

# A Concatenative Account of Tonal Patterns in Japanese Mimetic Nominal Adjectives

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Syntactically, Japanese mimetics are most commonly used as adverbs. In addition to their adverbial function, however, they may also serve as nominal adjectives (Hamano 1998). When used adverbially, mimetics typically co-occur with the quotative particle *-to*, whereas when used as nominal adjectives, they appear with a copula, as illustrated in (1).

Prosodically, the two uses exhibit systematic differences. In adverbial use, mimetics are generally accented, typically realized with a high tone followed by a low tone. In nominal-adjectival use, however, the tonal pattern depends on morphological structure. Reduplicated forms are typically unaccented and surface with a high tone accompanied by a phrasal initial low tone, whereas *-ri*-suffixed forms remain accented and therefore pattern like their adverbial counterparts. This asymmetry is illustrated in (2).

- (1) a. *pika-pika-to* hikaru.                      b. *pika-pika* da.  
MIM-QUOT shine-NPST                      MIM COP-NPST  
'It shines brightly.'                      'It is shiny.'

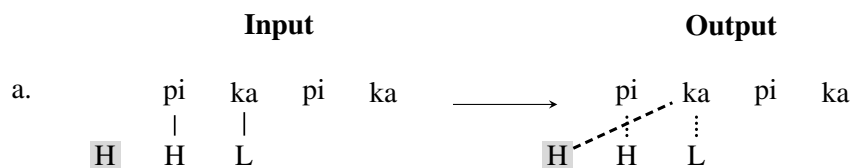
(2)

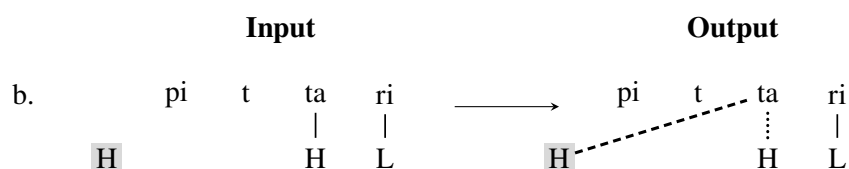
|                       | Reduplicated forms                                              | <i>-ri</i> -suffixed forms                                     |
|-----------------------|-----------------------------------------------------------------|----------------------------------------------------------------|
| Adverbial use         | pi <sup>H</sup> ka <sup>L</sup> pi <sup>L</sup> ka <sup>L</sup> | pi <sup>L</sup> t <sup>L</sup> ta <sup>H</sup> ri <sup>L</sup> |
| Nominal adjective use | pi <sup>L</sup> ka <sup>H</sup> pi <sup>H</sup> ka <sup>H</sup> | pi <sup>L</sup> t <sup>L</sup> ta <sup>H</sup> ri <sup>L</sup> |

Gloss: *pikapika* 'shining', *pittari* 'snugly'

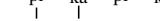
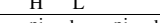
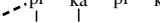
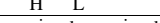
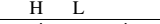
To account for these data, this paper adopts the Generalized Nonlinear Hypothesis (Bermúdez-Otero 2012; Bye & Svenonius 2012) and advances a concatenative analysis of grammatically conditioned phonology. I propose that the observed tonal pattern is derived by floating H-tone prefixation: nominal adjectivization is realized through the prefixation of a floating H tone to the base, thereby overwriting the base tone. Representationally, the proposal is couched in Autosegmental Colored Containment Theory (ACCT; Trommer 2011; Trommer & Zimmermann 2014), and computationally it is implemented within Stratal Optimality Theory (Kiparsky 2000; Bermúdez-Otero 2018). Crucially, the proposed H-tone prefixation is assumed to apply at the word level, abstracting away from independent tone-spreading processes and phrasal phenomena such as initial L insertion. The prefixation process is illustrated in (3), and the corresponding tableaux are presented in (4) and (5). The paper also evaluates several alternative analyses within mainstream Optimality Theory, including Antifaithfulness (Alderete 2001a, 2001b), RealizeMorpheme (Kurusu 2001), Cophonology Theory (Orgun 1996; Inkelas & Zoll 2005, 2007), and morpheme-specific constraints (Pater 2009). I argue that these approaches either fail to capture the relevant empirical generalizations or produce analyses that are less explanatory and more stipulative than the ACCT-based Stratal account developed here.

