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Against verb-stranding VP-ellipsis in Japanese: reply to Funakoshi (2016)

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Abstract Japanese has a deletion operation, called argument ellipsis, that targets arguments (Oku in A theory of selection and reconstruction in the minimalist program, 1998). The operation does not apply to adjuncts, and thus, adjuncts are unelidable. Funakoshi (J East Asian Linguist 25(2):113–42, 2016), following in the footsteps of Otani and Whitman (Linguist Inquiry 22:345–58, 1991), argues that adjuncts can be elided when V-stranding VP-deletion applies. This article refutes Funakoshi's proposal. Under rigorous control, adjuncts are generally unelidable even when the context strongly favors the adjunct inclusive interpretation, showing that the language lacks VP-deletion. It is also shown that, for a small number of speakers who permit the adjunct inclusive interpretation, the interpretation is sensitive to island constraints. The observation is attributed to covert right dislocation (Tanaka in J Linguist 37:551–79, 2001), marginally available for such speakers.

Keywords Adjuncts · Argument ellipsis · Island constraints · Right dislocation · VP-deletion

1 Introduction

Recent years have witnessed a growing interest in the study of elliptical constructions. Japanese furnishes an interesting problem in this area of inquiry, since the language permits ellipsis of various constituents, including subjects and objects. The earliest account of the phenomenon in the generative tradition is found in Kuroda (1965), who proposes that the language has phonetically null pronouns

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[see also Hoji (1998)]. Otani and Whitman (1991) point out that certain instances of ellipsis cannot be captured by the null pronoun account. One such example is given below. The ellipsis site is marked with *e*.

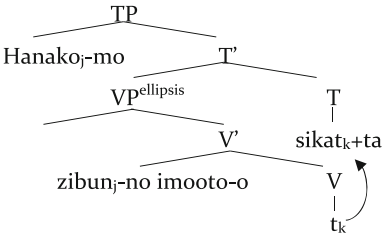
(1) Taro$_i$-ga zibun$_i$-no imooto-o sikat-ta. Hanako-mo *e* sikat-ta.
Taro-Nom self-Gen sister-Acc scold-Past Hanako-also scold-Past
'Taro scolded his sister. Hanako also scolded ~~her sister~~.'

The ellipsis site in the second sentence in (1) allows the sloppy interpretation (Ross 1967; Sag 1976): *Hanako scolded her own sister*. The reading is impossible with a pronoun in place of the null object. When (2) follows the first sentence in (1), only the strict reading is permissible: *Hanako scolded Taro's sister.* Hence, *e* in (1) cannot be a null pronoun.

(2) Hanako-mo kanojo-o sikat-ta.
Hanako-also her-Acc scold-Past
'Hanako also scolded her.'

Otani and Whitman's explanation of the sloppy interpretation is that the verb in the elliptical sentence in (1) moves out of the VP to T, and the VP gets elided (verb-stranding VP-deletion: Goldberg 2005), as depicted in (3).

(3)



Oku (1998) notes problems with the VP-deletion account of sloppy identity. One such problem is based on (4). Oku's point is that the ellipsis site does not contain the adverbial adjunct, *teineini*, in its interpretation, contrary to what we would expect under the VP-deletion account.

(4) Taro-ga kuruma-o teineini arat-ta. Hanako-mo *e* arat-ta.
Taro-Nom car-Acc carefully wash-Past Hanako-also wash-Past
'Taro washed the car carefully. Hanako also washed ~~the car~~.'

In contrast to (4), English VP-deletion permits, or even forces, the adjunct inclusive (henceforth, AI) interpretation.

(5) John washed the car carefully, and Mary did *e*, too.

Oku therefore concludes that Japanese does not have VP-deletion. Instead, the language has an elliptical operation that targets arguments (Maeda (2019), Saito

(2007), Sakamoto (2016), Takahashi (2006) among many others). For instance, the second sentence in (1) has an elliptical accusative object, as shown below. This accounts for the sloppy interpretation.

(6) Hanako$_j$-mo ~~zibun$_j$-no kuruma-o~~ arat-ta.
Hanako-also self-Gen car-Acc wash-Past
'Hanko also washed ~~her car~~.'

Note in passing that the AI interpretation becomes readily accessible when the second sentence has the pro-form *soo-s*, the Japanese counterpart of *do so.*

(7) Taro-ga kuruma-o teineini arat-ta. Hanako-mo *soo-si-ta*.
Taro-Nom car-Acc carefully wash-Past Hanako-also so do-Past
'Taro washed the car carefully. Hanako also did so, too.'

The difference in the availability of the AI interpretation between (4) and (7) naturally gets explained once we adopt the hypothesis that Japanese does not permit VP-deletion.

Funakoshi (2016) challenges this conclusion, claiming that the AI interpretation is possible in (4). Based on this empirical claim, he concludes that Japanese generally permits verb stranding VP-deletion, depicted in (3).

The present article is embedded in this line of inquiry. It puts an end to the controversy over the availability of the AI interpretation in the ellipsis site. Adjuncts are not elidable by an operation analogous to argument ellipsis, nor is VP-deletion available in Japanese. Two independent pieces of evidence are provided to establish these points. At the same time, some speakers marginally accept the AI interpretation, upon being forced to do so. It is shown that this is a result of a marginal process, covert right dislocation. Since right dislocation is subject to island constraints, so is the AI interpretation. Furthermore, since covert right dislocation is a marginal process, so is the AI interpretation.

The rest of this paper is organized as follows. Section 2 summarizes Funakoshi's (2016) claim. Section 3 points out two different environments in which the AI interpretation is impossible. First, when the elliptical clause is embedded in an island, the AI reading becomes impossible to obtain. Second, certain types of degree adverbs cannot be included in the ellipsis site, which reveals problems for Funakoshi's VP-deletion account. Section 4 first examines a solution to this puzzle provided by a *JEAL* reviewer, and refutes it. The section then advances our explanation, which gives a natural clarification of our observations. Our proposal is that the interpretation arises from right dislocation. Section 5 concludes the paper and explores some consequences.

2 Verb-stranding VP-deletion

Citing examples like (8), Funakoshi (2016) claims that the adverb *teineini* (carefully) is included in the interpretation of the ellipsis site in the second sentence. The English translation here reflects Funakoshi's judgment.

(8) Taro-wa kuruma-o teineini arat-ta kedo,
Taro-Top car-Acc carefully wash-Past but
'Taro washed the car carefully.'
Hanako-wa *e* araw-anakat-ta.
Hanako-Top wash-Neg-Past
'but Hanako didn't wash ~~the car carefully~~.'

Funakoshi further claims that when the context favors the AI interpretation, the reading becomes readily available. His example is shown in (9).

(9) Context: Taro and Hanako washed their parents' cars to get an allowance.
Taro was thorough in his work, while Hanako was not.
Taro-wa kuruma-o teineini arat-ta. Hanako-wa *e* araw-anakat-ta.
Taro-Top car-Acc carefully wash-Past Hanako-Top wash-Neg-Past
'Taro washed the car carefully. Hanako didn't wash ~~the car carefully~~.'
Hanako-ga arat-ta ato-no kuruma-wa kitanakat-ta.
Hanako-Nom wash-Past after-Gen car-Top dirty-Past
'The car that Hanako washed was dirty.'

