A frame-semantic approach to Japanese [N+V] compound verbs Category: cognitive/functional syntax/semantics

The aim of the present study is to investigate the meanings of Japanese [N+V] compound verbs (henceforth $[N+V]_V$) such as *hoo-baru* (cheek-stretch) 'eat with one's mouth full' in the framework of frame semantics (Fillmore & Baker 2010; inter alia). As Fillmore & Baker (2010: 334) states, a study of the range of senses attributed to a single lexeme has to be done by finding lexemes of the same form in more than one frame. Therefore, this study examines the meaning of $[N+V]_V$ by performing a usage-based analysis to investigate into the frame(s) it can participate in. On this basis, we argue that the meaning of $[N+V]_V$ is not always identical with the combined meaning of its elements used in the form [N+particle+V] (henceforth [N+P+V]) because some of them evoke different frames. For instance, even though the literal composite meaning of ta-mukeru (hand-direct) is a physical action (turn one's hand to), which occurs in many different frames such as Attack and Posing_as, the meaning of ta-mukeru is actually a very specific physical action (offer something to a deceased person), which related to a specific frame Rite.

Unlike the $[V+V]_V$ compound verbs, $[N+V]_V$ verbs remain largely unexplored in Japanese linguistics. One of the few previous studies is Kageyama (1980), who examines the meanings of $[N+V]_V$ verbs from the perspective of incorporation. In his work, Kageyama claims that most $[N+V]_V$ can be paraphrased to their [N+P+V] counterpart, except for a few with an abstract meaning, as shown below:

(1) a. Sanshiro-wa <u>tabi-dat-ta</u>.
 Sanshiro-Top journey-leave-Past
 'Sanshiro departed on a journey.'

b. Sanshiro-wa <u>tabi-ni tat-ta</u>.
Sanshiro-Top journey-Dat leave-Past
'Sanshiro departed on a journey.'

(Kageyama 1980: 167)

However, we found that tabi-datsu cannot be paraphrased to tabi-ni tatsu in certain contexts. For instance,

- (2) a. Sanshiro-wa tengoku-ni <u>tabi-dat-ta</u>.
 Sanshiro-Top heaven-Dat journey-leave-Past
 'Sanshiro passed away.'
 - b. ?Sanshiro-wa tengoku-ni <u>tabi-ni tat-ta</u>.
 Sanshiro-Top heaven-Dat journey-Dat leave-Past 'Sanshiro departed on a journey to heaven.'

The reason (2a) and (2b) cannot be paraphrased is that, judging from the collocations of *tabi-datsu* and *tabi-ni tatsu*, while both of them can evoke the Travel frame, only *tabi-datsu* can evoke the Death frame, and obtains the meaning 'pass away'.

Based on the idea that frames are crucial in understanding the semantics of $[N+V]_V$ verbs, we examined the meanings of 123 $[N+V]_V$ verbs found in *Iwanami Goitaikei*. We analyze the collocations of these verbs in the BCCWJ corpus, and specify the frames evoked by each of the $[N+V]_V$ and [N+P+V] pairs in terms of frame lists found in the English FrameNet. Depending on the frame-semantic relations between $[N+V]_V$ and [N+P+V], we classified $[N+V]_V$ into the following three types.

- (3) Frame-semantic relations between $[N+V]_V$ and [N+P+V]:
- 1. Identical (29%, 36/123): $[N+V]_V$ and [N+P+V] evoke the same frames.
- 2. Related (25%, 31/123):
- a. All of the frames evoked by $[N+V]_V$ are a part of the frames evoked by [N+P+V].
- b. All of the frames evoked by [N+P+V] are a part of the frames evoked by $[N+V]_V$.
- c. The frames evoked by $[N+V]_V$ and [N+P+V] are partially overlapped.
- 3. Unrelated (46%, 56/123):
- a. $[N+V]_V$ and [N+P+V] have no evident frame-semantic relation to each other.
- b. [N+P+V] is unable to evoke any frame.



Figure 1. The frame-semantic relations in Type 2 (Related)

The results suggest that only a restricted set of items (i.e., Type 1=29%) can be paraphrased in the way suggested by Kageyama. Moreover, the semantic behaviors of $[N+V]_V$ in 2b and 2c and 3 cannot be logically induced from the meanings of its components. For example, [*awa-datsu* (bubble-stand) 'bubble'] and [*awa-ga tatsu* (bubble-Nom Stand)] both evoke the same Fluidic_motion frame and no others, thus belonging to Type 1 (identical). As an instance of Type 2a, [*iki-zumaru* (breath-be.blocked) 'be suffocated'] evokes the Emotion_directed frame, while [iki-ga tsumaru] evokes two frames (Emotion_directed; Breathing). As an instance of Type 2b, [*tabi-datsu* (journey-leave) 'depart on a journey; pass away; start a new life'] evokes three frames (Travel; Death; Manner_of_life), while [*tabi-ni tatsu*] only evokes one (Travel). As an instance of Type 2c, [*mushi-kuu* (worm-eat) 'eat into wood; gnaw the healthy'] evokes two frames (Rotting; Cause_change_of_strength); [*mushi ga kuu*] also evokes two frames (Rotting; Ingestion), but only shares one (Rotting) with [*mushi-kuu*]. [*me-gakeru* (eye-hang) 'aim at'], an instance of Type 3a, evokes the Aiming frame, while [*me-o kakeru* (eye-Acc hang)] evokes the Attention frame. [*kuti-bashiru* (mouth-run) 'blurt out'], an instance of Type 3b, evokes the Reveal_Secret frame, while [*kuti-ga hashiru*] makes no sense.

In conclusion, through a corpus-based quantitative study of Japanese $[N+V]_V$ verbs in the framework of frame semantics, we found that the meanings of some compounds are not identical with the combined meanings of its elements, and we argue that these compounds must be understood via a specific frame.

References

Fillmore, Charles J. and Colin Baker (2010) A frames approach to semantic analysis. In B. Heine and H. Narrog (eds.) *The Oxford Handbook of Linguistic Analysis*, 313-340. Oxford: Oxford University Press.

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Websites

Berkeley FrameNet. <http://framenet.icsi.berkeley.edu/> BCCWJ. <http://chunagon.ninjal.ac.jp/>