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# Null adjuncts and adjunct-inclusive interpretation in Japanese

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This squib demonstrates that Japanese allows null adjuncts and the Adjunct-Inclusive (AI) reading, contrary to the widely held assumption since Oku (1998). Tanaka (2023) has recently claimed that Japanese lacks the AI reading with null adjuncts; in other words, adjuncts are unelidable in Japanese. I critically examine Tanaka's arguments and discuss the replicability of AI interpretations, emphasizing that careful control of test sentences and discourse factors is necessary when discussing the AI reading.

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#### **1** Introduction

It has been controversial whether Japanese has verb-stranding VP-ellipsis (VSVPE) (Funakoshi 2016; Landau 2020: among many others). The Adjunct-Inclusive (AI) interpretation with null adjuncts has been used as a tool to diagnose whether elliptical objects are derived via argument ellipses or VSVPE (Oku 1998; Landau 2023; Simpson 2023: inter alia). Against this backdrop, Tanaka (2023) has recently claimed that Japanese lacks AI readings, and that adjuncts are therefore unelidable. In response, this squib argues that adjuncts are indeed elidable in Japanese either through VSVPE or adjunct deletion operations. I discuss the replicability of AI interpretations and argue that research on null adjuncts requires careful and rigid control of test sentences and discourse properties.

The rest of this paper is organized as follows. Section 2 reviews general characteristics of null adjuncts and the observations from Tanaka (2023). Section 3 demonstrates that Japanese does allow AI readings with null adjuncts, and thus, adjuncts are elidable, consistent with Oku (2016), Landau (2023), and Tanabe & Kobayashi (2024a). I then propose an interpretative constraint on coordinated sentences with multiple ellipsis sites. Section 4 argues against Tanaka's (2023) analysis of inter-speaker variation in AI readings based on Right-Dislocation (**RD**). Finally, Section 5 concludes the paper.

#### 2 On the adjunct-inclusive interpretation in Japanese

Whether Japanese elliptical sentences allow for an AI interpretation with null adjuncts has been debated since Oku (1998). Consider the examples in (1), where both the object and adjunct are missing from the elliptical clause.

- a. Bill-wa kuruma-o teineini arat-ta.
   Bill-TOP car-ACC carefully wash-PST
   'Bill washed his car carefully.'
  - b. John-wa *e* araw-anakat-ta. John-TOP wash-NEG-PST Lit. 'John didn't wash *e*.'

(Oku 1998: 172)

Oku (1998: 172) notes that it is nearly impossible to obtain an AI interpretation with examples such as (1); that is, the data in (1b) lacks the reading "John didn't wash the car in a careful manner." Instead, (1b) is unambiguously interpreted as "John didn't wash the car (at all)."

In this context, Funakoshi (2016) argues that (1b) can have an AI reading. He slightly modifies (1), as shown in (2), and generalizes the behavior of null adjuncts in (3).

Bill-wa kuruma-o teineini arat-ta-kedo, John-wa {e/\*kuruma-o} araw-anakat-ta.
 Bill-TOP car-ACC carefully wash-PST-but John-TOP e/car-ACC wash-NEG-PST
 Intended: 'Bill washed the car carefully, but John didn't wash the car carefully.'

Generalization: In Japanese, an adjunct can be null only if the clause-mate object (or other VP-internal elements), if any, is also null. (Funakoshi 2016: 117)

Clearly, the AI interpretation in (2) is easier to obtain when the object and adjunct are elided. Based on this observation, Funakoshi (2016) claims that VSVPE derives the AI reading, as schematically illustrated in (4).

(4)  $[_{TP} John [_{NegP} [_{VP} car carefully t_V] t_{V-NEG}] V-NEG-T]$  (the second conjunct in (2))

In response, Tanaka (2023) has recently argued that AI readings are generally unavailable, citing examples such as (5). He claims that the AI interpretation is absent because the first conjunct in (5b) contradicts the second. If VSVPE were available, (5) should allow an AI reading; therefore, he concludes that Japanese lacks VSVPE and null adjuncts.

- (5) a. Taro-wa kuruma-o *teineini* arat-ta. Taro-TOP car-ACC carefully wash-PST 'Taro washed the car carefully.'
  - b. Hanako-wa #(teineini) araw-anakat-ta-kedo, arat-ta-koto-wa arat-ta.
    Hanako-TOP carefully wash-NEG-PST-but wash-PST-thing-TOP wash-PST
    'Hanako didn't wash the car (carefully), but she did wash it.'

