

Rethinking the *Core-Periphery* Model: Lexical Evidence from Japanese

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Ito and Mester (1995, henceforth I&M) developed the *Core-Periphery* model to account for apparent behavioral differences between strata in the Japanese lexicon. By assigning lexical items to strata with distinct rankings of FAITH, I&M attempt to account for these alternations with one overall ranking of markedness constraints. In this paper, however, I argue that not even this reranking of FAITH is necessary, and that all Japanese lexical data, including the numerous exceptions to their proposed strata, can be evaluated using a single ranking of constraints, if we keep in mind the reality of lexical change.

I suggest that the hierarchical nature of lexical stratification is due to the constraint reranking process that results in long-term phonological change, and that the phonotactic similarities within each stratum are a reflection of the constraint ranking active during the period when these forms were initially lexically stored. Once we accept that underlying forms change from generation to generation, and allow them to be updated accordingly, we realize that alternations that have posed problems for OT when attributed to phonology can be easily dealt with through the lexical representation instead.

I&M state that over time lexical items move toward the core of the lexicon and become more constrained, but I present three sources of data which show the opposite. I argue that the paradigm of the suffix *pun* ‘minute’ has levelled in casual speech from *i-ppun* ‘one minute’, *ni-φun* ‘two minutes’, *san-bun* ‘three minutes’ to *ip-pun*, *ni-pun*, *san-pun*, in violation of two of I&M’s constraints that should apply to *pun*’s stratum: “postnasal obstruents must be voiced” (NO-NT), and “no singleton-p” (NO-P). Rice (1997) also provides evidence of core lexical items violating I&M’s NO-NT constraint, including *anta* ‘you’, formed via syncope from *anata*. I&M are aware of these exceptions, but refer to them as “undoubtedly native, but peripheral” (830). Additionally, I&M use a constraint preventing voiced obstruent geminates to separate their two most peripheral strata, Assimilated and Unassimilated loans. According to Crawford (2009), however, there are only ten forms with relevant devoiced geminates, and at least five different adaptation mechanisms for loans with final voiced consonants, making this constraint an odd choice to differentiate these strata.

I argue instead that FAITH outranks both NO-P and NO-NT outright in Modern Japanese, and that all modern surface alternations seemingly due to these markedness constraints are instead lexically stored. In the Old Japanese period, however, the opposite ranking held; both outranked FAITH, effectively eliminating from the language any singleton-p and NT clusters that existed previously. Later in the Sino-Japanese period, under the influence of massive numbers of borrowings from Chinese, the NO-NT constraint was reranked below FAITH, allowing new words with NT clusters to enter the language. Of course, since NT clusters had been eliminated from all Old Japanese words previously, they were now missing from the entire surviving Old Japanese stratum in Middle Japanese. Crucially, however, this is now due to lexical transmission and acquisition and no longer due to constraint interaction. This pattern then repeated with the influx of Western borrowings in the 1600s, reranking NO-P below FAITH, but leaving the entire Middle Japanese stratum singleton p-less, again for lexical reasons. Since these restrictions were no longer phonological, the Old Japanese word *anata* was free to syncope to *anta*, and the paradigm of *pun* was able to level analogically.

This paper advocates rethinking the boundary between phonology and the lexicon, re-considering much of the reliance upon strata within OT, and stressing the importance of lexical representation in the input to OT evaluation.