The AI interpretation in (9), if available, means that either i) argument ellipsis can target adjuncts as well, or ii) something larger that contains the adjunct, such as VP, is being elided. Funakoshi takes the latter approach. The choice is based on his observation that when the object remains unelided, the null adjunct interpretation becomes harder to obtain. This is shown by (10). The object in bold-face in the elliptical clause means that VP-deletion does not apply to this example, which in turn means that the adjunct *teineini* is not contained in the elliptical clause. Thus, the third sentence contradicts the second sentence.[1]

(10) Context: Same as (9).
Taro-wa kuruma-o teineini arat-ta.
Taro-Top car-Acc carefully wash-Past
'Taro washed the car carefully.'
Hanako-wa kuruma-o *e* araw-anakat-ta.
Hanako-Top car-Acc wash-Neg-Past
'Hanako didn't wash the car.'
#Hanako-ga arat-ta ato-no kuruma-wa kitanakat-ta.
Hanako-nom wash-Past after-Gen car-Top dirty-Past
'The car that Hanako washed was dirty.'

[1] We will come back to this issue in section 0.

While Funakoshi's claim is interesting, the reported judgment is very hard to replicate for a number of speakers. At the same time, I was able to find three native informants who get the AI interpretation in examples like (9). For these speakers, the interpretation requires an extra heavy focal stress on the adjunct in the antecedent clause. The majority of speakers, including myself, systematically rule out the relevant interpretation. Generally, grammaticality judgment here remains murky at best, and to this extent, the validity of the VP-deletion account is not on solid empirical ground. What makes the judgment difficult, it seems, is that examples like (9) or (10) require cross-sentential judgment that involves the antecedent clause, the elliptical clause, and the control sentence which may or may not contradict the elliptical clause. The judgment is further obscured by the fact that the truth condition for the antecedent, e.g., *wash the car*, is consistent with that of the elliptical constituent, *wash the car carefully*. What is called for, thus, is cases with a straightforward judgment free from these difficulties, where informants unanimously agree. Citing such examples, the next section shows that the AI interpretation is in fact impossible, and by doing so, argues that verb-stranding VP-deletion is not available in Japanese.

3 Contexts that prohibit the adjunct inclusive interpretation

This section points out two syntactic contexts in which the AI interpretation is clearly impossible to obtain. They set up an empirical foundation for the discussion in this paper.

3.1 Semantic contradiction

When the adjunct *teineini* (carefully) in (11) is overt in the second sentence, the example is perfectly well-formed. However, when the adjunct is absent, the first half of the second sentence contradicts the rest of the sentence, since the first half can only mean that Hanako didn't wash the car at all.

(11) Taro-wa kuruma-o teineini arat-ta.
Taro-Top car-Acc carefully wash-Past
'Taro washed the car carefully.'
Hanako-wa #(teineini) araw-anakat-ta-kedo, arat-ta-koto-wa arat-ta.
Hanako-Top carefully wash-Neg-Past-but wash-Past-thing-Top wash-Past
'Hanako didn't wash the car (carefully), but she washed (it) anyway.'

This means that the AI interpretation is impossible in (11) without the overt adjunct, since if the interpretation was available, the adjunct could be covertly present, and (11) would be well-formed with or without the overt adverb. My informant work has found that even speakers who permit the AI interpretation in (9) cannot get the interpretation out of (11) without the overt adjunct. If VP-deletion was available in Japanese, as Funakoshi (2016) claims, (9) and (11) should both permit the AI interpretation. What should be stressed here is that (11) is semantically consistent

under the AI interpretation. Thus, the context forces (11) to have the AI interpretation. Nonetheless, the interpretation cannot be assigned to this example. The inevitable conclusion is that VP-deletion is not possible in Japanese.[2]

3.2 Degree adverbs

Our second argument against the availability of the AI interpretation, and consequently against VP-deletion, comes from certain adverbs denoting degree, which drastically change the semantics of the sentence depending on whether they are in the scope of negation or not. More specifically, without the adverb *tyuutohanpani* (half-heartedly), (12) means that Taro does not study math at all. With the adverb in place, the sentence means that Taro does not study math half-heartedly, but instead he studies the subject enthusiastically.

(12) Taro-wa suugaku-o (tyuutohanpani) benkyoos-inai.
Taro-Top math-Acc half-heartedly study-Neg
'Taro does not study math (half-heartedly).'

With this in mind, consider (13). The overt presence of the adverb *tyuutohanpani* (half-heartedly) in the second half of the example is necessary for the sentence to be pragmatically consistent: since Taro is enthusiastic about everything, the expectation is that he does not study math half-heartedly. That is, the context strongly favors the AI interpretation in which Taro studies math enthusiastically. Nonetheless, the relevant interpretation is impossible to get when the adverb is not overtly present. This is true even for the above mentioned three speakers who can get the AI interpretation in (9).

(13) Ano-gakubu-no gakusei-tati-wa suugaku-o tyuutohanpani
the department-Gen student-Plural-Top math-Acc half-heartedly
benkyoos-iteiru. Nanigoto-ni-mo nessinna
study-Prog-Pres everything-about-also enthusiastic
Taro-wa #(tyuutohanpani) benkyoos-itei-nai.
Taro-Top half-heartedly study-Prog-Neg
'Students from the department study math half-heartedly. Taro, who is enthusiastic about just about everything, does not study ~~math~~ (half-heartedly).'

The observation shows that the derivation through verb-stranding VP-deletion is not available. Note that in the English VP-deletion counterpart of (13), the interpretation impossible in (13) is the only available reading, which confirms our analysis.

(14) Students from the department study math half-heartedly. Taro, who is enthusiastic about just about everything, does not.

[2] The question also arises as to why (11) is much less tolerant of the AI interpretation. We will come back to this question in Sect. 4.2.4.

The above claim is further confirmed by (15), which minimally departs from (13) in that (15) has the pro-form *soo-s* in place of the ellipsis site. Above, it was pointed out that the pro-form *soo-s* can include adjuncts in the antecedent (see (7)). (15), in clear contrast to (13), permits such a reading. This shows that the impossibility of the AI interpretation cannot be attributed to pragmatic factors.

(15)	Ano-gakubu-no	gakusei-tati-wa	suugaku-o	tyuutohanpani
	the department-Gen	student-Plural-Top	math-Acc	half-heartedly
	benkyoos-iteiru.	Nanigoto-ni-mo	nessinna	
	study-Prog-Pres	everything-about-also	enthusiastic	
	Taro-wa	soo-s-ite-itei-nai.		
	Taro-Top	soo do-Prog-Neg-Pres		

'Students from the department study math half-heartedly. Taro, who is enthusiastic about just about everything, does not do so.'

(13) has an affirmative antecedent clause and a negative elliptical clause. The same happens when the antecedent is also negated. Without the overt adverb that serves as the focus of negation in the elliptical clause, (16) is pragmatically inconsistent, since the sentence means that Taro, who is enthusiastic about just about anything, does not study math at all. The context requires the overt adverb: when the adverb is absent, (16) is anomalous.

(16)	Ano-gakubu-no	gakusei-tati-wa	suugaku-o	tyuutohanpani
	the department-Gen	student-Plural-Top	math-Acc	half-heartedly
	benkyoos-itei-nai.	Nanigoto-ni-mo	nessinna	
	study-Prog-Neg-Pres	everything-about-also	enthusiastic	
	Taro-mo	#(tyuutohanpani)	benkyoos-itei-nai.	
	Taro-also	half-heartedly	study-Prog-Neg-Pres	

'Students from the department do not study math half-heartedly. Taro, who is enthusiastic about just about everything, also does not study ~~math~~ (half-heartedly).'

