A Distributed Morphology-based Analysis for Japanese Compound Verbs
"Category: morphology/lexical semantics"

Adopting the perspective of recent Distributed Morphology approaches (Embick & Marantz, 2008; Embick & Noyer, 2007; Harley & Noyer, 1999), this study provides new insight into Japanese Compound Verbs (JCVs).

Background: Since Kageyama (1993), it is well known that JCVs are divided into two classes depending on their productivity, compositionality and syntactic behavior. A-class JCVs (e.g., *kaki-komu* 'write down', *nomi-aruku* 'go out drinking'), showing low productivity and non-compositional meaning, do not submit to syntactic operations like *soo-su* substitution (1a) and subject honorification (2a); on the other hand, B-class JCVs (e.g., *kaki-hazimeru* 'start writing', *nomi-tuzukeru* 'continue drinking'), with their high productivity and compositional meaning, do, as in (1b) and (2b).

(1) *Soo-su substitution*

    a. *Taroo-ga   yoosi-ni   namae-o   kaki-kom-da,   Hanako-mo   ***soo-si*-kon-da.**

        -Nom   form-to   name-Acc   write-into-Past   -also   so-do-into-Past

        'Taroo fill out a form with his name, Hanako also did so.'

    b. Taroo-ga   yoosi-ni   namae-o   kaki-hazime-da,   Hanako-mo   ***soo-si*-hazime-da.**

        -Nom   form-to   name-Acc   write-start-Past   -also   so-do-start-Past

        'Taroo started writing his name in the form. Hanako also started doing so.'

(2) *Subject honorification*

    a. *Tanaka-sensei-ga   osake-o   ***o*-nomi-*ninari*-arui-ta.**

        Tanaka-teacher-Nom   alcohol-Acc   Hon-drink-Hon-walk-past

        'Tanaka-sensei went out drinking.'

    b. Tanaka-sensei-ga   osake-o   ***o*-nomi-*ninari*-tuzuke-ta.**

        Tanaka-teacher-Nom   alcohol-Acc   Hon-drink-Hon-continue-past

        'Tanaka-sensei continue drinking.'

These differences lead Kageyama (1993) to argue that the A-class is formed at the Lexicon (Lexical compound verbs: LCVs) and the B-class is generated at the Syntax (Syntactic compound verbs: SCVs).
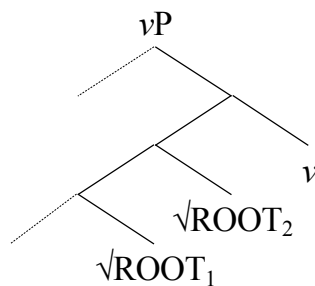
Although there appears to be no controversy in the literature surrounding the claim that SCVS are formed at Syntax, so-called LCVs, so-called LCVs have been recently reanalyzed from the syntactic perspective. In fact, previous studies (e.g., Hasegawa, 1999; Niinuma, 2010; Nishiyama 1998, 2008; Saito, 2001) have proposed various syntactic structures for LCVs. Specifically, Nishiyama's comprehensive analysis for LCVs demonstrates that syntactic analysis is capable of dealing with a wider range of linguistic phenomena than lexical analysis for LCVs (e.g., Kageyama, 1993; Fukushima, 2005).

Problems with previous studies: [1] In the literature including Nishiyama (1998, 2008), it has been generally recognized that so-called LCVs are formed by two content words labeled with a lexical category V. However, as LCVs are lexicalized and their meanings are opacified to varying degrees (Kageyama, 1993: 78), there are many of them whose meanings cannot be predicted from the individual verbs (e.g., *otiru* 'drop' + *tuku* 'reach' => *oti-tuku* 'calm down'). Therefore, it does not seem obvious that the first elements are necessarily labeled with a category V. **[2]** Previous studies show us various syntactic structures for LCVs, but they do not touch the problem of why LCVs and SCVs exhibit
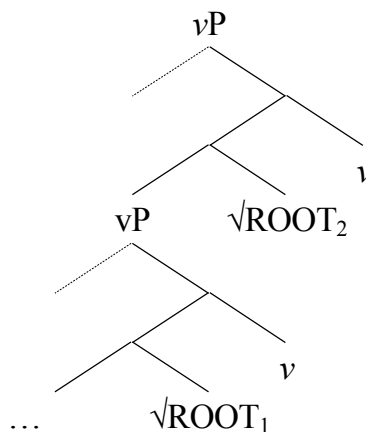
different syntactic behavior as in (1) and (2). The present study concludes that these problems are solved by analyzing JCVs in terms of DM.

The Proposal: Within recent DM (Embick & Marantz, 2008; Embick & Noyer, 2008; Harley & Noyer, 1999), so-called content words are formed by the combination of acategorial roots and category-defining heads (n, v, a). It should be noted that (i) category-defining heads are cyclic heads defining the phases that trigger spell out, and (ii) the combination of root and category-defining heads might yield a special interpretation, while the meaning of a word derived from pre-categorized words is predictable from the meanings of the original words (Arad 2003; Volpe 2005; Embick 2010). These claims could lead us to propose that LCVs are not be formed by a combination of two pre-categorized verbs but rather are generated by a derivation in which two Roots merge with a single category-defining head v (4a). On the other hand, SCVs showing compositional meaning are formed by the combination of two pre-categorized verbs (4b).

(4)　　a.　LCV　　　　　　　　　　　　b.　SCV

$$
\begin{array}{cc}
vP & vP \\
\sqrt{ROOT_1}\ \sqrt{ROOT_2}\ v & [\,vP\ [\,\ldots\ \sqrt{ROOT_1}\ v\,]\ \sqrt{ROOT_2}\,]\ v
\end{array}
$$

The differences in structure provide an explanation for the different syntactic behaviors, (1) and (2). That is, the reason why syntactic operations like (1) and (2) are not applicable to the first element of an LCV but are to SCVs can be attributed to whether or not the first Root merges with a category-defining head v. Thus, the two classes of JCVs are not attributed to a difference in components (i.e., Lexicon vs. Syntax) but to the difference in their syntactic structure (i.e., Root-derived vs. Verb-derived).

　　　This study, assuming the above structures, accounts not only for the derivations of several types of LCVs (transitive-transitive type; transitive-unaccusative/unergative type and unaccusative-unaccusative type), but for the derivations of so-called verb-derived compounding nouns like *tati-yomi* 'browse' and uri-kire 'sold out.'

References (Selected)

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