Tanaka further supports his claim with novel data involving the degree adverb *tyuutohanpani* 'halfheartedly' in (6). When the adverb is unpronounced, the sentence in (6) means "Taro doesn't study math at all," whereas with the overt adverb, it means "Taro studies math enthusiastically." As the AI reading is not available in (6), he concludes that Japanese does not allow null adjuncts and that VSVPE is not a viable operation.<sup>1</sup>

- (6) a. Ano-gakubu-no gakusei-tati-wa suugaku-o *tyuutohanpani* benkyoosi-tei-ru. the-department-GEN student-PL-TOP math-ACC halfheartedly study-ASP-PRS
   'Students from the department study math halfheartedly.'
  - b. Nanigoto-ni-mo nessinna Taro-wa #(tyuutohanpani) benkyoosi-tei-na-i.
     everything-about-also enthusiastic Taro-TOP halfheartedly study-ASP-NEG-PRS
     'Taro, enthusiastic about everything, doesn't study math (halfheartedly).'

As shown above, the debate over the availability of AI interpretations with null adjuncts in Japanese remains unresolved. While Tanaka's (2023) observations suggest that AI readings are unavailable in certain contexts, Funakoshi's (2016) data indicate that AI interpretations are possible in others. In this context, I argue that Japanese does allow AI readings, based on a close

<sup>&</sup>lt;sup>1</sup> As an anonymous reviewer correctly notes, the AI interpretation is not the only diagnostic for VSVPE. See Funakoshi (2014; 2016) for an overview.

examination of Tanaka's observations and novel supporting evidence. Accordingly, this paper points to the possibility that VSVPE is available (Funakoshi 2016) or that Adjunct Ellipsis, which directly deletes adjuncts, exists in Japanese (Oku 2016; Kobayashi 2020; Landau 2023; Tanabe & Kobayashi 2024a).

### 3 Adjuncts are elidable in Japanese

I demonstrate that one cannot simply argue whether there is (or is not) VSVPE in Japanese based on the availability of the AI interpretation with only a limited range of examples. Two arguments are in order against Tanaka's (2023) observations.

#### 3.1 Empirical evidence for the adjunct-inclusive interpretation

First, it is insufficient to use Verbal Nouns (**VN**) with the light verb *-su* 'do', such as *benkyoo-s-* 'study-do', to test the availability of the AI interpretation. A Sino-Japanese verb such as *benkyoo-s-* in (6) can be decomposed into a VN *benkyoo* 'study(ing)' and the light verb *su-* 'do'. Therefore, it is natural that the AI reading is absent in (6), considering the generalization in (3). In other words, a clause-mate VP-internal element, namely *benkyoo* 'studying', remains overt, even though the adjunct is unpronounced. If we replace the VN + *su* construction with a native verb, such as *manab-* 'study', we expect the AI interpretation to become available (cf. Hayashi 2015).<sup>2</sup> The prediction is indeed borne out in (7), where the continuation in (7c) is compatible with (7b).

- (7) a. Ano-gakubu-no gakusei-tati-wa suugaku-o tyuutohanpani manan-dei-ru. the-department-GEN student-PL-TOP math-ACC halfheartedly study-ASP-PRS
   'Students from the department study math halfheartedly.'
  - b. Taro-wa *e manan*-dei-na-i.
    Taro-TOP study-ASP-NEG-PRS
    'Taro doesn't study (halfheartedly).'
  - c. Kare-wa sikkari (suugaku-o) manan-dei-ru.
    he-TOP hard math-ACC study-ASP-PRS
    'He studies (math) hard.'

(i) [ ... SUBJECT [VP (OBJECT) (ADJUNCT) [V VN  $su_{do}$ ]] ... ]

It should be noted that caution is necessary in this case. The reason the AI reading is missing in Tanaka's (2023) data in (6) is that the VN remains unelided, although it is elidable, contrary to the generalization in (3). Therefore, the current analysis holds regardless of the precise structure of sentences with VN + su. I thank an anonymous reviewer for suggesting that the structure of VN + su be made explicit in the discussion.

<sup>&</sup>lt;sup>2</sup> I assume the structure in (i) for the VP with VN + su, which is widely accepted in the literature (Kageyama 1982; Hayashi 2015: among many others). In (i), the VN and *-su* 'do' merge first and can take an object and/or an adjunct as VP-internal elements.