The affirmative antecedent with an affirmative elliptical clause also works similarly. Without the overt adverb *tyuutohanpani*, the example is pragmatically inconsistent.[3]

(17)	Ano-gakubu-no	gakusei-tati-wa	suugaku-o	tyuutohanpani
	the department-Gen	student-Plural-Top	math-Acc	half-heartedly
	benkyoos-itei-ru.	Heikintekina	gakusei-dearu	
	study-Prog-Pres	average	student-Cop	
	Taro-mo	#(tyuutohanpani)	benkyoos-ite-ru.	
	Taro-also	half-heartedly	study-Prog-Pres	

'Students from the department study math half-heartedly. Taro, who is an average student, also studies math (half-heartedly).'

[3] Some speakers allow the AI interpretation in (17). The same speakers find it difficult to obtain the interpretation in (13) and (16). We will come back to this dichotomy in section 4.

The impossibility of the AI interpretation follows straightforwardly if VP-deletion is not available in Japanese.

This section has advanced two arguments against the availability of the AI interpretation, one based on a semantic contradiction and the other based on degree adverbs. While the judgment for these cases is clear, it is true that there are speakers who marginally permit the AI interpretation in Funakoshi's example in (9). The next section first summarizes the data, and then examines our empirical findings in light of a suggestion made by a *JEAL* reviewer, which is shown to be inadequate both theoretically and empirically. We then propose our own explanation.

4 Variability in judgment

To understand the puzzle here, let us summarize empirical facts. Some speakers can get the AI interpretation in Funakoshi's example in (9), repeated here, upon being forced to get the interpretation.

(18) Context: Taro and Hanako washed their parents' cars to get an allowance. Taro was thorough in his work, while Hanako was not.

Taro-wa	kuruma-o	teineini	arat-ta.	Hanako-wa	*e*	araw-anakat-ta.
Taro-Top	car-Acc	carefully	wash-Past	Hanako-Top		wash-Neg-Past

'Taro washed the car carefully. Hanako didn't wash ~~the car carefully~~.'

Hanako-ga	arat-ta	ato-no	kuruma-wa	kitanakat-ta.
Hanako-Nom	wash-Past	after-Gen	car-Top	dirty-Past

'The car that Hanako washed was dirty.'

(11), repeated in (19), is semantically contradictory, which shows that the AI interpretation is impossible in this case.

(19)

Taro-wa	kuruma-o	teineini	arat-ta.		
Taro-Top	car-Acc	carefully	wash-Past		

'Taro washed the car carefully.'

Hanako-wa	#(teineini)	araw-anakat-ta-kedo,	arat-ta-koto-wa	arat-ta.
Hanako-Top	carefully	wash-Neg-Past-but	wash-Past-thing-Top	wash-Past

'Hanako didn't wash ~~the car~~ (carefully), but she washed (it) anyway.'

Degree adverbs fail to form a part of the interpretation for ellipsis sites. This point is shown by (13) above, repeated here.

(20)

Ano-gakubu-no	gakusei-tati-wa	suugaku-o	tyuutohanpani
the department-Gen	student-Plural-Top	math-Acc	half-heartedly
benkyoos-iteiru.	Nanigoto-ni-mo	nessinna	
study-Prog-Pres	everything-about-also	enthusiastic	
Taro-wa	#(tyuutohanpani)	benkyoos-itei-nai.	
Taro-Top	half-heartedly	study-Prog-Neg-Pres	

'Students from the department study math half-heartedly. Taro, who is enthusiastic about just about everything, does not study ~~math~~ (half-heartedly).'

Thus, (18) allows the AI interpretation for some speakers, albeit marginally, but (19) and (20) do not. Before providing an account of the contrast, we critically examine a suggestion made by a *JEAL* reviewer.

4.1 Focus phrases blocking ellipsis

One *JEAL* reviewer suggests an account of the variability in judgment that consists of two independent hypotheses, listed below.

(21) V-stranding VP-deletion is generally available in Japanese syntax (Funakoshi 2016) but VP-deletion is inapplicable to a VP that contains a focused adjunct.

(22) Argument ellipsis takes priority over VP-deletion. Whenever the derivation in terms of argument ellipsis is possible, the VP-deletion interpretation becomes much harder to obtain.

According to these hypotheses, most Japanese speakers find it impossible to obtain the AI interpretation in (18), since the adjunct in this example is focused and therefore, VP-deletion is inapplicable in accordance with (21). (18) is therefore unambiguously derived by argument ellipsis for most speakers. This analysis may extend to the degree adverb in (20), provided that degree adverbs are inherently focused, and therefore cannot be deleted.

Some speakers marginally permit the AI interpretation in (18). (22) explains this fact. For these speakers, the adjunct is not focused, and VP-deletion is possible, but the derivation in terms of argument ellipsis takes priority, and therefore, the AI interpretation is marginal.

This account does not explain why speakers invariably find it difficult to obtain the AI interpretation in (19). After all, (18) and (19) have the same adverbial adjunct in the antecedent, but in clear contrast to (18), the AI interpretation is impossible to obtain in (19). In the next couple of sub-sections, we show that this account does not give us an illuminating solution to the problem at hand.

4.1.1 Focused adverbs

One problem with (21) is that it is not clear why certain adverbs can remain unfocalized for some speakers, which permits VP-deletion, while for others, they must be focalized, which consequently blocks VP-deletion. Such a property of adverbs remains as an *ad hoc* stipulation. Furthermore, the account requires that the degree adverb in (20) above is inherently focused, since even those speakers who permit the AI interpretation in (18) do not get the AI interpretation in (20). Aside from these theoretical problems, the hypothesis that focused adverbs block ellipsis makes false predictions in other parts of the grammar. Elsewhere, I have argued that

adverbs of this kind can be deleted in another syntactic environment (Tanaka 2021). In particular, consider negative fragmentary answers (NFAs) to a wh-question, discussed extensively by Watanabe (2004).

(23) Q: Dare-ga suugaku-o tyuutohanpani benkyoos-itei-ru-no?
who-Nom math-Acc half-heartedly study-Prog-Pres-Q
'Who studies math half-heartedly?'
A: Dare-mo *e*. (Min'na-ga sinkenni benkyoos-uru-yo.)
nobody everyone-Nom seriously study-Pres-Prt
'Nobody. (Everyone studies it seriously.)'

One notable feature of (23) is that the NFA is understood with the adverb *tyuutohanpani*: *nobody studies math half-heartedly*. As such, the NFA can be followed by the sentence in parenthesis without causing a contradiction. This means that *e* in (23) contains the degree adverb. This also means that the adverb is elidable in this context. This point is further confirmed by the fact that when the antecedent question does not contain the adverb, we get a contradiction.

(24) Q: Dare-ga suugaku-o benkyoos-itei-ru-no?
who-Nom math-Acc study-Prog-Pres-Q
'Who studies math?'
A: Dare-mo *e*. (*Min'na-ga sinkenni benkyoos-uru-yo.)
nobody everyone-Nom seriously study-Pres-Prt
'Nobody. Everyone studied it seriously.'

Thus, the hypothesis that the adverb *tyuutohanpani* is inherently focused for all speakers, and therefore is unelidable, makes false predictions and is hard to maintain.

