Verbs Stay In-situ in Japanese: A Case Study of VP-fronting*

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1 Introduction

It has been controversial whether syntactic verb-raising exists in Japanese, which is strictly head-final. Scholars such as Otani and Whitman (1991), Koizumi (2000), Funakoshi (2014), and Hayashi and Fujii (2015), among many others, present evidence for syntactic verb-raising in Japanese. On the other hand, researchers such as Hoji (1998), Fukui and Sakai (2003), Kobayashi (2016) and others have shown that earlier arguments that syntactic verb-raising occurs in Japanese are not conclusive.

Against this backdrop, this paper scrutinizes Funakoshi's (2020) recent argument for syntactic verb-raising in Japanese, which focuses on VP-fronting in (1).

(1) a. [$_{\mathrm{VP}}$ Ringo-o tabe-sae] Taro-ga t_{VP} si-ta.
apple-ACC eat-even Taro-NOM do-PST
'Even eat an apple, Taro did.'

* We thank three anonymous reviewers of the 30th Japanese/Korean Linguistics Conference for their comments. Thanks also go to Takayuki Akimoto for his insightful suggestions. This project is supported by JSPS KAKENHI Grant-in-Aid for Scientific Research (C) Grant Number JP21K00574. All remaining errors and inadequacies are of course ours.

Japanese/Korean Linguistics 30.
Edited by Sara Williamson, Adeola Aminat Babayode-Lawal, Laurens Bosman, Nicole Chan, Sylvia Cho, Ivan Fong, and Kaye Holubowsky.

b. [$_{\mathrm{VP}}$ Eigo-o hanasi-sae] Hanako-ga t_{VP} su-ru.
English-ACC speak-even Hanako-NOM do-PRS
'Even speak English, Hanako does.'

In Japanese, VP-fronting is possible only when the verb is accompanied with particles, such as *-sae* 'even', *-mo* 'also/even', and *-wa* 'TOP'. Thus, (2) is ungrammatical, unlike the English translations *Eat an apple, Taro did* and *Speak English, Hanako does.*

(2) a. *[$_{\mathrm{VP}}$ Ringo-o tabe] Taro-ga t_{VP} si-ta.
apple-ACC eat Taro-NOM do-PST
Intended: 'Eat an apple, Taro did.'
b. *[$_{\mathrm{VP}}$ Eigo-o hanasi] Hanako-ga t_{VP} su-ru.
English-ACC speak Hanako-NOM do-PRS
Intended: 'Speak English, Hanako does.'

Funakoshi (2020) attempts to explain the contrast between (1) and (2) by assuming string-vacuous syntactic verb-raising (V-to-T movement) in Japanese. In this paper, we argue against Funakoshi's verb-raising analysis of VP-fronting. We propose an alternative morphological account of the ungrammaticality of (2). With novel evidence, we show that our morphological analysis is empirically and conceptually superior to the string-vacuous verb-raising analysis of Funakoshi (2020).[1]

The rest of the paper is organized as follows. In Section 2, we review Funakoshi's (2020) argument for string vacuous syntactic verb-raising in Japanese. Section 3 argues against Funakoshi's verb-raising analysis of VP-fronting and provides an alternative analysis, which is morphological in nature. In Section 4, several pieces of supporting evidence for our morphological analysis are in order. Specifically, we observe data on coordinated VP-fronting in Japanese and conclude that Funakoshi's (2020) verb-raising analysis makes a wrong prediction about grammaticality of such data. Section 5 deals with a remaining issue and Section 6 concludes the paper.

2 The Syntactic Verb-raising Analysis of VP-fronting in Japanese (Funakoshi 2020)

We first review Funakoshi's (2020) analysis of VP-fronting in Japanese. He claims that the contrast in (3b) and (3c) is explained if string-vacuous syntactic verb-raising occurs only in (3b) but not in (3c). He argues that the verb raises out of the VP in Japanese unless blocked by focus particles. In (3),

[1] The present paper strongly advocates reconsideration of the existence of string-vacuous verb-raising in strictly head-final languages, especially Japanese, for there is no overt evidence for children to acquire it in these languages (cf. Fukui and Sakai 2003).

such verb-raising eventually makes *ringo-o* 'an apple' and *tabe* 'eat' a non-constituent. Because *ringo-o* and *tabe* do not form constituency, they cannot be fronted together; hence, (3b) is ungrammatical in Japanese. The same applies to (4).

(3) a. Taro-ga ringo-o tabe-ta.
Taro-NOM apple-ACC eat-PST
'Taro ate an apple.'
b. *[$_{\mathrm{VP}}$ Ringo-o tabe] Taro-ga t_{VP} si-ta.
apple-ACC eat Taro-NOM do-PST
Intended: 'Eat an apple, Taro did.'
c. [$_{\mathrm{VP}}$ Ringo-o tabe-sae] Taro-ga t_{VP} si-ta.
apple-ACC eat-even Taro-NOM do-PST
'Even eat an apple, Taro did.'