I further examine the data in (8) to reinforce the argument. Three main types of predicates can be used to test the AI reading, each exemplified in (8): (i) a VN + light verb; (ii) a light verb only; and (iii) a native verb, which requires the antecedent to include the same verb.

- (8) a. Ooku-no gakusei-wa suugaku-o tyuutohanpani {benkyoo-si-tei-ru/manan-dei-ru}. many-GEN student-TOP math-ACC halfheartedly study-do-ASP-PRS/study-ASP-PRS 'Many students study math halfheartedly.'
  - b. Taro-wa *e* {#benkyoo-si-tei / si-tei / manan-dei}-na-i.
    Taro-TOP study-do-ASP / do-ASP / study-ASP-NEG-PRS
    'Taro doesn't study (halfheartedly).' (\*VN+light verb/<sup>ok</sup>light and native verbs)

As Tanaka (2023) points out, the AI interpretation is difficult to obtain in (8b) with VN + su (i.e., *benkyoo-s-*). However, the reading becomes readily available in (8b) when either a light or native verb is used, thereby satisfying Funakoshi's (2016) generalization in (3). The same contrast between (6) and (7) can be reproduced with various verbal pairs, such as *kinmu-s-/hatarak-*'work(-do)' and *soonyuu-s-/sas-* 'insert(-do)', as shown in (9) and (10).

- (9) a. Dooryoo-wa tyuutohanpani {kinmu-si / hatarai}-tei-ru. colleagues-TOP halfheartedly {work-do / work}-ASP-PRS
   'Colleagues work halfheartedly.'
  - b. Taro-wa *e* {{#kinmu-si / si} / hatarai}-tei-na-i. Kare-wa issyookenmei
    Taro-TOP work-do / do / work-ASP-NEG-PRS he-TOP very.hard
    {*kinmu-si* / *hatarai*}-tei-ru.
    work-do / work-ASP-PRS
    'Taro doesn't work (halfheartedly). He works very hard.'

(AI: \*VN+light verb/<sup>ok</sup>light and native verbs)

- (10) a. Taro-wa tyuutohanpani konsento-ni dengenpuragu-o {soonyuu-si / sasi}-ta.
   Taro-TOP halfway socket-DAT power.plug-ACC insert-do / insert-PST
   'Taro inserted the power plug into the socket halfway.'
  - b. Hanako-wa *e* {{#soonyuu-si / si} / sasa}-nakat-ta. Kanojo-wa konsento-ni Hanako-TOP insert-do / do / insert-NEG-PST she-TOP socket-DAT dengenpuragu-o sikkari oku-made {*soonyuu-si / sasi*}-ta. power.plug-ACC firmly back-to insert-do / insert-PST 'Hanako didn't insert (it halfway). She inserted the power plug firmly deep into the socket.' (AI: \*VN + light verb/<sup>ok</sup>light and native verbs)

Based on these observations, it is safe to conclude that the example Tanaka (2023) discusses in (6) seems to lack an AI interpretation because the elliptical sentence leaves an elidable element (i.e., VN: *benkyoo*) unelided, although the adjunct is unpronounced.<sup>3</sup>

Furthermore, the data in (11) indicate that the adverb can be syntactically present at the ellipsis site. In (11), *zibun* 'self' appears inside the adverb. The bound reading available in (11b) indicates that the null adjunct is syntactically present at the ellipsis site, rather than being recovered via extra-syntactic processes (cf. Landau 2023).<sup>4</sup>

- (11) a. Ano-gakubu-no gakusei-tati-wa eigo-o (sorezore) zibun-no yarikata-de the-department-GEN student-PL-TOP English-ACC each self-GEN way-by *manan*-dei-ru. study-ASP-PRS
   'Students from the department (each) study English in their own ways.'
  - b. Taro-wa *e manan*-dei-na-i.
    Taro-TOP study-ASP-NEG-PRS
    'Taro<sub>i</sub> doesn't study (in his<sub>i</sub> own way).'
  - c. Kare-wa sensei-ni iw-are-ta-toori-no yarikata-de (eigo-o) manan-dei-ru. he-TOP teacher-by tell-PASS-PST-as-GEN way-by English-ACC study-ASP-PRS 'He studies (English) as the teacher told him.'

