Notes on Adjuncts: A Study from Ellipsis in Purpose Expression*

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1. Introduction

This squib examines one of the elliptical properties in the purpose expression (PE), also known as the V_1-*ni* V_2 construction, with a focus on the position of adjuncts. Building on and extending the scope of Takahashi's (2012) work, we claim that adjuncts are obliged to be placed in a certain position in elliptical configurations so that they are interpreted appropriately at the interfaces. Our claim thus lends support to the current Minimalist view (Chomsky 2013), where Merge is freely applied as long as merged objects are interpreted properly at the interfaces.

The paper is organized as follows: In section 2, we present Takahashi's (2012) observation on adjuncts in PE. It is shown that adjunction to an embedded clause is only possible when the clause contains an accusative object but not a nominative object, whereas adjunction to a matrix clause does not exhibit such a restriction.[1)] In section 3, we show that a different picture emerges in adjunction possibilities in elliptical configurations. We present our observation that adjunction to an elided embedded clause is not allowed, whereas adjunction to an elided matrix clause is allowed. In section 4, we turn to our analysis of the adjunction site in PE and propose that adjunction in an elliptical configuration is banned when the adjunction in

question fails to obtain appropriate interpretation at the interfaces, complying with the current minimalist view of free Merge (Chomsky 2013). In Section 5, we conclude the paper.

2. Adjunction in PE: Takahashi (2012)

This section presents Takahashi's (2012) observation on adjunction in the purpose expression (PE), a construction with a clause headed by the morpheme *-ni*. An example of PE is given in (1):

(1) Purpose Expression (PE)
Taroo-wa [keeki-o tabe-ni] it-ta.
-Top cake-Acc eat-NI go-Past
'Taro went to eat a cake.'

In (1), the bracketed clause lacks tense (e.g. Matsumoto 1996; Miyagawa 1987; Takahashi 2012; Tsujimura 1993 for extensive studies of the PE and its "restructuring" (i.e. clause-union) properties). As shown in (2a-c), when the matrix verb *ik* 'to go' is followed by the potential morpheme *-(rar)e* and is adjacent to the embedded verb, the object Case is optionally marked as nominative (Miyagawa 1987): [2)]

(2) a. Taroo-wa [keeki-ga/o tabe-ni] ik-e-ru.
-Top cake-Nom/Acc eat-NI go-can-Pres
'Taro can go eat a cake.'
b. Taroo-wa [keeki-*ga/o tabe-ni] ik-u.
-Top cake-Nom/Acc eat-NI go-Pres
'Taro goes to eat a cake.'
c. Taroo-wa [keeki-*ga/o tabe-ni] Koobe-ni ik-e-ru.
-Top cake-Nom/Acc eat-NI Kobe-to go-can-Pres
'Taro can go to Kobe to eat a cake.'

Following earlier literature (Miyagawa 1987, Tsujimura 1993, Wurmbrand 2001 among others), Takahashi (2012) calls PEs with nominative objects as in (2a) "restructuring PEs" and PEs with accusative objects as in (2c) "non-restructuring PEs".

Based on the restructuring/non-restructuring distinction of the PE and earlier literature such as Tsujimura (1993), Takahashi (2012) finds that restructuring PEs do not allow adjunction for an embedded clause but allows that for a matrix clause, as shown in (3): [3)]

(3) a. *Hanako-wa robusutaa-ga hasi-de tabe-ni ik-e-ru.
-Top lobster-Nom chopsticks-with eat-NI go-can-Pres
'Hanako can go eat a lobster with chopsticks.'
(Takahashi 2012: 1572)

b. Hanako-wa zitensya-de robusutaa-ga tabe-ni ik-e-ru.
-Top bicycle-by lobster-Nom eat-NI go-can-Pres
'Hanako can go eat a lobster by bicycle.'
(Takahashi 2012: 1573)

In (3a), the adjunct *hasi-de* 'with chopsticks' is intended to modify the embedded VP but fails to do so. In (3b), the adjunct *zitensya-de* 'by bicycle' modifies the matrix VP without issue. Thus, the contrast in (3a, b) shows that embedded modification is impossible when the object is nominative Case-marked.

Takahashi (2012) further observes that unlike restructuring PEs, non-restructuring PEs allow for adjunction for both embedded and matrix clauses, as shown in (4a, b): [4)]

(4) a. Hanako-wa [robusutaa-o hasi-de tabe-ni] (kuruma-de) ik-e-ru.
-Top lobster-Acc chopsticks-with eat-NI car-by go-can-Pres
'Hanako can go eat a lobster with chopsticks (by car).'
(Takahashi 2012: 1572)

b. Hanako-wa zitensya-de [robusutaa-o tabe-ni] ik-e-ru.
-Top bicycle-by lobster-Acc eat-NI go-can-Pres
'Hanako can go eat a lobster by bicycle.'
(Takahashi 2012: 1573)

In (4a, b), both the adjunct *hasi-de* 'with chopsticks' and *zitensya-de* 'by bicycle' successfully modify the embedded VP and the matrix VP, respectively.