(4) a. Hanako-ga eigo-o hanas-u.
Hanako-NOM English-ACC speak-PRS
'Hanako speaks English.'
b. *[$_{\mathrm{VP}}$ Eigo-o hanasi] Hanako-ga t_{VP} su-ru.
English-ACC speak Hanako-NOM do-PRS
Intended: 'Speak English, Hanako does.'
c. [$_{\mathrm{VP}}$ Eigo-o hanasi-sae] Hanako-ga t_{VP} su-ru.
English-ACC speak-even Hanako-NOM do-PRS
'Even speak English, Hanako does.'

On the other hand, since focus particles such as *-sae* 'even' and *-mo* 'also/even' block verb-raising out of VPs (see Aoyagi 1998 and Sakai 1998 for discussions) the verb remains inside the VP and so the object and the verb form a constituent. Therefore, VP-fronting is possible in (3c) and (4c). To summarize, Funakoshi (2020) claims that VP-fronting without a focus particle in (3b) and (4b) is ungrammatical because verbs raise out of VPs in Japanese. This is summarized in (5).

(5) **Generalization:** VP-fronting without focus particles obtains ungrammaticality because verbs raise out of VPs in Japanese, which makes the fronted elements non-constituents.

In the next section, we propose an alternative morphological account to the relevant contrast in (3b-c) and (4b-c) and argue that Funakoshi's (2020) claim that syntactic verb-raising occurs in Japanese is inconclusive at best.

3 Proposal: Verbs Stay In-situ in Japanese

We propose an alternative account to the contrast between (3b) and (3c). It is well known that verbal stems are bound forms and subject to suffixation

in Japanese (Fukushima 1999 and Nishiyama 2010, among others). We argue that the verbal stem and a linearly adjacent head undergo morphological merger in the post-syntactic component, which saves the bound verbal stems from being stranded in Japanese. In our analysis, (3b) is ungrammatical since the verbal stem *tabe* stands alone and remains in its bare form. On the contrary, (3c) becomes grammatical because the verbal stem *tabe* is suffixed by a particle *-sae*. In the same vein, (3a) is perfectly grammatical since the bound morpheme *tabe* is suffixed by a tense morpheme *-ta*. This is summarized in (6).

(6) **Generalization:** VP-fronting without focus particles obtains ungrammaticality because bare verbal stems are bound forms in Japanese.

Our analysis naturally explains the contrast in (3) with no recourse to syntactic verb-raising or any other additional assumptions than a widely known fact that Japanese verbal stems are bound morphemes (Fukushima 1999 and Nishiyama 2010, among others).

One may counter our proposal by stating that the verb may appear bare in coordination in (7). Indeed, Funakoshi (2020) claims that the data such as (7) serve as evidence that verbal stems in Japanese are free morphemes but not bound morphemes.

(7) Taro-ga ringo-o ***tabe***, mikan-o kat-ta.
Taro-NOM apple-ACC ***eat*** orange-ACC buy-PST
'Taro ate an apple and bought an orange.'

However, we claim that Funakoshi's assumption is wrong in the first place. In (7), a null coordinator head -& exists and is merged to the verbal stem in the first conjunct, which saves the bound morpheme *tabe* from being stranded. This is illustrated in (8).

(8) Taro-ga ringo-o ***tabe***-&, mikan-o kat-ta.
Taro-NOM apple-ACC ***eat***-& orange-ACC buy-PST
'Taro ate an apple and bought an orange.'

Our proposal is compatible with the following data in (9). In (9), the coordinated VPs are fronted. Although the verb *kai* 'buy' in the first conjunct is not suffixed by a particle that blocks verb-raising, the data is grammatical. Funakoshi's (2020) analysis cannot capture this fact without postulating additional assumptions concerning verb-raising and coordination, such as "verbs remain in-situ in coordination in Japanese, though they undergo raising in other contexts."

(9) [$_{VP}$ Ringo-o kai-&, banana-o tabe-sae] Taro-ga t_{VP} si-ta.
apple-ACC buy-& banana-ACC eat-even Taro-NOM do-PST
'Even buy an apple and eat a banana, Taro did.'

4 VP-coordination and VP-fronting in Japanese

In the previous section, we claimed that the data such as (9) lead us to conclude that Funakoshi's (2020) analysis must assume the following: verbs remain in-situ in coordination in Japanese, though they undergo raising in other contexts. With this in mind, let us observe a piece of counterevidence to Funakoshi's (2020) verb-raising analysis of VP-fronting in Japanese. If verbs remain in-situ in VP-coordination, then it is expected under Funakoshi's (2020) analysis that VP-fronting should be possible with coordination even without a focus particle that blocks verb-raising. In other words, coordination makes verbs remain in-situ and make them form constituency with other VP-internal elements. However, this is not the case: (10) is ungrammatical. The ungrammaticality of (10) is explained straightforwardly in our analysis. Because the verb in the second conjunct is morphologically stranded without any suffixation, the data is ungrammatical. This is unexpected in Funakoshi's syntactic verb-raising analysis of the availability of VP-fronting in Japanese.