The above observations indicate that AI reading is possible in Japanese, as long as the syntactic environments in which null adjuncts occur are properly established.<sup>5</sup> In other words, any test of the AI reading must satisfy at least the following requirements concerning control of discourse factors: (i) the preparation of a positive antecedent and a negative elliptic sentence pair (Landau 2020); (ii) the provision of continuations that are incompatible with the adjunct-exclusive

<sup>&</sup>lt;sup>3</sup> Kuno (1982) proposes a discourse constraint on ellipsis that produces a similar effect to (3). This constraint states that the deletion of recoverable constituents must be applied uniformly, as in (i).

 <sup>(</sup>i) Ban against Partial Discourse Deletion (Kuno 1982):
 If discourse deletion of recoverable constituents is to apply, it must apply uniformly to all non-focus constituents.

Although the VN *benkyoo* is a recoverable constituent, it remains unelided in (8b) (=(6)), while other recoverable elements are elided. I suggest that (i) underlies (3) and makes it difficult for speakers to interpret (8b) as a sentence containing an adjunct (Funakoshi 2014). This points to the possibility that the observations in (2) do not necessarily provide evidence for VSVPE. I thank two anonymous reviewers for suggesting further elaboration on this point.

<sup>&</sup>lt;sup>4</sup> It is true that a strict reading also appears to be available in (11b). However, the point is that a sloppy reading is possible, showing that a bound reading is obtainable with a missing adjunct. I thank an anonymous reviewer for highlighting the strict interpretation in (11). To increase the prominence of the sloppy reading, I added *sorezore* 'each', which makes the strict reading harder to obtain.

<sup>&</sup>lt;sup>5</sup> Tanaka (2023) attributes the inter-speaker variation of the AI interpretation to covert RD structure. However, I will show in Section 4 that this account falls short.

reading (Tanabe & Kobayashi 2024a); and (iii) the careful organization of data to comply with generalization (3) (Funakoshi 2016).<sup>6</sup>

Let us now turn to the second argument against Tanaka's (2023) observations. The AI reading becomes more prominent when we consider different types of adjuncts that Tanaka does not observe. It even becomes obligatory for some speakers when provided with the proper context favoring the AI interpretation, as in (12). Duration adverbs make the AI reading more accessible, as shown by the compatibility between (12b) and (12c). This contrast indicates that the AI reading is available in Japanese, at least with certain types of adverbs (cf. Kobayashi 2025).<sup>7</sup>

- (12) a. Taro-wa (*nitiyoobi-ni*) *ichinichijuu* kuruma-o arat-ta. Taro-TOP Sunday-on all.day.long car-ACC wash-PST
   'Taro washed his car all day long (on Sunday).'
  - b. Hanako-wa *e* araw-anakat-ta.
     Hanako-TOP wash-NEG-PST
     Lit. 'Hanako didn't wash *e*.'
  - c. Demo, (zitsu-wa) kanojo-mo ichi-zikan-dake-da-kedo arat-ta-nda-yo.
    but actually she-also one-hour-only-COP-but wash-PST-COP-SFP
    'But (actually), she washed her car for only an hour, though.'

One cannot conclude that Japanese lacks null adjuncts or AI interpretations, based on a limited range of observations. Although it is beyond the scope of this squib to fully explain why elidability varies depending on the type of adjuncts, our observations are sufficient to show that Japanese allows AI interpretation when syntactic and contextual factors are properly controlled.

<sup>&</sup>lt;sup>6</sup> I thank an anonymous reviewer for suggesting clarification of what exactly the proper syntactic environments are.

<sup>&</sup>lt;sup>7</sup> See Tanabe & Kobayashi (2024a) for additional observations that conditional and reason adverbials can also undergo ellipsis. An anonymous reviewer noted that the AI reading is absent if we replace the native verb with the corresponding VN + su form, as in *sensha-su* 'car-washing do'. The reviewer asked whether this poses a problem for the analysis. I agree with the reviewer regarding their judgment, but maintain that this is not problematic. I am not suggesting that certain types of adjuncts, such as duration adverbs, always facilitate AI interpretation. Rather, certain kinds of adjuncts make the relevant readings more accessible. For instance, the AI reading is unavailable when the VN *sensha* 'car-washing' appears in the example below:

<sup>(</sup>i) a. Taro-wa (*nitiyoobi-ni*) *ichinichijuu* kuruma-o sensha-si-ta. Taro-TOP Sunday-on all.day.long car-ACC car.washing-do-PST 'Taro washed his car all day long (on Sunday).'
b. Hanako-wa *e* sensha-si-nakat-ta. #Demo, (zitsu-wa) kanojo-mo ichi-zikan-dake-da-kedo Hanako-TOP car.wash-do-NEG-PST but actually she-also one-hour-only-COP-but sensha-si-ta-nda-yo. car.wash-do-PST-COP-SFP 'Hanako didn't wash her car at all. #But (actually), she washed her car for only an hour, though.'

