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PATTERNS OF TRUNCATION

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Prosodic Morphology (McCarthy and Prince 1986; 1988; to appear) maintains that morphological truncation is not an operation of deleting segments or syllables from a base form, but rather involves the mapping of the base melody segments to a prosodically defined template (see Steriade (1988) for a different view). As a simple example, consider clipped words in English and their mode of formation: *pregnant* → *pregg(ers)*, *Bolshevik* → *Bolsh(y)*, and the like. The string of segments in the base form is mapped to the prosodic target, a stressed monosyllable. A quasi suffix like *-y* then attaches to the truncated form. Template mapping explains why two medial consonants [lʃ] remain in *Bolsh(y)*, but only one medial consonant [g] in *pregg(ers)*: [boʃ] is a well-formed syllable (which happens not to be a constituent of the base form), but *[pregn] is not.

Though many cases are amenable to this kind of analysis, further crosslinguistic investigation (Weeda (in preparation)) has uncovered truncation types that are systematically beyond the reach of an unadorned template-mapping approach (see also section 1 below). In what ways must the formal options be expanded? The null hypothesis holds that truncation templates function in all and only the ways established elsewhere in Prosodic Morphology, and in no idiosyncratic way. There should be no separate "theory of truncation."

This minimalist position is defended here on the basis of Japanese name truncations (most extensively documented in Poser (1988), the main source of evidence for this study). It is argued that truncation templates operate exactly in the two ways independently established within the theory: (a) as *prosodic targets* to which the base melody segments are mapped; (b) as *prosodic delimiters* that effectively reduce base forms to a certain prosodic size.¹ The former is a constraint on the output of a process, the latter a reduction of the input domain. The distinction is further illustrated below (see sections 2.2 and 2.3).

1. Japanese Name Truncations

A bimoraic foot template has been firmly established within Japanese Prosodic Morphology in extensive and insightful work by Poser (1984a,b; 1988). I will focus here on the various melody-template relations that are observed in the different truncation patterns.

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¹ This is what McCarthy and Prince (to appear) refer to as "positive prosodic circumscription of a domain."

1.1. Truncation I: Hypocoristics

A productive process of hypocoristic formation derives shortened versions of personal names, adding the suffix /čaN/ ([N] represents the mora nasal). Some illustrative examples appear in (1).

- (1) Akira → Aki-čaN
 Megumi → Megu-čaN
 Keiko → Kei-čaN
 JuNko → JuN-čaN
 Sačiko → Sač-čaN
 Hiromi → Hiro-čaN, Romi-čaN
 Midori → Mido-čaN, Mii-čaN
 Yooko → Yoko-čaN, Yoo-čaN
 Mariko → Mari-čaN, Mako-čaN
 Hanako → Hana-čaN, Haa-čaN, Hač-čaN
 Takako → Taka-čaN, Taa-čaN, Tač-čaN

Poser (1984a,b; 1988) analyzes this as a bimoraic foot template [μ μ] filled by the melodic material of the base. This prosodic template subsumes bisyllables (with two light syllables as in *Aki-čaN*, *Megu-čaN*) and monosyllables (with one heavy syllable as in *Kei-čaN*, *JuN-čaN*, *Sač-čaN*).

What distinguishes this pattern of truncation from the others to be considered below is the extent to which hypocoristic and base can differ in the way the melody is aligned with prosodic structure. As Poser (1984a,b; 1988) has shown in detail, we find lengthening (*Mii-čaN* from *Midori*), shortening (*Yoko-čaN* from *Yooko*), and sometimes even skipping (*Mako-čaN* from *Mariko*). In addition, the suffix-initial consonant can spread to fill the second mora of the template (*Tač-čaN* from *Takako*). A personal name can in general give rise to several different hypocoristics. In contrast, the size demands imposed by the bimoraic template are inflexible; the hypocoristic suffix [čaN] cannot attach to a single mora.

1.2. Truncation II: Rustic Girls' Names

A second type of truncation appears in the derivation of rustic girls' names (2) (the constant initial *o* in the derivatives is an honorific prefix). The two-mora requirement holds here just as in the case of hypocoristics. Crucially, however, no deviation in mapping with respect to the base form is tolerated; the segments in the truncated form must be syllabified exactly as in the original.

- (2) Yuuko → o-Yuu *o-Yuko
 Ranko → o-Ran
 Yukiko → o-Yuki *o-Yuu

Hanako → o-Hana *o-Haa, *o-HaN
 Čiyoko → o-Čiyo
 Kaede → o-Kae
 Kinue → o-Kinu
 Midori → o-Mido
 Šinobu → o-Šino
 Šigeno → o-Šige
 Takie → o-Taki

1.3. Truncation III: Geisha-House Discretionary Names

A third pattern of truncation is found in the speech of geishas and of waitresses in Japanese-style bars and restaurants. Based on the family names of regular clients, the truncated forms create an aura of anonymity. Geishas usually add the honorific prefix *o*.