A similar point about (21) can be established based on English VP-deletion. (25) readily allows the interpretation that includes the adjunct *carefully*, which serves as the focus of negation: *Mary washed the car, but not carefully*. This shows that focused adjuncts in English can be deleted when VP-deletion applies.

(25) John washed the car carefully, but Mary didn't. The car she washed is still dirty.

Sluicing in English also works similarly. In (26), the adverb acts as the focus of negation in the antecedent clause, which gets elided in the sluiced clause.

(26) Someone didn't wash the car carefully, but we don't know who. The car is still dirty!

Thus, the hypothesis in (21) that focused phrases block ellipsis operations makes false predictions and cannot be maintained.

4.1.2 Ambiguity and Interpretations

The second part of the reviewer's suggestion is (22): when an elliptical sentence is derivationally ambiguous, the interpretation in terms of argument ellipsis takes priority over the one in terms of VP-deletion. This is an essential component of the account, since the AI interpretation is hard to obtain even for speakers who can get the interpretation.

One obvious problem with (22) comes from (27). Note that since the example has an intransitive verb, argument ellipsis plays no role in its derivation. Hence, (22) predicts that the example should be derived by VP-deletion and should readily permit the AI interpretation, but this expectation is not fulfilled: the AI interpretation is still hard to obtain.

(27) Taro-ga yukkuri hasit-tei-ru. Ziro-wa *e* hasit-te-inai.
Taro-Nom slowly run-Prog-Pres Ziro-Top run-Prog-Neg
'Taro runs slowly. Ziro doesn't run.'

This point is even more dramatic in the following example. Without the adverb in the second sentence, the example is semantically contradictory, showing the absence of the adjunct in the interpretation of the ellipsis site.

(28) Taro-ga yukkuri hasit-tei-ru. Ziro-wa #(yukurri) hasit-te-inai-kedo
Taro-Nom slowly run-Prog-Pres Ziro-Top slowly run-Prog-N-but
hasit-tei-ru-koto-wa hasit-tei-ru.
Run-Prog-Pres-thing run-Prog-Pres
'Taro runs slowly. Ziro doesn't run (slowly), but he is running anyway.'

The absence of the AI interpretation is also apparent with a degree adverb (see (20)), as in (29). The elliptical sentence here cannot have the AI interpretation: *Ziro is an enthusiastic runner*.

(29) Taro-ga tyuutohanpani hasit-tei-ru. Ziro-wa *e* hasit-te-inai.
Taro-Nom half-heartedly run-Prog-Pres Ziro-Top run-Prog-Neg
'Taro runs half-heartedly. Ziro doesn't.'

Aside from these empirical problems, the idea behind (22) that the argument ellipsis interpretation obscures the VP-deletion interpretation is theoretically problematic in that it is unattested elsewhere in the theory of grammar. Generally, ambiguous sentences should allow multiple interpretations without one blocking others. For example, in the structurally ambiguous (30), the adverb *carefully* can be construed with the predicate in the relative clause or with the matrix predicate. *It* in (31) is lexically ambiguous, which gives rise to structural/derivational ambiguity: *it* can be an expletive, or a pronoun in a *tough*-construction. Both interpretations are readily available in these sentences.

(30) The plumber who fixed the sink carefully packed his tools.

(31) It is easy to read.

In clear contrast to this, even speakers who can get the AI interpretation in (18) must be pressed to obtain the interpretation. (22) also raises a question about learnability: how do children learn that argument ellipsis takes priority over VP-deletion, but not the other way around? Without a principled explanation of these problems, the account fails to constitute a valid explanation.

4.1.3 Light verbs and ellipsis

Despite the above-mentioned difficulties, the *JEAL* reviewer points out one empirical advantage of (22); in so-called light verb constructions, argument ellipsis cannot apply, and the AI interpretation becomes somewhat easier to obtain in accordance with (22).[4] The reviewer's point is shown in (32), which has a predicate noun followed by a light verb in the antecedent (Grimshaw and Mester 1988; Kageyama 1976; Kuroda 1965).

(32) Taro-wa buhin-o teineini senzyo s-ita.
Taro-Top part-Acc carefully wash do-Past
Hanako-wa *e* s-inakat-ta.
Hanako-Top do-Neg-Past
'Taro washed the parts carefully. Hanako didn't do.'

In (32), only the light verb is stranded, and the predicate noun, *senzyo*, is elided along with its argument and modifier. Under the VP-deletion analysis, this means that only the light verb, *s-*, is raised to T, and the VP gets elided, as depicted in (33).

[4] We have already seen that this fails to account for sentences with intransitive verbs (see (27) and (28)). While a detailed examination of light verb constructions is beyond the scope of this paper, one possible explanation of the apparent AI interpretation in examples like (32) is that the nominal predicate can form a constituent with internal arguments and adjuncts. This is shown by i), in which the predicate nominal appears in a conjunct with its argument and modifier in a coordinate structure.

i) Taro-ga [joosi-ni isoide hookoku]-to
Taro-Nom superior-Dat quickly report-and
[buka-ni komakaku sizi]-o s-ita.
subordinate-Dat detailed instruction-Acc do-Past
'Taro gave a quick report to his boss and a detailed instruction to his staff.'

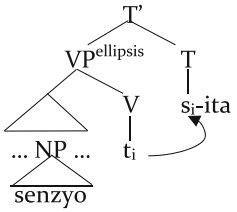
If argument ellipsis can target such a constituent headed by the predicate nominal, we can account for the AI interpretation without making recourse to VP-deletion. When ii) takes i) as its antecedent, the AI interpretation, in which the elliptical site takes as its antecedent the entire coordinate structure headed by *to*, seems to be possible.

ii) Hanako-mo *e* s-ita.
Hanako-also do-Past
'Hanako also did.'

This constituent structure shown in i) is only possible when the predicate nominal has an accusative Case marker. The examples in this section have their predicate nominal incorporated into the light verb. The difference between the two kinds of light verb constructions is overlooked here and left for future investigation.

Since the verbal noun is elliptical, the reviewer claims, the derivation in terms of argument ellipsis is not an available option in this case.

(33)



Since (32) is unambiguously derived by VP-deletion, the AI interpretation should readily be available. The reviewer also claims that the degree adverb discussed above (see (20)) can also be included when the light verb is stranded. (34) shows such a case.

(34) Ano-gakubu-no gakusei-tati-wa suugaku-o tyuutohanpani
the department-Gen student-Plural-Top math-Acc half-heartedly
benkyoos-iteiru-kedo, nanigoto-ni-mo nessinna
study-Prog-Pres-but everything-about-also enthusiastic
Taro-wa *e* s-itei-nai.
Taro-Top do-Prog-Neg-Pres
'Students from the department study math half-heartedly, but Taro, who is enthusiastic about just about everything, does not do.'

I find it very difficult to replicate the judgment that the reviewer reports. It is still more difficult to obtain the AI interpretation out of (34). As a matter of fact, (35) is contradictory without *so* in parentheses (see (7) and (15) above).

(35) Ano-gakubu-no gakusei-tati-wa suugaku-o tyuutohanpani
the department-Gen student-Plural-Top math-Acc half-heartedly
benkyoos-iteiru. Nanigoto-ni-mo nessinna Taro-{ga/wa}
study-Prog-Pres everything-about-also nthusiastic Taro-Nom/-Top
#(so) s-itei-nai-kara itiban seiseki-ga yoi.
so do-Prog-Neg-Pres-because best grade-Nom good
'Students from the department study math half-heartedly. Because Taro, who is enthusiastic about just about everything, does not, his grade is the best.'