Takahashi's (2012) observation on modification possibilities in the PE is schematically shown in (5) and (6):

(5) a. Embedded Modification (NOM OBJ) [5]
$[_{TP}\ SUBJ_1\ [_{vP1}\ t_{SUBJ1}[_{VP1}$ NOM OBJ $[_{vP2}\ PRO_1\ [_{VP2}\ t_{OBJ}\ V_{tabe\text{-}ni}]\ v]\ V_{ik}]\ v_{can}]\ T]$
↑ *adjunction

b. Matrix Modification (NOM OBJ)
$[_{TP}\ SUBJ_1\ [_{vP1}\ t_{SUBJ1}\ [_{VP1}$ NOM OBJ $[_{vP2}\ PRO_1\ [_{VP2}\ t_{OBJ}\ V_{tabe\text{-}ni}]\ v]\ V_{ik}]\ v_{can}]\ T]$
↑ adjunction

(6) a. Embedded Modification (ACC OBJ) [6]
$[_{TP}\ SUBJ_1\ [_{vP1}\ t_{SUBJ1}\ [_{VP1}\ [_{vP2}\ PRO_1\ [_{VP2}$ ACC OBJ $V_{tabe\text{-}ni}]\ v]\ V_{ik}]\ v_{can}]\ T]$
↑ adjunction

b. Matrix Modification (ACC OBJ)
$[_{TP}\ SUBJ_1\ [_{vP1}\ t_{SUBJ1}\ [_{VP1}\ [_{vP2}\ PRO_1\ [_{VP2}$ ACC OBJ $V_{tabe\text{-}ni}]\ v]\ V_{ik}]\ v_{can}]\ T]$
↑ adjunction

(5a) shows that adjunction to the embedded VP is impossible when the object Case is nominative, whereas (5b) shows that adjunction to the matrix VP is

possible. In contrast to (5a), (6a) shows that adjunction to the embedded VP is possible when the object Case is accusative, and (6b) shows that adjunction to the matrix VP is also possible. With this novel observation in (5) and (6) in hand, Takahashi (2012) suggests connecting Case-valuation to adjunction site in the PE.

With Takahashi's (2012) observation in mind, in section 3, we present our view that adjunction to an elided embedded clause is impossible even in non-restructuring PEs with accusative objects, while adjunction to an elided matrix clause is consistently possible. This suggests that a ban on adjunction to elided embedded clauses is tied to other factors than Case-valuation.

3. Facts on the adjunction in elliptical constructions

In this section, we present new facts on adjunction in PE elliptical constructions. We show that adjunct-stranded ellipsis of an embedded clause in PE is impossible even with an accusative object, whereas that of a matrix clause is possible. We begin with impossible embedded modification in (7):

(7) *Situation*: *Taro and Hanako have been practicing using chopsticks and trying to eat everything with chopsticks. Last Sunday…*

a. Taroo-wa [$_{VP}$ hasi-de [$_{VP}$ pasuta-o tabe-ni]] it-ta kedo, [7]
-Top chopsticks-with pasta-Acc eat-NI go-Past but
'Taro went to eat pasta with chopsticks, but...'

b. *Hanako-wa [$_{VP}$ hasi-de [$_{VP}$ *e*]] ik-anakat-ta.
-Top chopsticks-with go-Neg-Past
lit. 'Hanako did not go with chopsticks.'

c. Hanako-wa *e* ik-anakat-ta.
-Top go-Neg-Past
'Hanako did not go.'

Given the situation in (7), (7a) should be followed by (7b), intended to mean that "*Hanako did not go to eat pasta with chopsticks*"; however, (7b) is ungrammatical and ellipsis of the embedded clause with the adjunct stranded is not permitted. In contrast, (7a) can be followed by (7c), which has both interpretations in (8a, b), where the bracketed VP corresponds to what has been elided in (7c).

(8) *Interpretations of (7c)*

a. Hanako-wa [$_{VP}$ hasi-de pasuta-o tabe-ni] ik-anakat-ta.
-Top chopsticks-with pasta-Acc eat-NI go-Neg-Past
'Hanako did not go eat pasta with chopsticks.'

b. Hanako-wa [$_{VP}$ pasuta-o tabe-ni] ik-anakat-ta.
-Top pasta-Acc eat-NI go-Neg-Past
'Hanako did not go eat pasta.'

When interpreted as (8a) on the one hand, (7c) can be continued with a sentence such as "*She went to eat pasta with a fork instead*". When interpreted as (8b) on the other hand, (7c) simply denies *Hanako's going to eat pasta* to begin with; thus, it can be followed by a sentence such as "*She went to eat pizza instead*", and it does not necessarily mean that "*Hanako went to eat pizza with chopsticks or with other utensils*".

Unlike embedded modification in (7), matrix modification does not exhibit such restrictions, and therefore ellipsis of the embedded clause with or without the adjunct is both possible, as shown in (9):

(9) *Situation*: *Taro and Hanako have been practicing to ride bicycles every day. Last Sunday…*

a. Taroo-wa [$_{VP}$ zitensya-de [$_{VP}$ pasuta-o tabe-ni] it]-ta kedo,
-Top bicycle-by pasta-Acc eat-NI go-Past but
'Taro went to eat pasta by bicycle, but...'

b. Hanako-wa [$_{VP}$ zitensya-de [$_{VP}$ *e*] ik]-anakat-ta.
-Top bicycle-by go-Neg-Past
'Hanako did not go by bicycle.'

c. Hanako-wa [$_{VP}$ *e*] ik-anakat-ta.
-Top go-Neg-Past
'Hanako did not go.'

Given the situation in (9), (9a) can be followed by either (9b) or (9c) without issue. Thus, the adjunct *zitensya-de* 'by bicycle' can either be left out of the ellipsis of the embedded clause (9b) or be elided with the embedded clause (9c). As shown in (10), (9c) can be interpreted either as (10a) or (10b):

(10) *Interpretation of (9c)*

a. Hanako-wa [$_{VP}$ zitensya-de pasuta-o tabe-ni] ik-anakat-ta.
-Top bicycle-by pasta-Acc eat-NI go-Neg-Past
'Hanako did not go eat pasta by bicycle.'

b. Hanako-wa [$_{VP}$ pasuta-o tabe-ni] ik-anakat-ta.
-Top pasta-Acc eat-NI go-Neg-Past
'Hanako did not go to eat pasta.'

Thus, under the reading in (10a), (9c) can possibly be followed by the sentence such as "*…, but she went to eat pasta by car*", whereas (10b) denies *Hanako's going to eat pasta* in the first place.