The absence of AI interpretation is naturally predicted by Funakoshi's (2016) generalization in (3). I thank the reviewer for bringing this data to my attention.

#### 3.2 Interpretative constraint on multiple ellipsis sites

An astute reader may wonder why an AI reading is difficult to obtain in the example Tanaka (2023) discusses. Note that Tanaka overlooks the unpronounced elements in the interpreted continuation. The degradation in (5) arises from the contradiction that *Hanako* did not wash the car carefully, yet she did wash the car carefully. This is further supported by (13), which is severely degraded owing to the full pronunciation of both the object and adjunct in the continuation.

(13) #Hanako-wa kuruma-o teineini araw-anakat-ta-kedo, kuruma-o teineini Hanako-тор car-ACC carefully wash-NEG-PST-but car-ACC carefully arat-ta-koto-wa arat-ta. wash-PST-thing-TOP wash-PST 'Hanako didn't wash the car carefully, but she washed the car carefully.' (cf. (5))

I suggest that, when a coordinated sentence such as (5) contains multiple ellipsis sites, the noninitial one(s) is/are most naturally interpreted as identical to the first one, as summarized in (14).

#### (14) Interpretative Constraint on Multiple Ellipsis Sites:

When coordinated sentences have multiple ellipsis sites, the non-initial one(s) is/are most naturally interpreted as identical to the first.<sup>8</sup>

Strictly speaking, the continuation (5b) contains multiple ellipsis sites, namely e1 and e2, as illustrated in (15).

(15) #Hanako-wa el araw-anakat-ta-kedo, e2 arat-ta-koto-wa arat-ta.
Hanako-TOP wash-NEG-PST-but wash-PST-thing-TOP wash-PST
Lit. 'Hanako didn't wash e1, but she did wash e2.' (e1 = e2)

The unacceptability of (15) does not reflect a lack of null adjuncts in Japanese but rather the difficulty (or impossibility) of interpreting multiple gaps as non-identical (i.e., *e*1 as 'the car carefully' and *e*2 as 'the car'). This argument gains further empirical support from (16), in which the elliptic sentence (16b) is unacceptable unless the object *purezento-o* 'present-ACC' is overtly expressed.<sup>9</sup> In (16b), *e*1 and *e*2 are both interpreted as *Taro-ni purezento-o* 'to Taro a present', which renders the sequence unacceptable. However, (16b) with the overt object is completely acceptable without any contradiction because there is only one ellipsis site *e*1, which is interpreted as *Taro-ni purezento-o* 'to Taro a present'.<sup>10</sup> For comparison, the minimal pair of (16b) is in (17), which is plainly unacceptable due to contradiction.

<sup>&</sup>lt;sup>8</sup> I thank an anonymous reviewer for suggesting further justification of the condition in (14).

<sup>&</sup>lt;sup>9</sup> I focus on examples involving only arguments here, for simplicity.

<sup>&</sup>lt;sup>10</sup> I thank an anonymous reviewer for suggesting the use of a causative sentence here to ensure the argumenthood of the *ni*-marked phrase.

- (16) a. Hanako-wa Taro-ni purezento-o kaw-ase-ta.
   Hanako-TOP Taro-DAT present-ACC buy-CAUS-PST
   'Hanako made Taro buy a present.'
  - b. Yuko-wa *e*1 kaw-ase-anakat-ta-kedo, {purezento-o/#*e*2} kaw-ase-ta-koto-wa
    Yuko-TOP buy-CAUS-NEG-PST-but present-ACC buy-CAUS-PST-thing-TOP kaw-ase-ta.
    buy-CAUS-PST
    Lit. 'Yuko didn't make Taro buy a present, but she did make him buy a present.'
  - c. Kanojo-wa Ziro-ni purezento-o kaw-ase-ta. she-TOP Ziro-DAT present-ACC buy-CAUS-PST 'She made Ziro buy a present.'
- (17) #Yuko-wa Taro-ni purezento-o kaw-ase-anakat-ta-kedo, Taro-ni purezento-o Yuko-TOP Taro-DAT present-ACC buy-CAUS-NEG-PST-but Taro-DAT present-ACC kaw-ase-ta-koto-wa kaw-ase-ta.
  buy-CAUS-PST-thing-TOP buy-CAUS-PST
  'Yuko didn't make Taro buy a present, but she did make him buy a present.'

