Morphology problem set 2

24.900 — Introduction to linguistics

February 14, 2005

1 Warm-up

Draw labeled tree diagrams for the following compounds. Note that some compound words have more than one meaning and therefore require more than one tree. How does the tree structure relate to the difference in meaning?

- student film society
- New York taxi driver
- child psychology specialist
- AIDS research report
- tractor-trailer
- blue-green
- breakwater

2 Rendaku

In Japanese, certain stems undergo a phonological change at their left edge (traditionally called rendaku) when they are the right-hand member of certain types of compounds. The phonological change itself will be the topic of a later problem set. For the present purpose, assume that rendaku has applied if a word within a compound starts with any of the following consonants: g, d, z, b. The following is an example of rendaku at work:

- (1) a. susi 'sushi'
 - b. maki-zusi 'roll-sushi'
- (2) a. kaeri 'going'
 - b. yuki-kaeri 'coming and going'

In (1b), rendaku has applied, whereas in (2b) it hasn't. You should assume, given the data in this problem set, that whether rendaku applies or not has to do exclusively with the type of compound (and the position within it) that the word in question is in.

• Based on the following list of compounds, can you describe what positions in what types of compounds are contexts for rendaku, and which ones aren't? Draw labeled trees to make your generalizations explicit. In the following table, the second column is a word-for-word gloss, with clarifications in parentheses when necessary.

a. yoko-gaki horizontal writing b. naga-gutu long shoe (boot) oya-ko parent (and) child c. hebi-dosi d. snake-year eda-ha branches (and) leaves e. f. hana-zono flower garden suki-kirai likes (and) dislikes g. onna-girai woman disliker (misogynist) h. i. yuki-kaeri coming (and) going otome-gokoro maiden-heart j. k. ori-gami folding paper 1. umi-dori sea bird isi-datami stone tatami (stone pavement) m. hi-gaeri day going (day trip)

When compounds are made up of more than two words, things become truly interesting.
Observe the following:

a. me-zamasi-dokee eye waking clock

b. hosi-gaki-zukuri dried persimmon making

c. nise-kami-dana fake divine altar

d. nise-zakura-dayori fake cherry-blossom tidings (tidings of fake cherry-blossoms)

e. nise-sakura-dayori fake cherry-blossom tidings (fake tidings of cherry-blossoms)

Based on the preceding examples (note especially the minimal pair in (d) and (e) above), can you give the structure and a description of the possible meaning of the compounds in (b)-(c) below, made up of the same words as that in (a), but with rendaku in different places?

a. nise-gami-dana-zukuri fake god shelf making (making of shelves for fake gods)

b. nise-kami-tana-zukuri

c. nise-gami-tana-zukuri

3 English compound stress

Though not as easily identifiable as in the Japanese data discussed above, the structure of a compound in English also has an effect on its pronunciation. Consider the following, discussed in *The Sound Pattern of English*, where the numbers indicate degree of stress (from 1 — most forceful — to 4):

(3) a. $\lim_{n \to \infty} \frac{1}{n} = \frac{2}{n}$

 $1 \quad 3 \quad 2$

b. law degree program

c. law degree program director

- ${\rm d.}\quad {\rm university} \stackrel{2}{\rm entry} \stackrel{3}{\rm requirement}$
- e. law degree entry requirement
- What's the structure of the compounds above?
- Based solely on the preceding examples (since formulating the precise rules for stress assignment is not within our reach at the moment), what is the stress pattern predicted to be in each of the two readings of 'student film society'? Do these match your intuitions?