- (3) a. Koono → o-Koo-saN
 Iida → o-Ii-saN
 b. Uno → o-Uu-saN *o-Uno-saN
 Fukuda → o-Fuu-saN *o-Fuku-saN
 Tanaka → o-Taa-saN *o-TaN-saN *o-Tana-saN
 Tanizaki → o-Taa-saN *o-TaN-saN *o-Tani-saN
 Yasuda → o-Yaa-saN² *o-Yas-saN *o-Yasu-saN
 Hattori → o-Haa-saN *o-Has-saN
 c. Saiki → o-Saa-saN o-Sai-saN
 Kaifu → o-Kaa-saN o-Kai-saN
 d. HoNda → o-Hoo-saN o-HoN-saN
 KoNdo → o-Koo-saN o-KoN-saN
 ENdo → o-Ee-saN o-EN-saN

An inspection of (3) reveals that the truncated stem of the discretionary client name, besides conforming to the bimoraic template, fulfills the more stringent requirement that it be a monosyllable. As Poser (1988) points out, the mapping possibilities are severely restricted. Always available is the option to have a long-voweled syllable, identical with the first syllable of the base (3a) or obtained by lengthening the vowel of the initial mora (3b–d). An additional possibility is to use the first syllable of the base without modification, provided it contains a diphthong or ends in a nasal (3c–d).³

² *Yaa-saN* (from *Yasuda*) is the prime suspect in Matsumoto Seichō's detective novel *Ten to Sen* (1970), which is set in the bargirl milieu. *Koo-saN* and *Uu-saN* appear in the same work, but without revealing their base forms.

³ A reviewer raises the interesting question how names with geminate /s/ are treated. It appears that for a hypothetical example like *Kis-saka* the only option is to lengthen the vowel (*o-Kii-saN*).

2. Analysis

As is apparent from the above survey of Japanese name truncations, "conforming to a template" means different things in different contexts. An adequate treatment of truncation should capture the empirical typology within the confines of a parametrized theory. I will now try to demonstrate that the three types of truncation found in Japanese instantiate three possibilities of template use that are independently established in Prosodic Morphology.

2.1. Truncation I: The Template as a Mapping Target

The hypocoristics in (1) exemplify the most common use of a template, namely, as a mapping target. The template (in this case, a bimoraic foot) is satisfied by mapping of the base melody. The mapping process is in principle unconstrained by the prosodic structure of the base form, as illustrated in (4) (for reasons of clarity, only moraic structure is indicated).⁴

- (4) a. $[\mu \ \mu] + \text{čaN}$
 $\uparrow \ \uparrow$
 ta ka ko
 TakačaN
- b. $[\mu \ \mu] + \text{čaN}$
 $\swarrow \ \searrow$
 ta kako
 TaačaN
- c. $[\mu \ \mu] + \text{čaN}$
 $\swarrow \ \searrow$
 hi ro mi
 RomičaN
- d. $[\mu \ \mu] + \text{čaN}$
 $\uparrow \ \uparrow$
 ka na ko
 KaNčaN

2.2. Truncation II: The Template as a Delimiter

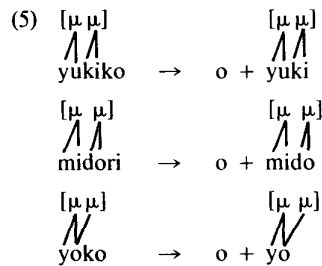
Truncation II (rustic girls' names, see (2)) also requires a bimoraic output; but within the two-mora window it differs from Truncation I (hypocoristics) in that the prosodic structure of the base is necessarily left intact. As a result, the truncated form is always exactly identical with the first two moras of the base form.

Target templates are ill-equipped to handle such (intuitively straightforward) identity cases, since remapping by its very definition allows for deviation from the base form (see the range of mapping effects in the hypocoristics illustrated in (1) and (4)). To account for the difference, Poser (1988) suggests that a truncating deletion rule be admitted as a separate mechanism provided by the theory, deleting everything in the base form after the initial bimoraic foot.

⁴ Not all mapping possibilities provided by the grammar are instantiated in actual usage; see Poser (1988) for a detailed discussion. This is the usual situation for nickname formations in many languages (Weeda (in preparation)).

Such truncation-specific deletion rules are a priori undesirable. It is therefore a welcome result that Prosodic Morphology offers a way to capture Poser's (1988) insight without seriously weakening the overall theory. The formal characteristics of Truncation II allow it to be subsumed under the second established use of templates: as prosodic delimiters.

In the areas of reduplication (for instance, Yidin^y) and of templatic morphology (for instance, Arabic broken plurals), prosodic constituents (in particular feet) function not only as mapping targets but also as mechanisms isolating a subdomain within the base form (see McCarthy and Prince (to appear) for formal development and exemplification of such prosodic circumscription). In the case of Truncation II, the bimoraic template functions as a delimiter isolating the first two moras of the base. This is illustrated in (5).