Some readers may have noticed that the number of ellided arguments differs between the data in question and those in (15) shown earlier. There is certainly a missing dative argument in (16b) in the second conjunct when the accusative object *purezento-o* 'present-ACC' is pronounced. Such a null argument can be *pro*, which is not derived via genuine deletion (i.e., Argument Ellipsis), whether by LF-copying or PF-deletion. In other words, some of the argumental gaps in (16) may be instantiations of *pro*. Importantly, this assumption does not overgenerate; it does not predict that the data including null adjuncts, such as (15), should be acceptable, contrary to fact. It is widely accepted that while *pro* can replace nominal arguments, it cannot substitute for (true) adjuncts in Japanese (Murasugi 1991). This asymmetry between arguments and adjuncts is crucial for the current analysis of AI readings, which will be elaborated below. In summary, the data in (16) further confirm that the current analysis is on the right track because the acceptability of (16b) is left unexplained without the condition in (14).

Now that we have seen that the proposed condition holds, we return to the data with null adjuncts in (18). This analysis predicts that a sequence will become uncontradictory if the continuation contains an overt object. This prediction is borne out. Tanaka's (2023) original example (5) becomes acceptable if an overt object is added, as shown in (18).

(18) a. Taro-wa *kuruma-o teineini* arat-ta. Taro-TOP car-ACC carefully wash-PST 'Taro washed the car carefully.' b. Hanako-wa *e* araw-anakat-ta-kedo, *kuruma-o* arat-ta-koto-wa arat-ta.
 Hanako-TOP wash-NEG-PST-but car-ACC wash-PST-thing-TOP wash-PST
 Lit. 'Hanako didn't wash (the car carefully), but she did wash the car.'

Therefore, it is safe to conclude that Tanaka's (2023) original data in (5) are contradictory because multiple ellipsis sites are obligatorily interpreted as identical, abiding by the condition in (14), not because adjuncts are unelidable in Japanese.

Thus far, we have seen that condition (14) can capture the empirical observations of multiple ellipsis sites, such as (5). The editor and two anonymous reviewers questioned the exact nature of condition (14). I claim that it is syntactic for the following reasons. The data in (19) are a case in point; they are minimally different from (5) in that the two ellipsis sites are separated into two distinct sentences with no coordinate structure. As evident from (19), this sequence is acceptable, unlike that in (5).

- (19) a. Taro-wa kuruma-o teineini arat-ta kedo, Hanako-wa *e*1 araw-anakat-ta. Taro-TOP car-ACC carefully wash-PST but Hanako-TOP wash-NEG-PST 'Taro washed the car carefully, but Hanako didn't *e*.'
  - b. Tadashi, e2 arat-ta-koto-wa arat-ta.
    however wash-PST-thing-TOP wash-PST
    'However, (she) did wash it.' (cf. (5))

This observation suggests that whether multiple ellipsis sites are contained in a single sentence is a decisive factor for the condition in (14) to be in effect.

The structure in (5) involves coordination, and I point out that the multiple ellipsis sites are residues of across-the-board movement. In this regard, Fujiwara (2022) and Mizuno (2025) propose a topic-deletion analysis of argument ellipsis based on the fact that the ellipsis of arguments exhibits a striking parallelism with topicalization.<sup>11</sup> I propose that null adjuncts are derived through topicalization and deletion. A schematic representation of (5) under a topic-deletion analysis is provided in (20). It is widely observed that only identical elements can undergo across-the-board movement in coordination (Boškovič & Franks 2000). If the ellipsis of arguments and adjuncts requires the movement of the target of deletion, then multiple elements must be identical to undergo topicalization in an across-the-board fashion. I argue that this is why condition (14) holds only for intra-sentential coordinate structure.

(20) 
$$\begin{bmatrix} CP & X_{\overline{e}} & [P & NP & VP & t_{e1} & V] - NEG - T \end{bmatrix} & \begin{bmatrix} TP & pro & VP & t_{e2} & V \end{bmatrix} - T \end{bmatrix}$$
(= (5))

<sup>&</sup>lt;sup>11</sup> Due to space limitations, I refrain from going into the details of the analysis. Instead, I refer readers to Fujiwara (2022) and Mizuno (2025).