In summarizing, we have observed that adjunct-stranded ellipsis of the embedded VP is not allowed, whereas adjunct-stranded ellipsis for the matrix VP is allowed, as illustrated in (11a) and (11b), respectively:

(11) a. *Ellipsis with embedded adjuncts stranded*

*[$_{TP}$ SUBJ$_1$ [$_{vP1}$ t$_1$[$_{VP1}$[$_{vP2}$ PRO$_1$[$_{VP2}$ ADJUNCT [$_{VP2}$ ~~ACC OBJ V$_{tabe\text{-}ni}$~~]]v]V$_{ik}$]v_{can}] T]

b. *Ellipsis with matrix adjuncts stranded*

$[_{TP}$ SUBJ$_1[_{vP1}$ t$_1[_{VP1}$ ADJUNCT $[_{VP1}[_{vP2}$ ~~PRO$_1[_{VP2}$ ACC OBJ V$_{tabe\text{-}ni}$ $]v]$~~V$_{ik}]]v_{can}]$ T$]$ [8)]

In section 4, we provide our analysis for the contrast between (11a) and (11b).

4. Analysis

In this section, we provide an account of the adjunction possibilities in PE; more specifically, we examine elliptical configurations with an accusative object inside a clause. We show that adjunction in elliptical configuration is regulated by the interpretive restriction at the interface with semantics.

We begin our analysis with an important assumption on adjunction that adjuncts can either be integrated into the structure or be unlabeled, "dangling off" (Hornstein 2009; Hornstein and Nunes 2008) the main clause, as shown in (12a, b) respectively:

(12) a. $[_X$ X^Y $]$^Z (Hornstein and Nunes 2008: 66)

b. $[_X [_X$ X^Y $]^Z]$

According to Hornstein (2009) and Hornstein and Nunes (2008), adjuncts are not necessarily labeled because adjuncts, unlike arguments, can directly hold predicate-modification relationships with verbs without the recourse to labeling.

With this assumption in mind, consider (7) and (8) again:

(7) *Situation*: *Taro and Hanako have been practicing using chopsticks and trying to eat everything with chopsticks. Last Sunday…*

a. Taroo-wa $[_{VP}$ hasi-de $[_{VP}$ pasuta-o tabe-ni$]]$ it-ta kedo,
-Top chopsticks-with pasta-Acc eat-NI go-Past but

'Taro went to eat pasta with chopsticks, but…'

b. *Hanako-wa [$_{VP}$ hasi-de [$_{VP}$ *e*]] ik-anakat-ta.
-Top chopsticks-with go-Neg-Past
lit. 'Hanako did not go with chopsticks.'

c. Hanako-wa *e* ik-anakat-ta.
-Top go-Neg-Past
'Hanako did not go.'

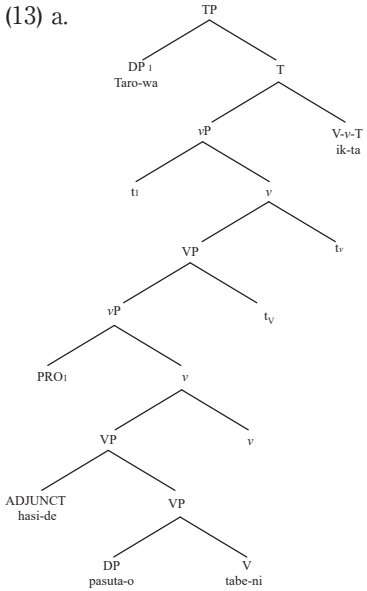
(8) *Interpretations of (7c)*

a. Hanako-wa [$_{VP}$ hasi-de pasuta-o tabe-ni] ik-anakat-ta.
-Top chopsticks-with pasta-Acc eat-NI go-Neg-Past
'Hanako did not go eat pasta with chopsticks.'

b. Hanako-wa [$_{VP}$ pasuta-o tabe-ni] ik-anakat-ta.
-Top pasta-Acc eat-NI go-Neg-Past
'Hanako did not go eat pasta.'

If we assume Hornstein (2009) and Hornstein and Nunes (2008), (7a) can possibly have a structure as in (13a) or (13b) since adjuncts are not necessarily integrated into the structure:

(13) a.



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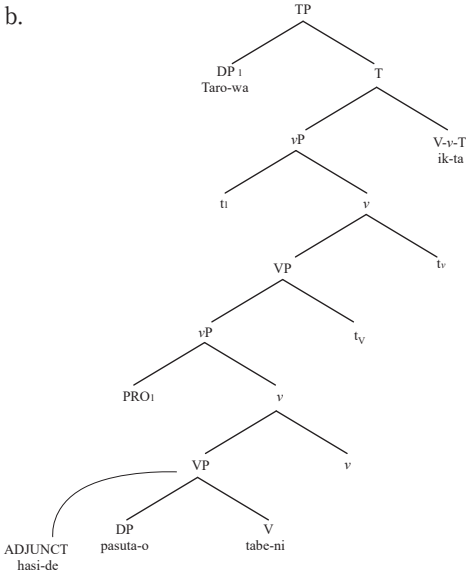


In (13a), the adjunct *hasi-de* 'with chopsticks' is integrated into the structure, thus being part of the embedded VP, whereas in (13b), the adjunct is outside of the clause, "dangling off" (Hornstein 2009; Horstein and Nunes 2008) the VP adjunction site. We also assume with researchers (e.g. Funakoshi 2014, 2016; Hayashi and Fujii 2015; Nakatani 2013) that verbs undergo head movement; thus, the verb *ik* 'to go' has undergone movement through *v* to T in (13a, b).[9] Furthermore, we assume with Takahashi (2012) that in (13a, b), the embedded *v*P contains PRO bound by the matrix subject, while our present analysis does not rely on this assumption, and therefore the subject could equally be assumed to have been moved from the lower *v*P to TP through the higher *v*P.