(35) suggests that VP-deletion is not possible in light verb constructions. Let us carefully examine the reviewer's judgment for (32). If the AI interpretation is possible, we expect that (36) is not contradictory with or without *so*, since *so-s* can substitute a VP that contains adjuncts ((7) and (15)). Contrary to this expectation, my informants agree that without *so*, (36) is contradictory.

(36) Taro-wa buhin-o teineini senzyoo s-ita.
Taro-Top part-Acc carefully wash-Acc do-Past

Hanako-wa *(so) s-inakat-ta kedo, ara-u-koto-wa arat-ta.
Hanako-Top so do-Neg-Past-but wash-Pres-thing-Top wash-Past
'Taro washed the parts carefully. Hanako didn't do (so), but she gave them a quick wash.'

We can also construct an intransitive light verb construction. (37) is contradictory without *so*.

(37) Taro-wa yukkuri ran'ningu-si-ta.
Taro-Top slowly running-do-Past
Hanako-wa *(so) s-inakat-ta-kedo, hasi-ru-koto-wa hasit-ta.
Hanako-Top so do-Neg-Past-but run-Pres-thing-Top wash-Past
'Taro ran slowly. Hanako didn't do (so), but she ran anyway.'

Thus, we conclude that the reviewer's explanation based on (21) and (22) is not satisfactory, and light verb constructions fail to support the view that VP-deletion is possible in Japanese. Having done this, we now move on to our proposal.

4.2 Right dislocation

Some speakers marginally permit the AI interpretation in (18). The marginality suggests that the mechanism that gives rise to the AI interpretation is not available for many speakers. It also suggests that the mechanism only kicks in upon being forced to get the interpretation: the mechanism itself must be marginal. Note at this point that when the elliptical clause is followed by a dislocated adjunct phrase, the AI interpretation clearly becomes available, as in (38).

(38) Taro-wa kuruma-o teineini arat-ta.
Taro-Top car-Acc carefully wash-Past
'Taro washed the car carefully.'
Hanako-wa *e* araw-anakat-ta-yo, teineini.
Hanako-Top wash-Neg-Past-Prt carefully
'Hanako didn't wash the car, (I mean) carefully.'

Even speakers that generally cannot get the AI interpretation readily get the interpretation with the dislocated adjunct. The intuition that I would like to pursue here is that (38) is the source of the AI interpretation. More specifically, speakers who can marginally get the interpretation allow the deletion of the dislocated adjunct, bold-faced in (38). Before exploring the technical details, justifications, and consequences of this proposal, we look at properties of right dislocation.

4.2.1 Bi-clausal account

Japanese has a construction, dubbed right dislocation, whereby a constituent that would normally appear internal to a clause appears in the post-verbal position (Abe 2019; Kuno 1978a, b; Ott and de Vries 2016; Takita 2014; Tanaka 2001 among others).

(39) Taro-wa e_i teineini aratta-ta-yo, kuruma-o_i.
Taro-Top carefully wash-Past-Prt car-Acc
'Taro washed it carefully, (I mean) the car.'

The operation can target adjuncts. The adverbial adjunct is dislocated in (40).

(40) Taro-wa kuruma-o aratta-ta-yo, teineini.
Taro-Top car-Acc wash-Past-Prt carefully
'Taro washed the car, (I mean) carefully.'

This is true even when the adjunct acts as the focus of negation (cf. Takita 2009). The sentence below means Taro washed the car, but not carefully.

(41) Taro-wa kuruma-o arawa-nakat-ta-yo, teineini.
Taro-Top car-Acc wash-Neg-Past-Prt carefully
'Taro didn't wash the car, (I mean) carefully.'

Right dislocation observes island constraints (Tanaka (2001)). The example below is ungrammatical since it violates the Complex NP Constraint (Ross 1967).

(42) *Taro-ga e_i arat-ta koto-ga hookokus-are-ta-yo, kuruma-o_i.
Taro-Top wash-Past thing-Nom report-Pass-Past car-Acc
'That Taro washed it was reported, (I mean) the car.'

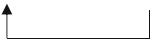
Furthermore, right dislocation is a root phenomenon, and cannot take place within a subordinate clause. The complement object dislocated in (43) to the sentence-final position cannot be dislocated within the complement clause, as shown in (44).

(43) Hanako-ga [Taro-ga e_i arat-ta-to] hookokus-ita-yo, kuruma-o_i.
Hanako-Nom Taro-Nom wash-Past-Comp report-Past-Prt car-Acc
'Hanako reported [that Taro washed it], the car.'

(44) *Hanako-ga [Taro-ga e_i arat-ta kuruma-o_i to] hookokus-ita-yo.
Hanako-Nom Taro-Nom wash-Past car-Acc Comp report-Past-Prt
'Hanako reported [that Taro washed it, the car].'

The prevalent view is that right dislocation constructions repeat the same sentence (biclausal analysis: Kuno 1978a, b). The dislocated phrase is a remnant, created by leftward scrambling in the second clause, followed by deletion (Tanaka 2001). (39), for instance, is derived in the following manner:

(45) Taro-wa *e* teineini aratta-ta-yo, kuruma-o_i ~~[Taro-wa t_i teineini aratta-ta]~~.



Since scrambling observes island constraints, so does right dislocation. This also accounts for the root property of right dislocation: the dislocated phrase is a

constituent from an independent clause, and therefore cannot appear within the antecedent clause. With this much in mind, let us go back to our main concern: the AI interpretation in elliptical sentences. The remainder of this section lists facts that this proposal affords.

Our proposal is that Funakoshi's judgment is rooted in a right dislocation structure with the remnant deleted along with the remainder of the second clause. (18), on which Funakoshi's claim is based, is represented as follows:

(46) Taro-wa kuruma-o teineini arat-ta.
Taro-Top car-Acc carefully wash-Past
'Taro washed the car carefully.'

Hanako-wa *e* araw-anakat-ta.
Hanako-Top wash-Neg-Past
'Hanako didn't wash (the car)'

~~**teineini**~~$_i$ ~~[Hanako-wa kuruma-o t$_i$ araw-anakat-ta]~~
carefully Hanako-Top car-Acc wash-Neg-Past
'~~Carefully, Hanako didn't wash the car~~.'

For the majority of speakers, right dislocation remnants are not elidable. The deletion operation can only elide the phrase in the square brackets, and the AI interpretation is possible only when the overt adjunct is present. For others, the interpretation is marginally available when the remnant gets deleted along with the rest of the clause.[5] We now see that the account makes four predictions, all of which are borne out.

4.2.2 Argument phrases in the ellipsis site

In a typical right dislocation sentence, the remnant phrase serves as an afterthought, but in examples like (46) above, the remnant adjunct serves as a focus of negation. The focused phrase bears new information. Kuno (1978a, b) proposes a functional constraint on ellipsis given in (47).

(47) Delete less important information first, and more important information last.

(47) accounts for, for instance, the fact that the answer in (48) is impossible. Since (48)Q is a question relating to the year in which the addressee was born, deleting *1968-nen-ni* while retaining the verbal complex violates (47).

[5] Since eliding the right dislocated phrase, an afterthought, is a marginal operation, the AI interpretation is available only for a small number of speakers. See An (2016) for a possible explanation of such a deletion operation, which he calls extra-deletion.

