

## Productivity and morpheme ordering in Japanese compound verbs

### Abstract

This study demonstrates that Japanese compound verbs provide evidence for the processing account of affix ordering advocated by Hay (2002, 2003).

It is known that Japanese compound verbs can be divided into two classes. A limited number of verbs, such as *-hazimeru* ‘begin’ and *-wasureru* ‘forget’, can occur after complex structures like the passive (1) and the *suru*-verb construction (2) (*si-* is an inflected form of *suru*), while verbs like *-deru* ‘go out’ or *-kosu* ‘get across’ cannot.

Kageyama (1993) notices that the distinction between the two classes of the compound verbs correlates with productivity, but he argues that the correlation is not perfect and rejects the idea that productivity is an explanatory factor for the grammatical differences. Instead, he claims that the differences are due to the properties of the modules in which compound verbs are derived, based on his own theory of modular morphology.

In this study, a corpus investigation reveals the striking correlation between productivity and the distinction between the two classes of the compound verbs. It is argued that their distinct behavior is therefore predicted by Hay’s generalization, which states that more parsable (i.e. productive — see Hay & Baayen (2002)) morphemes must occur outside less parsable morphemes. Moreover, there exist verbs with intermediate productivity, such as *-au* ‘do something for each other’ and *-naosu* ‘do something again’. These verbs actually show ambiguous behavior between the two classes, which can be easily explained by the processing-based account of morpheme ordering.

The investigation of Japanese compound verbs further suggests that there is no reason to believe that the scope of Hay’s generalization must be restricted to the domain of morphology. Productive compound verbs have been regarded to subsuming verb phrases rather than verbs, as shown in (3). This fact is illustrated by the contrast between (4a) and (4b): although both *ii-sokoneru* and *ii-otosu* mean ‘fail to tell’, *-sokoneru* is much more productive than *-otosu*. As a consequence, only the former can be modified by the adverb *hakkiri* ‘clearly’ to mean ‘fail to tell clearly’. From our perspective, this contrast can be seen as another effect of the difference in parsability: *-sokoneru* is parsable enough to occur outside fully productive phrases.

This is in parallel with the contrast between (5a) and (5b), a variant of the so-called bracketing paradox. The structure (5a) is allowed because *generative grammar* has a lexicalized meaning (Spencer 1988) and therefore less parsable. These considerations lead us to the conclusion that a more parsable morphemes occur outside less parsable morphemes, no matter whether the morphemes involved are bound or not.

- (1) a. os-are-            hazimeru  
           push-PASSIVE begin  
           ‘begin to be pushed’  
       b. \*os-are-            deru                    (cf. *nagare-deru*, flow-go.out ‘flow out’)  
           push-PASSIVE go.out
- (2) a. yakusoku- si- wasureru  
           appointment do forget  
           ‘forget to make an appointment’  
       b. \*zyanpu- si- kosu                    (cf. *tobi-kosu*, jump-get.across ‘jump over’)  
           jump            do get.across
- (3) [hon-o    yomi-] hazimeru  
       book-ACC read        begin  
       ‘begin reading a book’
- (4) a. [ hakkiri ii- ] sokoneru  
           clearly tell fail  
           ‘fail to tell clearly’  
       b. \*[ hakkiri ii- ] otosu  
           clearly tell fail
- (5) a. [generative grammar]-ian  
       b. \*[bad grammar]-ian

## Reference

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