We propose that the structural optionality of (7a) illustrated in (13a) and (13b) accounts for the interpretations in (8a) and (8b), when coupled with the assumptions on ellipsis in (14):

(14) a. Ellipsis is an LF-copying operation (e.g. Oku 1998; Saito 2007).

b. Copied materials are merged in the syntax in a cyclic way (Saito 2017).[10)]

c. Verb-stranding VP-ellipsis is available in Japanese (e.g. Funakoshi 2014, 2016; Hayashi and Fujii 2015; Otani and Whitman 1991; Sugimura 2012).

We begin with our assumption in (14a). Consider (15) and (16):

(15) a. Mary-wa [[zibun-no ronbun-ga] saiyo-sare-ru-to] omot-te-i-ru.
-Top self-Gen paper-Nom accept-Pass-Pres-C think-TE-Cop-Pres
'Mary thinks that her paper will be accepted.'

b. John-mo [[*e*] saiyo-sare-ru-to] omot-te-i-ru.
-also accept-Pass-Pres-C think-TE-Cop-Pres
'John also thinks that her/his proposal will be accepted.'
(her = Mary, his = John)

(modified from Oku 1998: 177)

(16) John$_1$-mo [[$_{DP}$ zibun$_1$-no ronbun-ga] saiyoo-sare-ru-to] omot-te-i-ru
-also self-Gen paper-Nom accept-Pass-Pres-C think-TE-Cop-Pres
'John$_1$ also thinks that his$_1$ proposal will be accepted.'

(modified from Oku 1998: 178)

According to Oku (1998), argument ellipsis as in (15b) is assigned interpretation via a LF-copying operation, as illustrated in (16); that is, the elliptical part [*e*] in (15b) corresponds to the [$_{DP}$ *zibun-no ronbun-ga*] 'self's paper' in (15a). As indicated in the translation of (15b), the reflexive pronoun *zibun* can either refer to *Mary* or *John*; Oku (1998) highlights that the latter interpretation is only possible if the [*e*] in (15b) is an instance of ellipsis, by which the bound variable reading becomes available. Based on this reasoning, Oku (1998) proposes an LF-copying analysis where the antecedent DP is

copied to the elided DP in (15b) at LF, by which the appropriate interpretation is given, as shown in (16).[11)]

We turn to our assumption in (14b): copied materials are merged in the syntax in a cyclic way. Following Saito (2017), we assume that the copied materials are merged in the syntax in a cyclic way. Thus, in our current analysis, the derivation in (15b) starts with the LF object [$_{DP}$ *zibun-no ronbun-ga*] 'self's paper', which then merges with the embedded verb, followed by the rest of concatenation, as illustrated in (17):

(17) a. [$_{DP}$ zibun-no ronbun-ga] *LF-copy of the antecedent DP entering syntax*
b. [$_{VP}$ [$_{DP}$ zibun-no ronbun-ga] $V_{saiyoo\text{-}s}$] *Merge of the verb and the LF object*
c. [$_{TP}$ John-mo$_1$ [$_{vP}$ t_1 [$_{VP}$ [$_{CP}$ zibun-no ronbun-ga saiyoosareru-to] t_V] t_v] omotteiru$_{V\text{-}v\text{-}T}$] *TP-formation after a series of concatenation*

With these assumptions in (14a, b) in mind, we return to (7) and (8), repeated below:

(7) *Situation*: *Taro and Hanako have been practicing using chopsticks and trying to eat everything with chopsticks. Last Sunday…*
a. Taroo-wa [$_{VP}$ hasi-de [$_{VP}$ pasuta-o tabe-ni]] it-ta kedo,
-Top chopsticks-with pasta-Acc eat-NI go-Past but
'Taro went to eat pasta with chopsticks, but...'
b. *Hanako-wa [$_{VP}$ hasi-de [$_{VP}$ *e*]] ik-anakat-ta.
-Top chopsticks-with go-Neg-Past
lit. 'Hanako did not go with chopsticks.'
c. Hanako-wa *e* ik-anakat-ta.
-Top go-Neg-Past
'Hanako did not go.'

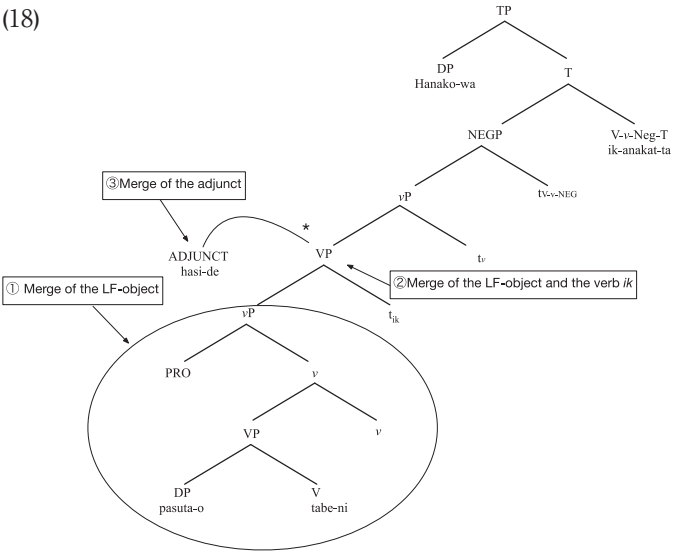
(8) *Interpretations of (7c)*

a. Hanako-wa [$_{VP}$ hasi-de pasuta-o tabe-ni] ik-anakat-ta.
-Top chopsticks-with pasta-Acc eat-NI go-Neg-Past
'Hanako did not go eat pasta with chopsticks.'

b. Hanako-wa [$_{VP}$ pasuta-o tabe-ni] ik-anakat-ta.
-Top pasta-Acc eat-NI go-Neg-Past
'Hanako did not go eat pasta.'

