Surface Constraints on Multiple Default Morphemes of Tense

The current paper proposes an optimality-theoretic alternative to the conventional assumption of the 'non-past' tense morpheme and verb base forms of Japanese, that explains dialectal differences, performing a division of labor among linguistic components.

Literature review: The conventional assumption for the standard, as assumed in, for example, Hayata (1998:32), Shirota (1998:23), if extended to Yamaguchi dialect, would need to assume that each '/n/ consonant-final' base verb, which is a weak base verb, has two base forms, 1) consonant-final one as usual since they pattern the same as the consonant-final base verbs when they are in the negative, present participle and passive forms, e.g., (1b-ii) the same as in (1a-ii), and 2) the other with the vowel /u/ added at the final of the usual one since they pattern the same as the strong base verbs #ku+ru# 'come Non-past' and #su+ru# 'do Non-past' when they are in the 'non-past' and /(r)eba/-conditional forms, e.g., in (1b-i) in contrast with its standard counterpart (1a-i).

(1) a. i) sin u ii) sin anai [Standard Japanese]
die Non-past die not
'i) (He) dies.' 'ii) (He) does not die.'

b. i) sinu ru ii) sin an [Yamaguchi dialect]
die Non-past die not
'i) (He) dies.' 'ii) (He) does not die.'

All the '/n/ consonant-final base' verbs are only /sin/ 'die' and /in/ 'leave' in the dialect. It would be simpler if we could avoid this dialectal different assumptions of the base forms of /n/ consonant-final base verbs.

Proposal: The alternative to propose, further analyzes Kasuga's (1973:129) 'non-past' morpheme /uru/ as a complex consisting of two default morphemes of tense (DfltMTs) /u/ and /ru/, as formalized as $[_{\boldsymbol{DfltMT}}\ [_{\boldsymbol{DfltMT}}\ \mathbf{X}][_{\boldsymbol{DfltMT}}\ \mathbf{Y}]]$. The analysis of the content of the default morpheme of tense as the identity function, formalized as $\mathbf{DfltMT'} = \lambda\mathbf{X}\lambda\mathbf{e}\lambda\mathbf{t}[\mathbf{X}(\mathbf{e})(\mathbf{t})]$, makes this reiteration possible. The content of the complex #u+ru# is thus computed as $\lambda\mathbf{X}\lambda\mathbf{e}\lambda\mathbf{t}[\mathbf{X}(\mathbf{e})(\mathbf{t})](\lambda\mathbf{X}\lambda\mathbf{e}\lambda\mathbf{t}[\mathbf{X}(\mathbf{e})(\mathbf{t})]) = \lambda\mathbf{X}\lambda\mathbf{e}\lambda\mathbf{t}[\mathbf{X}(\mathbf{e})(\mathbf{t})]$.

An extension of Ito 1990 as a surface constraint that **the prosodic structure, including the phonetic realization, of the finite form of every verb consists of more than one syllable** in conjunction with the independently motivated final /u/ absence immediately after the dental nasal in Yamaguchi dialect, built on the tense analysis, does not permit the /n/ consonant-final base verbs with its 'non-past' tense morpheme only /u/, #sin+u# (1a-i) and #in+u# 'leave Non-past' in the dialect. This is because the former would realize as [sin] and the latter as [in] eventually, and their prosodic structures would consist only of one syllable, violating the phonological heaviness constraint.

It will be correctly predicted that #sin+u+ru# (1b-i), for example, is optimal in the dialect, #sin+u# (1a-ii) being ungrammatical, whereas #sin+u# (1a-ii) is optimal in the standard, if an economy surface constraint is assumed that **no morpheme is repeated if not necessary, and a morpheme may be repeated if necessary**. The tense of the content of a verb with the default morpheme of tense will be specified as the 'non-past' tense if the 'non-past' tense, which is formalized as $\boldsymbol{\lambda X \lambda e \lambda t}[\boldsymbol{X(e)(t)}\ \&\ \boldsymbol{t} \in \boldsymbol{T_{NON-PAST}}]$ (which uses Parsons' (1985: 244) analysis of a tense morpheme), **is free**, which is independently motivated, for example, for 'copula-less' sentences. For example,

#sin+u+ru# (1b-i) is correctly predicted to be interpreted as meaning $\lambda X \lambda e \lambda t[X(e)(t)$ & $t \in T_{NON-PAST}](\lambda X \lambda e \lambda t[X(e)(t)](\lambda e \lambda t[die'(e)$ & $Cul/Hold(e)(t)]))$, equivalently $\lambda e \lambda t$ $[sleep'(e)$ & $Cul/Hold(e)(t)$ & $t \in T_{NON-PAST}]$. The analysis of the default morpheme of tense in conjunction with the economy constraint and the phonological heaviness constraint also immediately explains the 'non-past' complex /uru/ with the strong base verbs /k/ 'come' and /s/ 'do' since they consist only of one consonant, but the 'non-past' simple morpheme /u/ or /ru/ with the weak base verbs in the standard Japanese (1a) since there is no weak base verb the base form of which consists only of one consonant.

Steriade's (2008: 336) global correspondence, which states '**[g]iven a subconstituent C of a candidate expression characterized by a set of syntactic specifications {[α F], [β G]..., [γ H]}, C stands in correspondence to that one of its listed allomorphs that is characterized by the same set of syntactic values**', **if assumed within each morphological class**, explains the 'non-past' complex /uru/ for the /e/ vowel-final base verbs with the last /e/ absent in Yanagawa dialect, as in (2-i) and (2-ii).

(2) i) tab u ru ii) n u ru [Yanagawa dialect]
eat Non-past Non-past sleep Non-past Non-past
'i) (He) eats (it).' 'ii) (He) sleeps.'

The surface constraint selects the complex #u+ru# as the default morpheme of tense standing in correspondence within the morphological verb class. Had it selected the simple /u/ instead, since there is at least one /e/ vowel-final base verb with the last /e/ absent that consists only of one consonant /n/ 'sleep', the 'non-past' form #n+u# 'sleep Non-past' would have violated the phonological heaviness constraint. The current study implies that the default morpheme of tense with the content of the identity function is in Japanese, whereas there is no present tense in English (Enç 1997:347).

References

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