There remains one obvious difference in the use of delimiting templates between truncation and other types of prosodic morphology, where the part of the base form outside of the delimiting template is not lost, but is restored in the final output. This is not the case in Truncation II (otherwise, the overall effects would be nil, since no modification at all would be achieved). This difference, however, is tangential to the delimiting use of the template; it derives rather from the overriding constraint of melody conservation (McCarthy and Prince (1986)) in Prosodic Morphology, which is out of force in truncation systems. It appears that this fundamental characteristic of truncation must in some form find a place in any framework. After all, to truncate a form means to make it radically shorter, and such a process cannot be segment-preserving with respect to the base form.

2.3. *Truncation III = Truncation I + Truncation II*

As noted above (see (3)), the formation of Truncation III (clients' discretionary names) involves two simultaneous constraints on the output: it must be both a bimoraic foot and a syllable (in other words, a heavy syllable). Following Poser (1988), who remarks that such multiple constraints are difficult

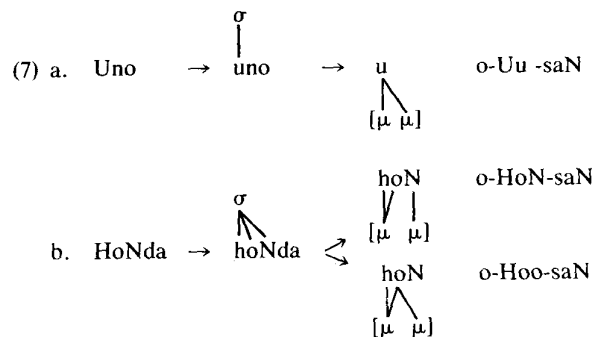
to formulate, this could be expressed by positing (6) as the target template.

(6) $\text{F}[\sigma]$

However, closer inspection of the forms in (4) reveals that a composite target template like (6) is in fact empirically inadequate. The real generalization is that only material belonging to the initial syllable of the base form is available for mapping to the bimoraic template. This is why *HoNda* can truncate to *o-HoN-saN* and *o-Hoo-saN*, but *Tanizaki* or *Uno* only to *o-Taa-saN* and *o-Uu-saN*, not to **o-TaN-saN* and **o-UN-saN*, as (6) would allow.

What is needed is not a composite target template to which the whole base melody is mapped but rather the concerted action of two different templates with different functions. First a delimiting syllable template restricts the operative part of the base to the first syllable; the melodic material made available in this way is then mapped to a bimoraic target template.

Truncation III can be viewed, in a sense, as the combined effect of Truncation II (delimiting) and Truncation I (mapping to a bimoraic target). As illustrated in (7), this analysis captures both the restriction to the first syllable of the base and the constant prosodic shape of the output. (A similar interaction of templates characterizes the Arabic broken plural in the analysis of McCarthy and Prince (to appear).)



A final point to be considered in this context is the suggestion made by McCarthy and Prince (to appear) to restrict the delimiting use of templates to "minimal word." This raises the question whether "syllable" is a legitimate delimiting template in Japanese.

Since the smallest size of a lexical item is one (monomoraic) syllable (as shown by numerous forms like *ki* 'tree', *to* 'door', and *ya* 'arrow'), it could be argued that "minimal word" is in this case identical with "syllable." Furthermore, some independent evidence for a syllable-sized template in Japanese can

be deduced from the behavior of another hypocoristic suffix *-ko* (distinct from the usual ending *-ko* for women's names found in many of the examples above) discussed in Tateishi (to appear). The forms cited there suggest that hypocoristic *-ko* subcategorizes for a (truncated) monosyllabic base, either monomoraic or bimoraic, and this has been confirmed by native speakers. For example, *Hiromi* can give rise to *Hi-ko*, *Ro-ko*, *Mi-ko*, *Hik-ko*, *Hii-ko*, *RoN-ko*, *Mii-ko*, etc., but not to **Hiromi-ko*, **Hiro-ko*, **Romi-ko*, etc.⁵

On the other hand, the bimoraic foot plays the role of a minimal word template in various derivational formations (including the name truncations discussed here). It is possible that we are dealing with two different notions of "minimal word"⁶ whose proper differentiation must be left for future research.

3. Conclusion

Two independently motivated template functions (target and delimiter) are separately instantiated in Japanese name truncations, in hypocoristics and rustic girls' names; their combination derives a third pattern found in discretionary names.

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⁵ The foot-based account proposed in Tateishi (to appear) does not rule out forms with bimoraic-bisyllabic bases like **Hiro-ko* or **Romi-ko* (from *Hiromi*).

⁶ See Itô (1989) for a discussion along these lines. Within Japanese, the dichotomy noted in the text is in an abstract way reminiscent of the contrast between underived nouns, with unpredictable accent positions, and derivational and inflectional formations governed by regular accentuation rules. It is not unreasonable to hypothesize that foot structure is present in the latter, but not in the former.

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