Note that given (14a, b), the only possible way for (7b) to be derived is to merge the elided embedded clause, an LF-object copied from (7a), with the matrix verb *ik* 'go', and then to merge the created VP with the adjunct intended to modify the copied embedded clause, as illustrated in (18): [12]

(18)



In (18), the circled domain of *v*P/VP, an LF-object copied from (7a), is merged with the matrix verb *ik*. [13] At this point, the only possible adjunction position for the adjunct *hasi-de* "with chopsticks" is the matrix VP. However, the

adjunct is semantically incompatible with the matrix VP because it is intended to modify the embedded VP; hence, (7b) becomes ungrammatical.[14)]

Note that the ungrammaticality of (7b) cannot be explained via a PF-deletion analysis of ellipsis because it is theoretically possible to derive (7b) as an instance of PF-deletion, as illustrated in (19):

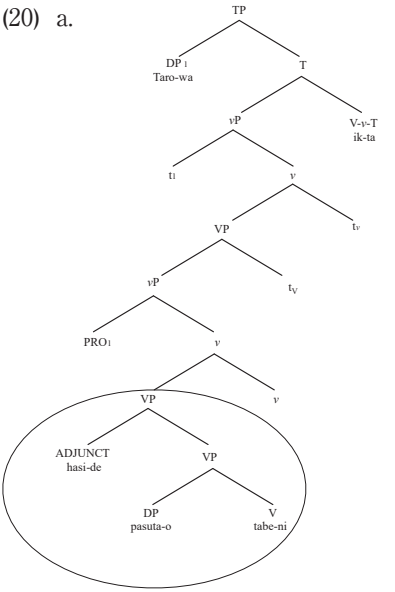
(19) a. Taro-wa [$_{VP}$ hasi-de [$_{VP}$ pasuta-o tabe-ni]] it-ta-kedo...
-Top chopsticks-with pasta-Acc eat-NI go-Past-but...
'Taro went to eat pasta with chopsticks, but...'

b. *Hanako-wa [$_{VP}$ hasi-de [$_{VP}$ ~~pasuta-o tabe-ni~~]] ik-anakat-ta.
-Top chopsticks-with ~~pasta-Acc eat-NI~~ go-Neg-Past
'Hanako did not go to eat pasta with chopsticks (intended).'

In (19), the elided VP in (19b) is identical to the antecedent VP in (19a); thus, ellipsis of the lower VP in (19b) should be possible if PF-deletion under structural identity is applied, contrary to fact. Thus, ungrammaticality of (7b)/(19b) indirectly favors the LF-copying analysis of ellipsis, as Oku (1998) and Saito (2007) independently argue for, when it is coupled with Funakoshi's (2014) and among others' assumptions of Verb-stranding VP-ellipsis in (14c).

In contrast, in (7c), the adjunct is possibly included in the LF-copied object or left out of the copy, being outside of the VP. The possible targets of LF-copy in (7a) are illustrated in (20a, b):

(20) a.



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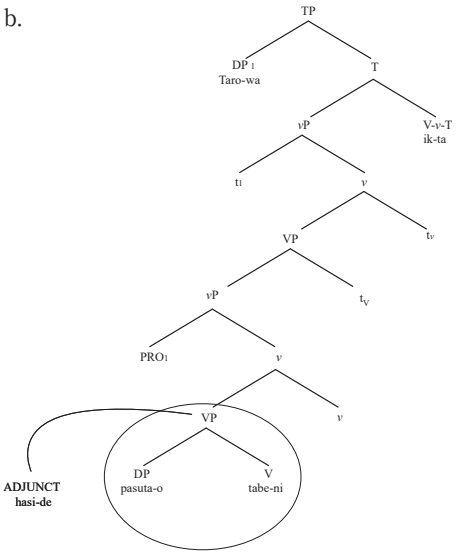


If the circled VP in (20a) is copied as an LF object and is combined with the matrix verb, followed by the rest of the derivation, (7c) is consequently interpreted as (8a). If the circled VP in (20b) is instead LF-copied and merged with the matrix verb, (7c) is interpreted as (8b). Thus, the structural optionality of (7a) illustrated in (20a, b) successfully accounts for the interpretive ambiguity of (7c).

We turn to ellipsis with an adjunct for the matrix clause in PE. Recall that unlike ellipsis with embedded modification, ellipsis with matrix modification has no restriction on adjunction imposed. Consider (9) and (10) again, repeated below:

(9) *Situation*: *Taro and Hanako have been practicing to ride bicycles every day. Last Sunday…*

a. Taroo-wa [$_{VP}$ zitensya-de [$_{VP}$ pasuta-o tabe-ni] it]-ta kedo,
-Top bicycle-by pasta-Acc eat-NI go-Past but
'Taro went to eat past by bicycle, but...'

b. Hanako-wa [$_{VP}$ zitensya-de [$_{VP}$ *e*] ik]-anakat-ta.
-Top bicycle-by go-Neg-Past
'Hanako did not go by bicycle.'

c. Hanako-wa [$_{VP}$ *e*] ik-anakat-ta.
-Top go-Neg-Past
'Hanako did not go.'

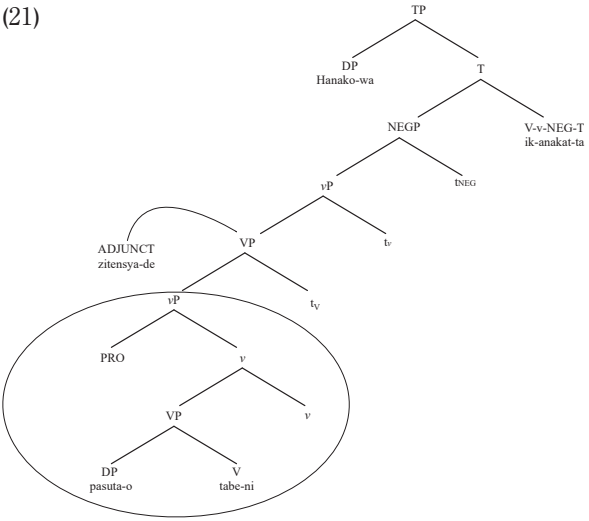
(10) *Interpretation of (9c)*

a. Hanako-wa [$_{VP}$ zitensya-de pasuta-o tabe-ni] ik-anakat-ta.
-Top bicycle-by pasta-Acc eat-NI go-Neg-Past
'Hanako did not go eat pasta by bicycle.'

b. Hanako-wa [$_{VP}$ pasuta-o tabe-ni] ik-nakat-ta.
-Top pasta-Acc eat-NI go-Neg-Past
'Hanako did not go eat pasta.'

