

The phonology of /r/ in Japanese
with special attention to distributional asymmetries
(Japanese /r/ as a case of ‘emergence of the unmarked’ ?)

No native Japanese independent word starts with /r/. The aim of this paper is to investigate this strong typological characteristic, in relation with the many other properties of /r/ in Japanese.

Listed below are some of the most interesting phonetic, phonological and morpho-phonological properties of Japanese /r/, which will be presented and discussed in my paper:

- **Phonetic variation:** the prototypical realization of /r/ in Japanese is the apico-alveolar flap [ɾ], but several other pronunciations are attested, among which [l], [r], [ɽ], [d], [ɽ].
- **Distributional asymmetries:** while /r/ is absent of word initial position in the Yamato (native) and mimetic stratas, it is the most frequent of all Japanese consonants in non-initial position. Moreover, it turns out that /r/s are more likely to occur close to the end of morphemes (i.e. in a trisyllabic morpheme, /r/ is more likely to occur in the final syllable than in the second syllable).
- **Complementary distribution with zero (empty onset):** /r/ is in complementary distribution with the ‘zero consonant’, or empty onset. In Yamato Japanese, as well as in mimetics, empty onsets are only licit in word initial position, i.e. the position where /r/ does not occur. Moreover, it must be noted that in word initial position, the empty onset is the most frequent type of onset.
- **Co-occurrence restrictions:** there can be one and only one /r/ per root. No Yamato or mimetic root contains more than one occurrence of /r/
- **Instability:** /r/ is the most unstable of all Japanese consonants, both diachronically and synchronically. /r/ beginning syllables frequently undergo syncope but also unexpectedly appear as epenthetic elements.
- **Phonological ‘inertia’:** /r/ fails to undergo several phonological processes, such as palatalization and gemination.
- **Morphological role:** /r/ is crucially involved in the verbal flexion. It is also frequent at the beginning of several grammatical suffixes (-ra ‘plural’, -raru/-rareru ‘passive’, -ri ‘adverbial’, -re ‘deictic’, etc.).

Previous studies have proposed that Japanese /r/ should be considered as a placeless segment or even as a totally underspecified consonant ((Mester & Itô 1989, Labrune 1997). Taking into special consideration the fact that /r/ stands in complementary distribution with the empty onset, I will argue that the above characteristics can be interpreted as evidence that the presence of /r/ in Yamato morphemes results from a kind of ‘emergence of the unmarked’ process (McCarthy & Prince 1994), and that /r/ can thus be analyzed as **the unmarked, default consonant** of Japanese.

Finally, I would like to open up the discussion and document one of the most striking typological characteristics of /r/ from a general, cross-linguistic point of view, namely, the fact that rhotics (and other types of liquids) are frequently prohibited at the beginning of lexical words. Outside Japanese, a fair number of languages of diverse genetic affiliation have been reported where /r/ does not occur in word initial position, for instance Proto-Indo-European, Basque, some Melanesian languages, Altaic languages¹ such as Mongol and Korean, Efic (Niger-Congo), ancient Caucasian, Susu, Diyari (Australian), Piro (Arakawan), etc, to cite just a few. Whether the Japanese facts can provide new insights into the problem of the distributional gaps of rhotics in several world languages is a question I would like to address in the final part of my paper, and discuss with other participants to the Workshop.

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¹ Japanese is sometimes classified as a member of the Altaic family, but this assumption is far from being accepted by Japanese scholars. The absence of liquids at the beginning of lexical words constitutes one of the strongest evidence for such a classification. However, the fact that this typological characteristic is shared by a relatively high number of genetically unrelated languages considerably weakens the argument.