(48) Q: 1968-nen-ni umare-masi-ta-ka?
1968-year-in born-Pol-Past-Q
'Were you born in 1968?'
A: * Hai, umare-masi-ta.
Yes, born-Pol-Past
'Yes, I was born.'

Examples similar to (48) do not always result in unacceptability. Since the question in (49)Q inquires whether the addressee was still a small child, (49)A is an acceptable answer.

(49) Q: 1968-nen-ni mada kodomo-desi-ta-ka?
1968-year-in still child-Cop-Past-Q
'Were you still a small child in 1968?'
A: Hai, kodomo-desi-ta.
Yes, child-Cop-Past
'Yes, I was a child.'

Against this backdrop, consider (10) above, whose relevant part is reproduced in (50) with modifications. Funakoshi claims that the example does not allow the AI interpretation, since VP-deletion cannot be responsible for this example. Our account gives an alternative explanation: in the second clause, the object in boldface remains unelided, but the adjunct serving as the focus of negation is absent. Since the adjunct bearing more important information is absent, the presence of the object, less important information, would violate (47). The overt object therefore blocks the AI interpretation.

(50) Taro-wa kuruma-o teineini arat-ta.
Taro-Top car-Acc carefully wash-Past
'Taro washed the car carefully.'

Hanako-wa **kuruma-o** araw-anakat-ta.
Hanako-Top car-Acc wash-Neg-Past
'Hanako didn't wash the car.'

~~teineini$_i$ [Hanako-wa kuruma-o t_i araw-anakat-ta]~~
carefully Hanako-Top car-Acc wash-Neg-Past
'Carefully, ~~Hanako didn't wash the car~~.'

This accounts for Funakoshi's judgment in (10).

The next section examines how degree adverbs discussed in Sect. 3.2 behave in the proposed account.

4.2.3 Dislocating degree adverbs

We have seen above that (20), repeated in (51) with slight modifications, does not allow the AI interpretation. At first blush, our right dislocation account seems to predict that the reading should be available, since nothing precludes the adjunct from getting dislocated to the postverbal position.

(51) Ano-gakubu-no gakusei-tati-wa suugaku-o tyuutohanpani
the department-Gen student-Plural-Top math-Acc half-heartedly
benkyoos-iteiru, nanigoto-ni-mo nessinna
study-Prog-Pres everything-about-also enthusiastic
Taro-wa benkyoos-itei-nai-yo, ~~tyuutohanpani~~.
Taro-Top study-Prog-Neg-Pres-Prt half-heartedly
'Students from the department study math half-heartedly. Taro, who is enthusiastic about just about everything, does not study math, (I mean) half-heartedly.'

There are two reasons that (51) resists the AI interpretation. First, note that the kind of degree adverbs resists right dislocation in a negative sentence. The sentence below seems semantically contradictory when the second clause is not elliptical.

(52) #Taro-wa suugaku-o benkyoos-itei-nai-yo,
Taro-Top math-Acc study-Prog-Neg-Prt

tyuutohanpani ~~Taro-wa suugaku-o benkyoos-itei-nai~~.
half-heartedly Taro-Top math-Acc study-Prog-Neg

'Taro does not study math, (I mean) half-heartedly.'

The problem with (52) is that, without the adverb, the antecedent clause is negative: *Taro does not study math at all,* but the elliptical clause that hosts the remnant has the degree adverb associated with the negation, which gives rise to a positive interpretation: *Taro studies math seriously.* The inconsistency is the source of the problem in (51) and (52).

Second, the affirmative antecedent clause in (51) has a negative interpretation due to the degree adverb. The elliptical clause in (51), although it is a negative sentence, gets a positive interpretation if it is to get the AI interpretation. That is, the degree adverb must be present in order for the two clauses in (51) to contrast. The degree adverb should therefore bear new information. If new information cannot be

deleted as a part of the deletion operation in right dislocation, we expect that the AI interpretation of (51) requires an overt degree adverb.

One *JEAL* reviewer points out that the degree adverb can be dislocated in an affirmative sentence. This fact is also consistent with our view, since the first sentence here is affirmative: *Taro studies math*, and the elliptical clause with the remnant is also affirmative: *Taro studies math half-heartedly*. The example is therefore free from the pragmatic inconsistency.

(53) (?)Taro-wa suugaku-o benkyoos-ite-ru-yo,
Taro-Top math-Acc study-Prog-Pres-Prt
tyuutohanpani ~~Taro-wa suugaku-o benkyoos-itei-ru~~.
half-heartedly Taro-Top math-Acc study-Prog-Pres
'Taro studies math, (I mean) half-heartedly.'

The example of the pattern (51) also permits the interpretation that includes the degree adverb remnant, when the clause that hosts the dislocated phrase is affirmative. (17), repeated here, is such an example, which seems to marginally permit the AI interpretation for some speakers.

(54) Ano-gakubu-no gakusei-tati-wa suugaku-o tyuutohanpani
the department-Gen student-Plural-Top math-Acc half-heartedly
benkyoos-itei-ru. Heikintekina gakusei-dearu
study-Prog-Pres average student-Cop
Taro-mo #(tyuutohanpani) benkyoos-ite-ru-yo.
Taro-also half-heartedly study-Prog-Pres-Prt
'Students from the department study math half-heartedly. Taro, who is an average student, also studies math (I mean, half-heartedly).'

Finally, consider (55). Without the overt degree adverb in the second clause, it is difficult to obtain the AI interpretation even for speakers who generally permit the interpretation, as noted by a *JEAL reviewer.*

(55) Ano-gakubu-no gakusei-tati-wa suugaku-o tyuutohanpani
the department-Gen student-Plural-Top math-Acc half-heartedly
benkyoos-itei-nai. Taro-wa #(tyuutohanpani) benkyoos-ite-ru.
study-Prog-Neg Taro-Top half-heartedly study-Prog-Pres
'Students from the department study math half-heartedly. Taro studies math.'

The observation can be accounted for in the same way as (51). The impossibility of the AI interpretation is rooted in the contrastive semantics of the antecedent clause and the elliptical clause. The former gets a positive interpretation, since the degree

adverb is in the scope of negation. If the elliptical clause is to have a contrastive negative interpretation, the degree adverb is essential and bears new information. If new information cannot be deleted as a part of the deletion operation in right dislocation, we expect that (55) does not allow the AI interpretation without an overt degree adverb.

4.2.4 Island constraints

Recall that right dislocation observes island constraints ((42) above). When the elliptical clause appears inside of an island, the AI interpretation should be much harder to obtain due to a violation of the island constraint incurred by the dislocated remnant phrase. (19), repeated in (56), represents such a case.[6]

(56) Taro-wa kuruma-o teineini arat-ta. Hanako-wa #(teineini)
Taro-Top car-Acc carefully wash-Past Hanako-To carefully
araw-anakat-ta-kedo, arat-ta-koto-wa arat-ta.
wash-Neg-Past-but wash-Past-thing-Top wash-Past
'Taro washed the car carefully. Hanako didn't wash the car (carefully), but she washed (it) anyway.'

Dislocating the adjunct in the second sentence in (56) results in ungrammaticality due to the Coordinate Structure Constraint, as shown independently by (57).

(57) *Hanako-wa araw-anakat-ta-kedo, arat-ta-koto-wa arat-ta-yo, teineini.
Hanako-Top wash-Neg-Past-but wash-Past-thing-Top wash-Past-Prt, carefully
'Hanako didn't wash the car, but she washed (it) anyway, carefully.'