The grammaticality of (9b) with the adjunct stranded is explained if it has a structure in (21):

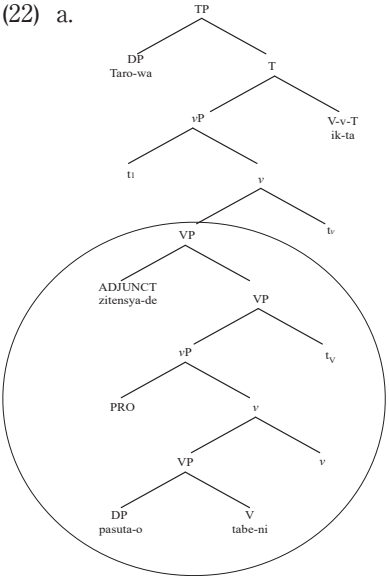
(21)



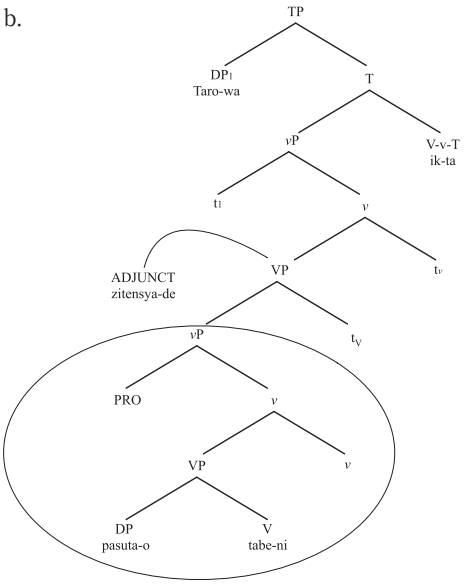
In (21), after the circled *v*P/VP LF-object is merged with the verb *ik* 'go', the adjunct is subsequently merged. Unlike (18), the adjunct *zitensya-de* 'by bicycle' is semantically compatible with the [$_{VP}$ *pasuta-o tabe-ni ik*] 'to go to eat pasta', and therefore the merged syntactic object is properly assigned interpretation.

As for (9c), the adjunct is possibly included in the LF-copied object or left out of the copy, being outside of the matrix VP, similarly to (7c). The possible targets of LF-copy in (9a) are illustrated in (22a, b):

(22) a.



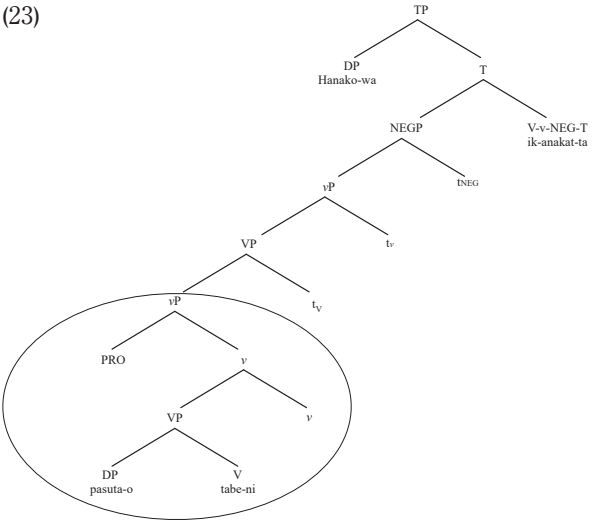
b.



In (22a), the circled matrix VP includes the adjunct. If this VP is LF-copied and merged with the matrix verb *ik* 'go', followed by the rest of the derivation, (9c) is interpreted as (10a) because the LF-copy in (22a) includes the adjunct. In (22b), in contrast, the adjunct is hanging off the main clause and therefore is outside of the matrix VP, the circled domain. If this VP is LF-copied and merged with the verb *ik* 'go' without the adjunct, as in (23), the ellipsis in (9c) is correctly interpreted as in (10b) because the VP does not

include the adjunct:

(23)



These findings about ellipsis thus show that adjuncts can either be integrated into the structure or be unlabeled, 'dangling off' (Hornstein 2009; Hornstein and Nunes 2008) the main clause. Furthermore, the current analysis suggests that unavailability of the lower-adjunct-stranded ellipsis is not due to the root-vs.-embedded- dichotomy in terms of labeling as opposed to e.g. Ceccheto and Donati (2015) but to the incompatible merge between the adjunct and the wrong VP.

5. Concluding Remarks

We have examined elliptical configurations in the PE with respect to the position of adjuncts. We first presented the views that adjunction to an elided embedded clause is not allowed, whereas adjunction to an elided matrix clause is allowed. We then showed that adjuncts are to be merged in a position where they are interpreted appropriately at the interfaces, adding

to Takahashi's (2012) work on the position of adjuncts. Furthering Takahashi's (2012) claim that adjunction and Case-valuation are closely related to each other, we have claimed that adjuncts are placed in a position where they are interpreted appropriately, in accordance with the current minimalist view of free Merge (Chomsky 2013). The current claim has also supported Hornstein (2009) and Hornstein and Nunes (2008)'s view on adjuncts; that is, adjuncts are optionally labeled, whether they are lower or higher adjuncts. Through examining adjunction in elliptical configurations in PE, we have also indirectly presented support to Oku (1998) and others including Saito's (2007) LF-copy analysis of ellipsis, in combination with Funakoshi's (2014) and among others' Verb-stranding VP-ellipsis analysis. The present study can thus be viewed as a hybrid account for ellipsis in general, while its validity is entirely left for further research.

