Hidden Native Phonology of Tokyo Japanese Accentuation

When Japanese borrows a word from other languages, there is possibility that the accent inherits the original accent of the word (Mutsukawa 2006 for loanwords from English) or that the accent reflects the grammar of the borrowing language (Kubozono 2006). However, neither of the cases is true of some loanwords. For example, te.ku.nik.ku "technique" (/tek'ni:k/) and myuu.ji.a.mu "museum" (/mju:'zɪəm/) show accentual variation (te'.ku.nik.ku ~ *te.ku.n'ik.ku*; *myu'u.ji.a.mu* ~ *myu.u.ji'.a.mu*). The latter accentual pattern (i.e. *te.ku.n'ik.ku*; myu.u.ji'.a.mu) can be attributed to the original accentual position or to the result of the application of the well-known antepenultimate accent rule in Japanese (McCawley 1968), but where does the former accentual pattern (i.e. *te'.ku.nik.ku*; *myu'u.ji.a.mu*) come from?

This study argues that the former accentuation comes from the 'hidden' native grammar of Tokyo Japanese accentuation (TJA). Most of the Japanese words consist of at most four moras, but some loanwords exceed four-mora length. Therefore, I assume that more investigation into loanword accentuation can reveal the existence of the hidden grammar. Accentuation of native and SJ words, mimetic words, nonce-words, and nominal and dvandva compounds may lead us to presume that NONFINALITY (σ' , Ft') (*FIN (σ' , Ft')) dominates ALIGN-R (σ) in the constraint ranking of TJA, but, in addition to the constraints, the data of loanwords in Japanese tell us that TJA involves ACCENT-DOMAIN (Penult Ft) (ACC-Đ (Penult Ft)) and ALIGN-L (σ). I conclusively propose two constraint rankings in TJA as follows:

1. Ranking RL: ACC-D (Penult Ft) = *FIN (σ ', Ft') >> ALIGN-R (σ ') >> ALIGN-L (σ ') 2. Ranking LR: ACC-D (Penult Ft) = *FIN (σ' , Ft') >> ALIGN-L (σ') >> ALIGN-R (σ')

They include the ad hoc constraint ACC-D (Penult Ft), which requires accent to be placed on a syllable between the left edge of the penultimate foot and the right edge of the word. As examples of the analysis, it is shown in the table below that the two rankings can account for the accentuation of the LLHL, HLLL, and LHH structures (H = a heavy syllable; L = a light syllable). The LLHL and the HLLL have two main accentuations including variation while the LHH has the only one accentuation. For the LLHL and the HLLL, each of the two main accentual patterns is the result of the application of each constraint ranking. For the LHH, the only one accentual pattern can be obtained by applying either of the two rankings. The proposal proposed in this study implies that TJA is characterized as the 'syllable-accenting and foot-counting' system.

Table			
Syllable	Accentual	Ranking RL	Ranking LR
Structure	Patterns		
LLHL	LLH'L, L'LHL	(te.ku.)(ni'k.)ku "technique"	(te'.ku.)(nik.)ku "technique"
HLLL	H'LLL, HL'LL	(myuu.)ji'.(a.mu) "museum"	(myu'u.)ji.(a.mu) "museum"
LHH	LH'H	wa.(si'n.)(ton) "Washington"	

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Each bracket stands for a foot.

Selected References

Kubozono, Haruo. 2006. Where does loanword prosody come from? A case study of Japanese loanword accent. Lingua 116(7): 1140-70.

Mutsukawa, Masahiko. 2006. Japanese loanword phonology in Optimality Theory: The nature of inputs and the loanword sublexicon. Ph.D dissertation. Michigan State University.