of the well-known phenomenon of high-vowel devoicing in Japanese.

I conclude my presentation with a discussion of one shortcoming in the OT account (an explanation for the equal likelihood of all three forms for names with a voiceless fricative followed by a high vowel) and how this might be overcome. I also briefly discuss some minor trends in the data and their implications for further work.

References

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