Notes

* An earlier version of this paper, that also includes a comparative study between the V-*te* V and V-*ni* V (PE) constructions, was presented at the symposia of 10th conference of Kansai Chapter of the English Literary Society of Japan, held at Mukogawa Women's University. We are grateful to the audience for their insightful feedback and to Professor Jon Clenton for his editorial support. This research is supported in part by the grant-in-aid for young scientists (B) (No. 16K21479) for the first author and the grant-in-aid for scientific research (C) for the second author (No. 26370563).

Abbriviations: Acc = accusative, Cop = copula, Gen = genitive, Neg = negation, Nom = nominative, Pass = passive, Pres = present, Top = topic

1) Takahashi (2011, 2012) examines the PE and another apparently similar construction called the sequential expression (SE), also known as the V-*te* V construction, showing that they show diverging behaviors with respect to the distribution of adjuncts. We do not attempt to comparatively examine the two constructions in this paper, but see Sugimura and Miyamoto (2015, 2017) and Sugimura (2018) for the comparative studies between the V-*ni* V and the V-*te* V constructions based on Hayashi and Fujii's (2015) work on the V-*te* V construction.

2）See Kuno (1973) and Kuroda (1965) for nominative Case assignment of stative predicates and Bobaljik and Wurmbrand (2005); Miyagawa (1987); Nomura (2005); Saito (2012); Tada (1992); Takahashi (2010, 2012); Takano (2003); Wurmbrand (2001), among many others for nominative Case assignment mechanism and its related properties.

3）Takahashi (2012) accounts for the contrast between (3a) and (3b) based on the assumption in (i):

(i) Adjunction to XP is impossible if XP contains an unvalued Case-feature.
(Takahashi 2012: 1576)

Takahashi (2012) claims that the nominative Case of the object in (3a) is not valued in its original position and thus has to move out of the embedded clause so that it is licensed in the matrix clause. According to Takahashi (2012), adjunction to the embedded VP after the object movement is banned because the VP contains the object with an unvalued Case-feature. In contrast, adjunction to the matrix VP is allowed because the moved object for its Case-licensing is valued in the higher VP domain in Takahashi's analysis. See Takahashi (2012) for further details of Case-valuation mechanism and the definition of phasehood in PE.

4）In contrast to (3a, b), adjunction to the embedded VP as well as that to the matrix VP in (4a, b) is allowed because both VPs do not contain any unvalued Case-features in Takahashi's (2012) analysis. See Takahashi (2012) for further details.

5）Takahashi (2012), in contrast to Wurmbrand (2001), assumes that the complement clause in restructuring PEs is a *v*P and not a bare VP and that the *v*P contains PRO bound by the subject. We follow his assumptions in this regard but our present analysis is not affected either way.

6）Although Takahashi (2012), following Wurmbrand (2001), assumes a full-CP complement clause in non-restructuring PEs, we omit those structures irrelevant for the present discussion here.

7）We assume with Funakoshi (2014) that using *-kedo* 'but' in the antecedent sentence in ellipsis makes it easier to provoke the null adjunct reading in the elided clause.

8）In (11b) we tentatively assume that the embedded *v*P is elided but if we assume movement of the verb *ik* 'to go', the matrix VP could equally be the target of ellipsis. We return to this point in section 4.

9）We assume that embedded verbs do not undergo head movement when followed by the particle *-ni*. See Sugimura (2012) and Sugimura and Miyamoto (2015, 2017) for details.

10) We assume (14b) along the lines of Bobaljik (1995), who argues that covert and overt operations occur within the same component.

11) Saito (2007), based on Sinohara's (2006) work, supports Oku's LF-copying analysis and provides further evidence and consequences.

12) Following Matsui (2007), we assume that V-*v* complex undergo head movement to T through Neg head, while our present analysis does not hinge on this assumption. See Matsui (2007) for evidence of this claim.

13) Although we remain silent, whether the target of LF-copy is a *v*P or a VP, it should be noted that either option does not affect our present analysis.

14) Oku (2016) argues that ellipsis should be applied "across the board to nonfocus constituents" (Kuno 1982) and that remaining constituents from ellipsis are otherwise interpreted as contrastive foci (Kuno 1982). For example, the adjunct *zibun-no burasi-de* 'with his brush' in (ia) is not included in the ellipsis in (ib). Thus, according to Oku (2016), what is left behind in (ib), *sono-kuruma-o* 'the car', is reinterpreted as a contrastive focus of negation, and the sentence means that "*Taro did not wash his car in the first place.*":

(i) a. Ziroo-wa zibun-no burasi-de sono-kuruma-o aratta ga
Jiro-Top self-Gen brush-with the-car-Acc washed but
'Jiro$_1$ washed the car with his$_1$ brush, but'

b. Taroo-wa ([e]) sono-kuruma-o araw-anak-atta
Taro-Top the-car-Acc wash-not-Past
'Taro$_2$ didn't wash the car.' (*[e] = with his$_2$ brush)

(Oku 2016: 59)

Note that if this line of analysis is applied to (7b), (7b) is incorrectly predicted to be grammatical, with the left-behind adjunct *hasi-de* 'with chopsticks' interpreted as a focused element of negation, yielding an interpretation such that "*Hanako did not go to eat pasta with chopsticks, but she went to eat it with a fork.*" Therefore, the ungrammaticality of (7b) suggests that other factors than discourse conditions are involved in this case.