In (5), each gap within a conjunct contains an adjunct and an argument. It has been well known that multiple topicalization results in marginality in languages such as English. However, Kuroda (1988) notes that Japanese allows multiple elements to be topicalized, as in (21). Therefore, in Japanese, an adjunct and an object can independently undergo topicalization, at least at the observational level.

(21) Pari-de-wa Masao-wa Efferu too to Nootorudamu-no too-ni nobot-ta. Paris-at-TOP Masao-TOP Eiffel Tower and Notre.Dame-GEN tower-DAT climb-PST 'In Paris, as for Masao, he climbed up the Eiffel Tower and the tower of Notre Dame.' (Kuroda 1988: 37)

If an object and an adjunct can undergo topicalization independently via movement, then the topic-deletion analysis better captures the empirical observations made in this paper and those reported in Tanaka (2023). A schematic representation of (5) under the topic-deletion analysis of argument/adjunct ellipsis is illustrated in (22) below. In summary, the condition in (14) is syntactic, provided the discussion here is plausible.<sup>12</sup>

(22) 
$$\begin{bmatrix} CP & X_{eT} & Y_{e2} & [P & P & [P & P & [P & t_{e1} & t_{e2} & V] - NEG - T] & [P & pro & [P & t_{e1} & t_{e2} & V] - T] \end{bmatrix} - C \end{bmatrix}$$

In the next section, I argue against Tanaka's (2023) RD analysis of AI readings in Japanese. There are three different possibilities for deriving an AI reading with null adjuncts: VSVPE, Adjunct Ellipsis, and covert RD (Tanaka 2023). I demonstrate that the third option cannot be maintained, leading to the conclusion that AI interpretations in Japanese are derived from either VSVPE or Adjunct Ellipsis.

#### 4 Against the Right-Dislocation analysis of null adjuncts

Tanaka (2023: 46) attributes the variability in judgments of AI interpretations to the marginal availability of remnant ellipsis in RD. He analyzes (5b) as having the bi-clausal RD structure in (23) (cf. Tanaka 2001), in which clausal ellipsis applies to [the bracketed clause].

(23) Hanako-wa araw-anakat-ta. *Teineini*<sub>i</sub> [Hanako-wa  $t_i$  kuruma-o araw-anakat-ta]. Hanako-TOP wash-NEG-PST carefully Hanako-TOP car-ACC wash-NEG-PST 'Hanako didn't wash (the car). Carefully, Hanako didn't wash the car.'

Subsequently, Tanaka (2023: 16) claims that the dislocated remnant adjunct (i.e., *teineini*) undergoes ellipsis. Tanaka assumes that this covert RD is only marginally available to

<sup>&</sup>lt;sup>12</sup> I thank the editor and two anonymous reviewers for encouraging us to carefully consider the nature of the condition in (14).

some speakers, which explains why AI readings are generally difficult (or even impossible) to obtain.<sup>13</sup>

I argue that RD analysis has both conceptual and empirical problems. First, although Tanaka (2023) attributes the inter-speaker variation in the AI interpretation to the availability of covert RD, this reasoning essentially restates Oku's (1998) assumption that adjuncts are unelidable in Japanese. The covert RD analysis states that AI readings are absent because dislocated remnant adjuncts are unelidable for most speakers, which is basically the same as what has been widely assumed since Oku (1998).

Furthermore, this reasoning is empirically inaccurate, particularly regarding island sensitivity. Tanaka (2023) discusses (24), which is a follow-up to (5a): *Taro-wa kuruma-o teineini arat-ta* 'Taro washed the car carefully.' He claims that (24) is degraded due to Coordinate Structure Constraints (**CSC**: Ross 1967).<sup>14</sup>

(24) #Hanako-wa  $t_i$  araw-anakat-ta-kedo, arat-ta-koto-wa arat-ta-yo, teineini<sub>i</sub>. Hanako-TOP wash-NEG-PST-but wash-PST-thing-TOP wash-PST-SFP carefully 'Hanako didn't wash *e*, but she did wash (it), (I mean) carefully.' (Tanaka 2023: 20)

As already noted in (15), Tanaka (2023) overlooks the fact that the data in (24) contains another gap in the second conjunct. Therefore, it is possible for the adjunct to undergo across-the-board movement. The current analysis predicts that the gaps in each conjunct in (24) contain either (i) *kuruma-o* 'the car' and *teineini* 'carefully' or (ii) only *kuruma-o* 'the car'. In either case, (24) results in a contradiction: *#Hanako didn't wash the car (carefully), but she did wash the car (carefully)*. Thus, one cannot conclude that the unacceptability of (24) is due to a CSC violation, which significantly undermines Tanaka's (2023) RD analysis.