(10) *[$_{VP}$ Ringo-o kai-&, banana-o tabe] Taro-ga t_{VP} si-ta.
apple-ACC buy-& banana-ACC eat Taro-NOM do-PST
Intended: 'Buy an apple and eat a banana, Taro did.'

Note that (9) is not derived from (11), in which both verbs in the first and second conjuncts are suffixed by focus particles.

(11) [$_{VP}$ Ringo-o kai-sae, banana-o tabe-sae] Taro-ga t_{VP}
apple-ACC buy-even banana-ACC eat-even Taro-NOM
si-ta.
do-PST
'Even buy an apple and even eat a banana, Taro did.'

The interpretation differs in (12a) and (12b). While (12b) allows either the single or the multiple event readings (Carlson 1987 and Takano 2004), (12a) only has the single event reading. In (12), the single event reading refers to an interpretation in which *Taro* even bought an apple and even had a banana in the same occasion. On the other hand, the multiple event reading here refers to an interpretation in which *Taro* even bought an apple and he even had a banana on separate occasions.

(12) a. [{*Betsubetsuno/Onaji} kikai-ni ringo-o kai,
different/same chance-at apple-ACC buy
banana-o tabe-sae]$_i$ Taro-ga t_i si-ta.
banana-ACC eat-even Taro-NOM do-PST
'In different/same occasion(s), even buy an apple and eat a banana, Taro did.'

b. [{Betsubetsuno/Onaji} kikai-ni ringo-o kai-sae,
different/same chance-at apple-ACC buy-even
banana-o tabe-sae]$_i$ Taro-ga t_i si-ta.
banana-ACC eat-even Taro-NOM do-PST
'In different/same occasion(s), even buy an apple and even eat a banana, Taro did.'

The fact that (12a) and (12b) have different interpretations further confirms our analysis that (9) is grammatical since a null coordinator head morphologically merges with the bare verb in the first conjunct, satisfying the morphological requirement of the bound morpheme (i.e., the verb in its bare form).

5 Verbal Nouns and VP-fronting in Japanese

Before we conclude, we touch on VP-fronting with verbal nouns in Japanese. Our morphological analysis states that VP-fronting is unavailable when the verb is stranded without affixation. This analysis may face a problem when we take verbal nouns into consideration. The data is in (13), in which *benkyoo* 'study' is used. Note that the verbal nouns are free forms unlike native Japanese verbs such as *tabe* 'eat' and *kaw* 'buy'. Since *benkyoo* is morphologically free, it is expected that [*eigo-o benkyoo*] 'study English' can undergo VP-fronting, contrary to the fact in (13b).

(13) a. Taro-ga eigo-o benkyoo si-ta.
Taro-NOM English-ACC study do-PST
'Taro studied English.'

b. *[Eigo-o benkyoo]$_i$ Taro-ga t_i si-ta.
English-ACC study-do Taro-NOM do-PST
Intended: 'Study English, Taro did.'

In this paper, we suggest that VP-fronting is actually *v*P-fronting in Japanese, contra Funakoshi (2020). We assume that the root $\sqrt{\text{BENKYOO}}$ 'study' undergoes super-short distance raising from V to *v*, which is spelled-out as *-su* 'do' in (13) after categorization (but see Hayashi 2015). In (13b), *-su* is not in the fronted *v*P constituent; hence, the data is ungrammatical.[2] Note that (14a) is ungrammatical even though *v* has its phonetic content *-su*

[2] We thank Takayuki Akimoto (p.c.) for bringing this possibility to our attention.

'do'. However, this is not a problem for our suggestion that verbal nouns raise to *v* in *v*P-fronting. Since *-su* is verbal and bound in nature, it requires some suffixation. This prediction is indeed borne out. (14b) is perfectly grammatical, thanks to *-sae* attached to the verbal stem *-su* 'do'.

(14) a. *[Eigo-o benkyoo-si]$_i$ Taro-ga t_i (si-)ta.
English-ACC study-do Taro-NOM do-PST
Intended: 'Study English, Taro did.'

b. [Eigo-o benkyoo-si-sae]$_i$ Taro-ga t_i si-ta.
English-ACC study-do-even Taro-NOM do-PST
'Even study English, Taro did.'

6 Conclusion

In this paper, we have shown that the contrast in (3) is explained with no recourse to syntactic verb-raising. Our alternative analysis is superior to Funakoshi's (2020) syntactic verb-raising analysis because it provides a natural account to the data set in (9) through (12). To summarize, Funakoshi's argument that verb-raising occurs in Japanese based on the observations of VP-fronting is not conclusive at best.

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