Since right dislocation is impossible, the AI interpretation is not available in (56), unless the adjunct is overtly expressed in the ellipsis site. Since the AI interpretation is not available in (56), the sentence is contradictory without the overt adverb.

The same effect is observed with other island constraints. The elliptical clause is contained in a complex NP in (58). Without the overt adjunct in the complex NP, the example is pragmatically implausible.

(58) Taro-wa kitanai kuruma-o teineini arat-ta. [Hanako-ga #(teineini)
Taro-Top dirty car-Acc carefully wash-Past Hanako-Nom carefully

[6] A *JEAL* reviewer reports that when the second sentence in (56) is replaced with i), the AI interpretation becomes somewhat easier to obtain.

i) Hanako-wa araw-anakat-ta-kedo, kinisitei-nai.
Hanako-Top wach-Neg-Past-but care-Neg
'Hanako didn't wash ~~the car~~, but ~~she~~ doesn't care.'

Since i) is identical to (56) in relevant respects, I have no solid explanation for this observation. The point about (56) is that it is contradictory unless the AI interpretation was available. Since i) does not result in such a semantic contradiction, one possibility is that availability of the AI interpretation in i) is only apparent. As a matter of fact, my informants generally cannot get the AI interpretation either in (56) or in i).

araw-anakat-ta kitanai kuruma-mo] kireini-nat-ta.
wash-Neg-Past dirty car-also clean-become-Past
'Taro washed the dirty car carefully. The dirty car that Hanako didn't wash (carefully) also became clean.'

The impossibility of right dislocation in this syntactic environment is confirmed by the following example.

(59) *Hanako-ga araw-anakat-ta kitanai kuruma-mo kireini-nat-ta-yo, teineini.
Hanako-Nom wash-Neg-Past dirty car-also clean-become-Past-Prt, carefully
'The dirty car that Hanako didn't wash also became clean, carefully.

The observation here that the availability of the AI interpretation correlates with island constraint violations is hard to capture under Funakoshi's VP-deletion account, since VP-deletion can apply freely in complex NPs in English. Antecedent contained deletion is a case in point (Bouton 1970).

(60) John read everything you did [$_{VP}$ ø].

VP-deletion is also free from the Coordinate Structure Constraint.

(61) John washed the car. Bill also did [$_{VP}$ ø], and his car is now spotless.

Thus, it is impossible to account for the absence of the AI interpretation in (56) and (58) in terms of VP-deletion.

A *JEAL* reviewer observes that the AI interpretation becomes somewhat easier to obtain when the antecedent clause is also contained in an island. (62) is the example that the reviewer cites to this effect.

(62) Mazu [Taro-ga kuruma-o teineini arat-ta toiu zizitu-ga]
First Taro-Nomno change car-Acc carefully wash-Past thatno change fact-Nom
hookokus-are-ta.
Report-Pass-Past
Sonoato, [Hanako-ga *e* araw-anakat-ta toiu zizitu-mo] hookokus-are-ta.
Then Hanako-Nom wash-Neg-Past that fact-also report-Pass-Past
Hanako-ga arat-ta ato-no kuruma-wa kitanakat-ta.
Hanako-Nom wash-Past after-Gen car-Top dirty-Past
'First, the fact that Taro washed the car carefully was reported. Then, the fact that Hanako didn't was reported. The car that Hanako washed was dirty.'

While I feel sympathetic to the judgment, one thing that our discussion has revealed is that the judgment on the availability of the AI interpretation requires rigorous control. In this light, consider the following example, based on (62). The example here has a predicate that is only consistent with the AI interpretation. Without the

parenthesized adverb in the second clause, (63) is contradictory, showing that the AI interpretation is impossible when the adverb is not overtly present.

(63) Mazu [Taro-ga kuruma-o teineini arat-ta toiu zizitu-ga]
First Taro-Nom car-Acc carefully wash-Past that fact-Nom
hookokus-are-ta.
Report-Pass-Past
Sonoato, [Hanako-ga #(teineini) araw-anakat-ta toiu zizitu-mo]
Then Hanako-Nom carefully wash-Neg-Past that fact-also
hookokus-are-ta-kedo, Hanako-wa arat-ta-koto-wa arat-ta.
report-Pass-Past-but Hanako-Top wash-Past-thing-Top wash-Past
'First, the fact that Taro washed the car carefully was reported. Then, the fact that Hanako didn't (wash the car carefully) was reported, but Hanako gave it a quick wash.'

Hence, we conclude that the availability of the AI interpretation in (62) is only apparent.

4.2.5 Additional cases of Island violations

A JEAL reviewer reports that the example in (64) has the AI interpretation when the dislocated adverb is overt, but the reading disappears when the dislocated adverb is not pronounced. This is not expected if right dislocation is the source of the AI interpretation. Since the claimed judgment contrasts with (18), in which the object is elliptical, the reviewer claims that the AI interpretation displays the subject vs. object asymmetry: when the subject is elided, the AI interpretation is hard to obtain.

(64) Taro-wa kuruma-o teineini arat-ta-ga,
Taro-Top car-Acc carefully wash-Past-but
e zitensya-wa arawa-nakat-ta-yo, *(teineini) ~~Taro-wa kuruma-o teineini~~
Bicycle-Top wash-Neg-Past-Prt carefully. Taro-Top car-Acc carefully
~~arat-ta-ga, *e* zitensya-wa arawa-nakat-ta.~~
wash-Past-but bicycle-Top wash-Neg-Past
'Although Taro washed the car carefully, ~~he~~ didn't wash the bicycle (carefully).'

I disagree with the reviewer's judgment. For my informants, and for myself, (64) does not permit overt right dislocation, as long as the second clause acts as a conjunct coordinated by *-ga* (*although*). As far as I can see, the reviewer's judgment takes the two clauses in (64) as two independent sentences, and right dislocation takes place only in the second clause. (64), as a coordinate structure, does not permit the AI interpretation whether the final adverb is overt or not. If so, (64) does not constitute an obstacle for our right dislocation account of the AI interpretation. As a matter of fact, this is an automatic consequence of the bi-clausal account of right

dislocation, a root phenomenon (see (44)). This is shown in the final part of (64) with strike-out, in which the dislocated adverb must move out of the coordinate structure, resulting in a violation of the Coordinate Structure Constraint.[7] The same happens in (65), in which the object is dislocated in the same environment.[8]

(65) *Taro-wa kuruma-o teineini arat-ta-ga, *e* arawa-nakat-ta-yo, zitensya-o.
Taro-Top car-Acc carefully wash-Past-but wash-Neg-Past-Prt bicycle-Acc
'Taro washed the car carefully, but ~~he~~ didn't wash, the bicycle.'

The following example also points to the same conclusion. Note that argument ellipsis can apply backwards. Without the dislocated adverb, (66) is grammatical, but lacks the AI interpretation. With the dislocated adverb, the example is clearly ungrammatical, since it violates the Coordinate Structure Constraint. This shows that right dislocation out of the first conjunct is impossible.

(66) *e* zitensya-wa ara-ta-ga,
Bicycle-Top wash-Past-but
Taro-wa kuruma-o iikagenni arat-ta-yo, (*teineini).
Taro-Top car-Acc half-heartedly wash-Past-Prt carefully
'~~He~~ didn't wash the bicycle, although Taro washed the car half-heartedly, carefully.'

