

# Cognitive phonology and the accented-unaccented opposition in Japanese

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Cognitive linguists tend to adhere to the idea that a speaker's grammar may not include references to negatively specified structure, a stance which for instance is reflected in the restrictions of Langacker's (1987) 'content requirement'. While this approach makes sense intuitively, it remains to be shown that phenomena that at least at first sight seem to require reference to binary features and/or negative constraints can be insightfully analyzed in alternative cognitive-phonological analyses. The opposition between accented and unaccented words in Japanese seems to form a good test case: some types of words prefer to be accented, while other types of words prefer to be unaccented, depending on their morphological and/or phonological structure.

I start by comparing three different representations of (Tokyo) Japanese pitch accent: one based on privative specification, one based on a binary feature [ $\pm$ accent], and an approach based on two opposed 'features' in the form of schematic abstractions from actual exemplars. After concluding that the privative analysis is to be preferred, I will continue to investigate whether the proposed representation can be maintained in the light of three different (morpho-)phonological patterns related to accent in Japanese. The first pattern shows how the attachment of a derivational morpheme may delete the accent of the base form: *gengo*<sup>0</sup>*gaku* 'linguistics' + *-teki* '-like' = *gengogaku-teki*<sup>0</sup> 'linguistic'. The question is how to analyze these forms without making use of the feature [-accent] or a construction-specific constraint that prohibits an accent ('NOACCENT'). The second pattern involves the accentual behavior of verbal forms. There are two groups of verbs in Japanese: inherently accented ones and unaccented ones. The location of the accent depends on the following suffix, but only in verbs of two moras or longer with accented stems, e.g. *tabe*<sup>\*</sup>*-ru* 'eat-NONPAST' vs. *ta*<sup>\*</sup>*be-ta* 'eat-PAST'. The challenge here is to prevent output schemas abstracted from accented verbal forms ([ $\dots\mu^*\text{-ru}$ ] and [ $\dots\mu^*\mu\text{-ta}$ ]) from applying to verbs with unaccented stems, which surface without an accent (e.g. *ake**-ru*<sup>0</sup> 'open-NONPAST', *ake**-ta*<sup>0</sup> 'open-PAST'). The third test case concerns the accent patterns of loanwords. In loanwords, the length of a word largely determines not only the location of accent, but also whether a word gets an accent in the first place. More concretely, bimoraic, trimoraic, and pentamoraic words tend to get penultimate or antepenultimate accent (*pa*<sup>\*</sup>*ri* 'Paris', *ka*<sup>\*</sup>*nada* 'Canada', *ba*<sup>\*</sup>*ruse*<sup>\*</sup>*rona* 'Barcelona'), whereas quadrimoraic words tend to be unaccented (*ame**rika*<sup>0</sup> 'America'). The challenge here is how to prevent the assignment of an accent to the antepenultimate mora in quadrimoraic words. In the analysis proposed by Ito and Mester (2016) this is accomplished by adopting constraints on prosodic structure, several of which are prohibitions.

In the analyses I propose, the distinction between first-order and second-order schemas (Nesset 2008) plays an important role. To account for the behavior of deaccenting morphemes, which can be seen as examples of what Langacker (2016) calls 'subtraction', we need a unidirectional second-order schema that links the schema of the base with a schema of the derived word, with the accent being absent in the latter. This construction-specific schema will block more general accent-assigning and/or accent-preserving schemas. For the accent patterns of verbs, we need second-order schemas that capture bidirectional relations between forms that share the same stem, which will again block the less specific first-order schemas that include an accentual specification. For the accent patterns of loanwords first-order schemas in combination with principles of schema competition such as 'elaborative distance' and 'entrenchment' (see Taylor 2002) seem to be sufficient, although I will also consider an analysis which makes use of if-then relations and inhibitory links between schemas (see Kreyer 2013).

## References

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