

Hierarchy of Special Morae in Japanese: Evidence from Loanword Compound Truncation

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Introduction In this study, we consider a hierarchy of special morae in Japanese especially focusing on loanword compound truncation. In Japanese (Tokyo dialect), there are two claims about a hierarchy of special morae, which are a long vowels (R), diphthongs (J), geminate consonants (Q) and moraic nasals (N). The first claim focuses on the difference in independence of the special morae, and the hierarchy is indicated as ‘J > R > N > Q’ (Vance 1987; Kubozono 1992; Tanaka 2008). The other claim focuses on the degree of stability of the special morae, and the hierarchy is indicated as ‘N > J > R > Q’ (Nasu 2009). The current study provides evidence for the latter hierarchy through the analysis of loanword compound truncations.

Data and Analysis We analyzed the Loanword Compound Truncation Database (Moon 2018), which has a total of 1,101 words. In Japanese, loanword compounds are often truncated as quadrimoraic patterns by clipping the initial two morae from each element of the baseword (e.g., *dezitaru* + *kamera* → *dezikame* ‘digital camera’) (Itô 1990, Kubozono 2002, etc). However, according to the results of the database analysis, in the case of a first element with a special mora, the truncated form can be not only a quadrimoraic pattern but also a trimoraic pattern. Table 1 shows the results of the analysis.

	Total	4 moraic		3 moraic	
N	144	100%	konmasu ‘concert master’	0%	
J	82	89.0%	aimasu ‘Idol master’	4.9%	manpa ‘Mountain Parka’ ranobe ‘light novel’
R	123	63.4%	waahori ‘working holiday’	10.6%	patori ‘part leader’ meado ‘mail address’
Q	26	42.3%	nikkado ‘nikel cadmium’	34.6%	netoge ‘net game’ nekafe ‘net cafe’

Table 1. The patterns of compound loanwords with special mora in the first element

Since the quadrimoraic pattern (4 moraic) shown in Table 1 is truncated by clipping the initial two morae from each element of the baseword, the output form always includes the special mora (e.g., *konsaato masutaa* → *konmasu*). On the other hand, the trimoraic pattern (3 moraic) in Table 1 has two types, namely ‘1 mora from the first element + 2 morae from the second element’ (e.g., *raito noberu* → *ranobe*) and ‘2 morae from the first element + 1 mora from the second element’ (e.g., *netto geemu* → *netoge*). These trimoraic patterns are characterized by not including the special mora in the second part of the first or the second element.

Results and Discussion As shown in Table 1, when a moraic nasal (N) is contained in the first element of the compound, the compound is truncated as a quadrimoraic pattern without exception (e.g., *konsaato masutaa* → *konmasu*). In the case of a diphthong (J), 89% is truncated as quadrimoraic patterns (e.g., *aidoru masutaa* → *aimasu*). On the other hand, only 63.4% of the long vowel (R) (e.g., *waakingu horidee* → *waahori*) and 42.3% of the geminate consonant (Q) (e.g., *nikkeru kadomiumu* → *nikkado*) are truncated as quadrimoraic patterns. The rate of occurrence of the quadrimoraic patterns at each special mora is consistent with the order of the hierarchy ‘N > J > R > Q’. Furthermore, the trimoraic pattern occurrence rate is low in the order of ‘N > J > R > Q’ as seen in Table 1. The current study claims that the more unstable the special mora, the more unlikely it is to be contained in output forms.

References Ito, Junko. 1990. Prosodic Minimality in Japanese. *Proceedings of Chicago Linguistic Society*. 26(2): 213–239. / 窪菌晴夫 (1992) 「日本語のモーラ：その役割と特性」『日本語のモーラと音節構造に関する総合的研究 (1)』(文部省科学研究費重点領域研究「日本語音声」E10 班研究成果報告書) 48–61. / 窪菌晴夫 (2002) 『新語はこうして作られる』東京：岩波書店. / 文昶允 (2018) 「複合外来語に由来する短縮語の形成メカニズムに関する研究」, 博士論文, 筑波大学. / 那須昭夫 (2009) 「特殊モーラの分節構造と安定度」『文藝言語研究. 言語篇』56: 53–71. / 田中真一 (2008) 『リズム・アクセントの「ゆれ」と音韻・形態構造』東京：くろしお出版. / Vance, Timothy J. 1987. *An Introduction to Japanese Phonology*. Albany: State University of New York Press.