(67) is parallel to (64) in relevant respects, but (67) is ungrammatical.

(67) *Taro-wa kuruma-o iikagenni arat-ta-ga,
Taro-Top car-Acc half-heartedly wash-Past-but
e zitensya-wa arat-ta-yo, teineini.
Bicycle-Top wash-Past-Prt carefully
'Although Taro washed the car half-heartedly, ~~he~~ washed the bicycle, carefully.'

When the first conjunct that precedes the coordinate marker *-ga* in (67) is followed by (68), without right-dislocation, the example is perfectly well-formed.

[7] Some of the examples discussed in this paper, in particular those involving a coordinate structure with the particle *-kedo*, e.g., (8), violate the coordinate structure constraint, and for that reason, it is difficult to get the AI interpretation in such examples.

[8] (65) improves when the accusative marker on the dislocated phrase is replaced with the topic marker *-wa.* The backward argument ellipsis counterpart of (65), to be discussed just below, is still ungrammatical.

i) *Taro-wa *e* teineini arat-ta-ga, *e* zitensya-o arawa-nakat-ta-yo, kuruma-wa.
Taro-Top carefully wash-Past-but bicycle wash-Neg-Past-Prt car-Top
'Taro washed carefully, but ~~he~~ didn't wash the bicycle, the car.'

(68) *e* zitensya-wa teineini arat-ta-yo.
bicycle-Top carefully wash-Past-Prt
'~~He~~ washed the bicycle carefully.'

Without the coordination marker *-ga*, (67) also improves substantially, since the resulting structure incurs no island violations.

(69) Taro-wa kuruma-o iikagenni arat-ta.
Taro-Top car-Acc half-heartedly wash-Past
e zitensya-wa arat-ta-yo, teineini.
Bicycle-Top wash-Past-Prt carefully
'Taro washed the car half-heartedly. ~~He~~ washed the bicycle, carefully.'

When the adverb in the antecedent clause in (69) is replaced with an appropriate adverb, as in (70), the AI interpretation becomes available at least for those speakers who can generally get the interpretation. Note also that this is not expected under Funakoshi's account of the AI interpretation: since the object *zitensya-mo* should block VP-deletion.

(70) Taro-wa kuruma-o teineini arat-ta. *e* zitensya-mo arat-ta-yo.
Taro-Top car-Acc carefully wash-Past bicycle-also wash-Past-Prt
'Taro washed the car carefully. ~~He~~ washed the bicycle.'

These examples show that the coordinate structure with *ga* (*but*) blocks right dislocation. Since right dislocation in (64) violates the Coordinate Structure Constraint, the example is ungrammatical with an overt dislocated phrase. The AI interpretation is also expected to be impossible.

5 Conclusion

This paper has pointed out problems with Funakoshi's (2016) verb stranding VP-deletion account of the AI interpretation available for some speakers. The interpretation is subject to island constraints. Also, certain adverbs denoting degree cause an easily detectable semantic shift in the scope of negation. Such adverbs show that adjuncts cannot be included in the ellipsis site of the elliptical clauses. Our alternative account is that some speakers can obtain the AI interpretation, since such speakers permit extra-deletion of the remnant in the right dislocation constructions.

The materials in this paper suggest that VP-deletion is not available in Japanese syntax (Oku 1998; Kuno 1978a, b). Fukui (1988) argues that agreement is not forced in Japanese [see also Kuroda (1988)]. Let us assume that this is true, at least for the subject NP and the tense head: the subject does not agree with the tense head. This is evident from the fact that Japanese does not have morphological subject-verb agreement, and permits so-called multiple subject constructions. Suppose with Lobeck (1995) that agreement between a specifier and a head is required for a

complement to delete. When the two theses are put together, we expect that the language lacks VP-deletion.

The hypothesis that Japanese subjects do not agree with the tense head is also consistent with the recent development in the minimalist program (Chomsky (2013)). In languages like English, the subject DP raises from v*P-specifier, since v*P must be labeled, to the TP-specifier, and then agrees with T, so that TP can be labeled. Saito (2016) proposes that Case particles in Japanese serve as an anti-labeling device, and the proposal captures various properties of the language. One consequence of Saito's proposal is that Japanese does not have subject agreement.

This does not mean that Japanese does not have ellipsis of constituents that apply to phrases larger than arguments. As a matter of fact, (23), above, shows that in other syntactic contexts, TP-ellipsis is possible [see Tanaka (2021) for details]. Saito and Murasugi (1990) also show that Japanese has N'-deletion.

Argument ellipsis can target arguments of a noun. Thus, *e* in the elliptical NP in (71) allows the interpretation that contains Taro, but the adjective does not form a part of the interpretation of the ellipsis site, showing that argument ellipsis can delete the argument but not the adjective in the nominal system.

(71) Kinoo-no Taro-no ookii syashin-wa
Yesterday-Gen Taro-Gen big picture-Top
kyoo-no *e* syashin-yori omosiroi.
today-Gen picture-than interesting
'The big picture of Taro from yesterday is more interesting than the one (of Taro's) from today.'

When N'-deletion applies, as in (72), the adjective can naturally form a part of the interpretation of the ellipsis site: *Taro's big picture from yesterday is more interesting than Taro's big picture from today*. This shows that when N'-deletion applies, the adjective can be deleted along with the rest of N'.

(72) Kinoo-no Taro-no ookii syashin-wa
Yesterday-Gen Taro-Gen big picture-Top
kyoo-no *e* yori omosiroi.
today-Gen than interesting
'The big picture of Taro from yesterday is more interesting than today's.'

Thus, N'-deletion in Japanese can delete a phrase that contains adjuncts. Under Lobeck's (1995) system, this means that the genitive marker *-no* in Japanese agrees with the nominal.

Funakoshi's (2016) conclusion bears some similarities with that of more recent papers from Sato and Hayashi (2018) and Sato and Maeda (2021). Their claim is that verb echo answers to a polar question are derived by raising the verbal complex to C, with concomitant ellipsis of TP, that is, sluicing.

(73) Q: Taro-ga dokugaku-de Toodai-ni ukat-ta-no?
Taro-Nom self-study-with University of Tokyo-Dat pass-Past-Q
'Did Taro passed the Tokyo University entrance exam by studying by himself?'

A: [CP [TP … ~~t_i~~] [C ukat-ta$_i$]-yo].
Pass-Past-Prt
'Passed.'

I have argued elsewhere that their claim does not capture various properties of verb echo answers (Tanaka 2022). One clear piece of evidence that sluicing cannot be operative in verb echo answers is shown by (74).

(74) Q: Taro-ga suugaku-o tyuutohanpani benkyoos-ite-ru-no?
Taro-Nom math-Acc half-heartedly study-Prog-Pres-Q
'Does Taro study math half-heartedly?'
A: Benkyoos-ite-inai-yo.
study-Prog-Neg-Pres-Prt
'*Lit.* Does not study.'
'He does not study math.'

(74) A does not have the interpretation in which the degree adverb is contained in the ellipsis site, i.e., within the scope of negation (*Taro does not study math half-heartedly*), contrary to what Sato *et al.* would predict.[9] The sluicing account of verb echo answers therefore cannot be maintained. This also means that verb echo answers do not incur specifier-head agreement, which is evident from the fact that there is no phrasal projection that agrees with the verbal complex.

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[9] This contrasts with (23) above, in which the negative fragmentary answer is interpreted with the degree adverb.

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