

Downstep in Japanese: Syntactic vs. Semantic Approach

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It has been argued that the effect of downstep differently appears depending on the syntactic structure (Kubozono 1989, 1992 and Azuma 1992a, 1992b) or on the semantic information (Koori 1992a, 1992b) of a phrase or a sentence. In this joint research, we argue for the semantic analysis and propose a refined alternative.

Kubozono (1989, 1992) assumes the device called "metrical boost" to explain the pitch raising in the right-branching structure. However, there are problematic examples as follows:

- (1) a. [uma'i [ki'ui to mi'kan wo] ta'beta] ("'" stands for accent)
"ate a kiwi and an orange which are both delicious"
b. [[uma'i ki'ui] to mi'kan wo] ta'beta
"ate a delicious kiwi and an orange"

If metrical boost worked, then the upstep would be observed on the accented syllable "ki" in (1a) but not on "mi" in (1b). However, the effect of metrical boost is seen on the syllable "mi" in (1b) as illustrated in Figures 1-2.

Koori (1992a, 1992b), on the other hand, assumes the weakening of the accent of the words which is *restricted* semantically. The examples in (2), however, seems to suggest that Koori's assumption is insufficient, because the accent of "Hooryuuji" in (2a) appears to be weakened while that of "Kentooshi" in (2b) does not, although both words are not semantically *restricted* as shown in Figures 3-4.

- (2) a. [na'ra no [to'odaiji to ho'oryuuji no] kenkyuu]
"a study on Toodaiji and Hooryuuji in Nara"
b. [[na'ra no to'odaiji to] kento'oshi no kankei]
"a relation between Todaiji in Nara and Kentooshi"

In order to solve the problems shown above, we propose a refined semantic analysis as follows:

- (3) a. The accent of semantically restricted words is weakened.
b. Coordinate phrases adjust their accents so that they become a close degree.

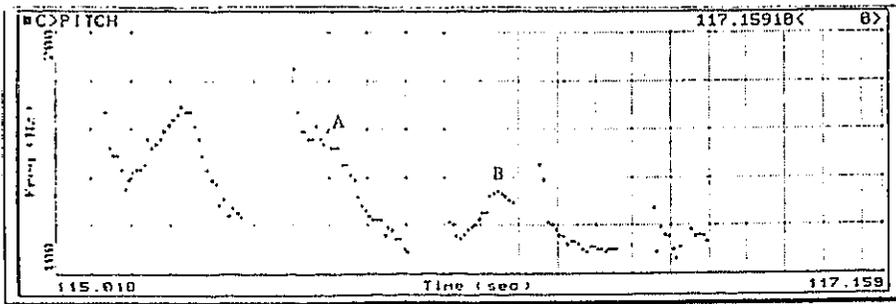


Figure 1 [uma'i [ki'ui to mi'kan wo] ta'beta]

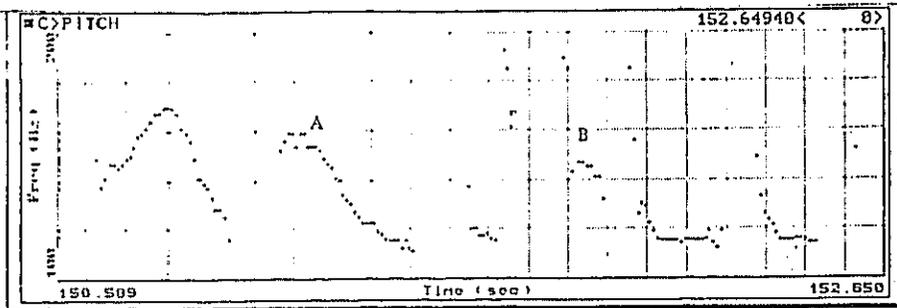


Figure 2 [[uma'i ki'ui] to mi'kan wo] ta'beta]

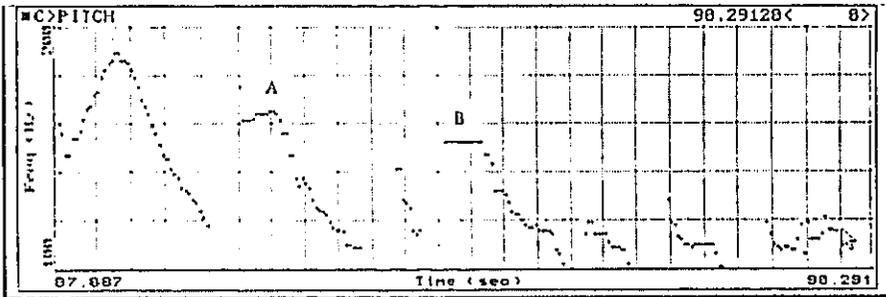


Figure 3 [na'ra no [to'odaiji to ho'oryuuji no] kenkyuu]

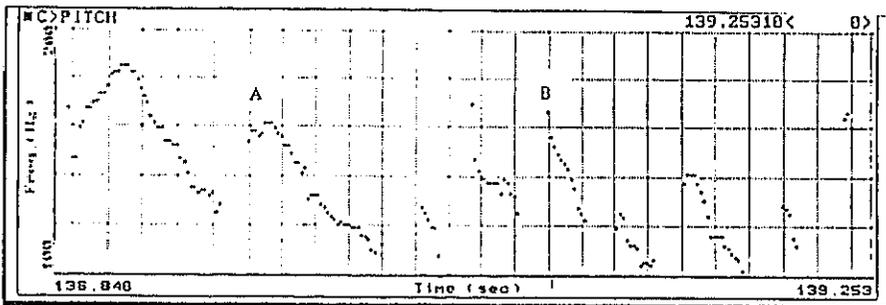


Figure 4 [[na'ra no to'odaiji to] kento'oshi no kankei]