- (3) H-tone prefixation

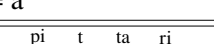
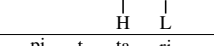
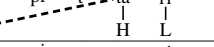
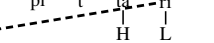
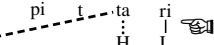




(4) Tableau for *pikapika*

| Input = a                                                                            | $\tau \mu \tau$ | $\tau \rightarrow \mu$ | $\ast \text{CON}$ | $\ast \tau [\mu] \tau$ | $\ast \text{CRO}$ | Max         | Dep    | $\ast \text{CRO}$ | $\ast \text{CON}$ | $\ast \tau \mu \tau$ |
|--------------------------------------------------------------------------------------|-----------------|------------------------|-------------------|------------------------|-------------------|-------------|--------|-------------------|-------------------|----------------------|
| a.  |                 | $\ast !$               |                   |                        |                   |             |        |                   |                   |                      |
| b.  | $\ast !$        |                        |                   |                        |                   |             | $\ast$ |                   |                   | $\ast$               |
| c.  |                 |                        | $\ast !$          |                        |                   | $\ast$      | $\ast$ | $\ast$            | $\ast$            |                      |
| d.  |                 |                        |                   |                        |                   | $\ast \ast$ | $\ast$ | $\ast$            | $\ast$            |                      |
| e.  |                 |                        |                   |                        |                   | $\ast \ast$ | $\ast$ | $\ast \ast !$     |                   |                      |
| f.  |                 |                        |                   | $\ast !$               |                   | $\ast$      | $\ast$ |                   |                   | $\ast$               |

(5) Tableau for *pittari*

| Input = a                                                                              | $\tau \mu \tau$ | $\tau \rightarrow \mu$ | $\tau \rightarrow \mu$ | $\tau \rightarrow \mu$ | $\tau \rightarrow \mu$ | Max | Dep | CRO | CON | $\tau \mu \tau$ |
|----------------------------------------------------------------------------------------|-----------------|------------------------|------------------------|------------------------|------------------------|-----|-----|-----|-----|-----------------|
| a.   |                 | *                      |                        |                        |                        |     |     |     |     |                 |
| b.  | *               |                        |                        |                        |                        |     | *   |     |     | *               |
| c.  |                 |                        | *                      |                        | *                      |     | *   | *   | *   |                 |
| d.  |                 |                        |                        |                        |                        | *   | *   |     |     | *               |
| e.  |                 |                        |                        |                        |                        | *   | *   |     |     | *               |
| f.  |                 |                        |                        |                        |                        | *   | *   | *   | *   |                 |

**Selected References:** Bermúdez-Otero, Ricardo. 2012. The architecture of grammar and the division of labour in exponence. In Jochen Trommer (ed.), *The morphology and phonology of exponence*. Oxford: Oxford University Press, 8–83. • Bermúdez-Otero, Ricardo. 2018. Stratal phonology. In S. J. Hannahs and Anna R. K. Bosch (eds.), *The Routledge handbook of phonological theory*. London: Routledge, 100–134. • Bye, Patrik and Peter Svenonius. 2012. Non-concatenative morphology as epiphenomenon. In Jochen Trommer (ed.), *The morphology and phonology of exponence*. Oxford: Oxford University Press, 84–105. • Hamano, Shoko. 1998. *The sound-symbolic system of Japanese*. Tokyo: Kurocio and Stanford, CA: CSLI. • Kiparsky, Paul. 2000. Opacity and cyclicity. *The Linguistic Review* 17(2–4). 351–367. • Trommer, Jochen. 2011. *Phonological aspects of Western Nilotic mutation morphology*. Habilitation thesis, University of Leipzig. • Trommer, Jochen and Eva Zimmermann. 2014. Generalised mora affixation and quantity-manipulating morphology. *Phonology* 31(3). 463–510.