References

Bobaljik, Jonathan David. 1995. Morphosyntax: The syntax of verbal inflection. Ph.D. dissertation, MIT.

Bobaljik, Jonathan David and Susi Wurmbrand. 2005. The domain of agreement. *Natural*

Language and Linguistic Theory 23, 809-865.
Ceccheto, Carlo and Caterina Donati. 2015. *(Re)labeling*. Cambridge, MA: MIT Press.
Chomsky, Noam. 2013. Problems of projection. *Lingua* 130, 33-49.
Funakoshi, Kenshi. 2014. Syntactic head movement and its consequences. Ph.D. dissertation, University of Maryland, College Park.
Funakoshi, Kenshi. 2016. Verb-stranding verb phrase ellipsis in Japanese. *Journal of East Asian Linguistics* 25, 113-142.
Hayashi, Shintaro and Tomohiro Fujii. 2015. String vacuous head movement: The case of V-*te* in Japanese. *Gengo Kenkyu* 147, 31-55.
Hornstein, Norbert. 2009. *A Theory of Syntax: Minimal Operations and Universal Grammar*. New York: Cambridge University Press.
Hornstein, Norbert and Jairo Nunes. 2008. Some thoughts on adjunction. *Biolinguistics* 2, 57-86.
Kuno, Susumu. 1973. *The Structure of the Japanese Language*. Cambridge, MA: MIT Press.
Kuno, Susumu. 1982. Principles of discourse deletion – case studies from English, Russian and Japanese. *Journal of Semantics* 1, 61-93.
Kuroda, S.-Y. 1965. Generative grammatical studies in the Japanese language. Ph.D. dissertation, MIT.
Matsui, Haruko. 2007. NPI licensing and head movement. *Proceedings of the 30th Annual Penn Linguistics Colloquium* 13, 211-224.
Matsumoto, Yo. 1996. *Complex Predicates in Japanese*: *A Syntactic and Semantic Study of the Notion 'Word'*. Stanford: CSLI Publications and Tokyo: Kurosio Publishers.
Miyagawa, Shigeru. 1987. Restructuring in Japanese. In Takashi Imai and Mamoru Saito eds., *Issues in Japanese Linguistics*, 273-300. Dordrecht: Foris Publications.
Nakatani, Kentaro. 2013. *Predicate Concatenation: A Study of the V-te V Predicate in Japanese (Studies in Japanese Linguistics 12)*. Tokyo: Kuroshio Publishers.
Nomura, Masashi. 2005. Nominative case and AGREE(ment). Ph.D. Dissertation, University of Connecticut, Storrs.
Oku, Satoshi. 1998. A theory of selection and reconstruction in the minimalist perspective. Ph.D. dissertation, University of Connecticut.
Oku, Satoshi. 2016. A note on ellipsis-resistant constituents. *Nanzan Linguistics*: *Research Results and Activities* 11, 57-70.
Otani, Kazuyo and John Whitman. 1991. V-raising and VP-ellipsis. *Linguistic Inquiry* 22, 345-358.
Saito, Mamoru. 2007. Notes on East Asian argument ellipsis. *Language Research* 43, 203-

227.

Saito, Mamoru. 2012. Case checking/valuation in Japanese: Move, agree or merge? *Nanzan Linguistics* 8, 109-127.

Saito, Mamoru. 2017. Ellipsis. In Masayoshi Shibatani, Shigeru Miyagawa and Hisashi Noda eds., *Handbook of Japanese Syntax*, 701-750. Berlin: de Gruyter Mouton.

Shinohara, Michie. 2006. Nihongo-no koosakuzyobun no LF-kopii bunseki: Konseki-o hukumu yooso-no kanten-kara [An LF-copy analysis of argument ellipsis in Japanese: A view from the constituent involving traces]. Master's thesis, Nanzan University.

Sugimura, Mina. 2012. Domain extension: A study of restructuring predicates in Japanese and the role of head movement. Ph.D. dissertation, McGill University.

Sugimura, Mina. 2018. The role of head movement in structural realization: V-*te* V vs. V-*ni* V constructions in Japanese. In Laura Kalin, Illeana Paul, and Jozina Vander Klok eds., *Heading in the Right Direction: Linguistic Treats for Lisa Travis. McGill Working Papers in Linguistics* 25 *(Special Issue in Honour of Lisa Travis)*, 392-403.

Sugimura, Mina and Yoichi Miyamoto. 2015. Saikootiku gensyoo: *ni*-no koosatu-o tyuusin-ni [Restructuring phenomenon: focusing on *-ni*]. Symposium presentation at the 10th meeting of the English Literary Society of Japan, Kansai Chapter. Nishinomiya, Japan.

Sugimura, Mina and Yoichi Miyamoto. 2017. The function of *-ni* in labeling in Japanese: In support of Saito (2014). Unpublished manuscript., Kyoto Notre Dame University and Osaka University.

Tada, Hiroaki. 1992. Nominative objects in Japanese. *Journal of Japanese Linguistics* 14, 91-108.

Takahashi, Masahiko. 2010. Case, phrases, and nominative/accusative conversion in Japanese. *Journal of East Asian Linguistics* 19, 319-355.

Takahashi, Masahiko. 2011. Some theoretical consequences of Case-marking in Japanese. Ph.D. dissertation, University of Connecticut.

Takahashi, Masahiko. 2012. On restructuring infinitives in Japanese: Adjunction, clausal architecture, and phases. *Lingua* 122, 1569-1595.

Takano, Yuji. 2003. Nominative objects in Japanese complex predicate constructions: A prolepsis analysis. *Natural Language and Linguistic Theory* 21, 779-834.

Tsujimura, Natsuko. 1993. Adjuncts and event argument in restructuring. *Japanese Korean Linguistics* 3, 121-136.

Wurmbrand, Susi. 2001. *Infinitives*: *Restructuring and clause structure*. Berlin/New York: Mouton de Gruyter.