Next, we examine further evidence against the covert RD analysis from Tanaka (2023), focusing on the Complex NP Constraint (**CNPC**). Tanaka (2023: 21) argues that the sentence in (25) is degraded due to CNPC violation. However, this expression is unacceptable regardless of whether the adjunct is dislocated or pronounced in-situ, as shown in (26), which is a follow-up to (25a).

<sup>&</sup>lt;sup>13</sup> The covert RD analysis of Tanaka (2023) contends that the availability of a specific syntactic construction depends on each individual and that this is the cause of the variability in the judgment of the AI interpretation. However, as an anonymous reviewer correctly pointed out, this is unlikely. I demonstrate that the availability of the AI interpretation largely depends on pragmatic/discourse factors in Sections 3 and 4. It is inconceivable that such properties influence the availability of certain syntactic structures, given the autonomy of syntax (Chomsky 1965). I sincerely thank the reviewer for bringing this issue to our attention.

<sup>&</sup>lt;sup>14</sup> Tanaka (2023) marks (24) as ungrammatical with '\*', but I use '#' here, as I argue that the degraded status here is not syntactic.

- (25) a. Taro-wa kitanai kuruma-o teineini arat-ta. Taro-TOP dirty car-ACC carefully wash-PST 'Taro washed the dirty car carefully.'
  - b. #[Hanako-ga araw-anakat-ta kitanai kuruma]-mo kireini nat-ta-yo, (teineini).
    Hanako-NOM wash-NEG-PST dirty car-also clean be-PST-SFP carefully
    'The dirty car that Hanako didn't wash also became clean, (I mean) carefully.'
- (26) #[Hanako-ga (*teineini*) araw-anakat-ta kitanai kuruma]-mo kireini nat-ta. Hanako-NOM carefully wash-NEG-PST dirty car-also clean be-PST 'The dirty car that Hanako didn't wash carefully also became clean.'

I suspect that the unacceptability of (25) stems not only from a potential CNPC violation but also from semantic oddness; it does not make sense (unless supplemented by some unnatural and peculiar contexts) that the dirty car "also" became clean without being carefully washed. The function of additive *-mo* 'also' in these examples remains unclear.

Let us now consider more natural sentences, both logically and contextually. (27) and (28) are uttered in response to the following question: *Which subject did Taro and Hanako study halfheartedly*? The data in (28) are especially noteworthy: The expression is acceptable regardless of whether the adjunct *tyuutohanpani* 'halfheartedly' is pronounced in-situ, unlike in (26). Nevertheless, the RDed counterpart in (27b) is unacceptable, despite the AI reading being available in (28). This is not predicted by Tanaka's (2023) covert RD analysis. The fact that the acceptability of (27b) does not correlate with that of (28) undermines Tanaka's (2023) covert RD analysis of the AI interpretation. This finding indicates that covert RD is irrelevant to AI interpretations.<sup>15</sup>

- (27) a. Taro-wa tyuutohanpani suugaku-o manan-da. Taro-TOP halfheartedly math-ACC study-PST
   'Taro studied math halfheartedly.'
  - b. \*[Hanako-ga manab-anakat-ta kyooka]-wa wakar-ana-i-ya, tyuutohanpani.
     Hanako-NOM study-NEG-PST subject-TOP know-NEG-PRS-SFP halfheartedly
     'I don't know which subject Hanako didn't study, (I mean) halfheartedly.' (cf.(25b))
- (28) [Hanako-ga (*tyuutohanpani*) manab-anakat-ta kyooka]-wa wakar-ana-i-ya.
  Hanako-NOM halfheartedly study-NEG-PST subject-TOP know-NEG-PRS-SFP
  'I don't know which subject Hanako didn't study (halfheartedly).' (cf.(26))

<sup>&</sup>lt;sup>15</sup> An anonymous reviewer pointed out that topicalization under the current topic-deletion analysis of Adjunct Ellipsis is also island-sensitive. I agree, but emphasize that this does not pose a problem for the current analysis. I do not claim that islands are irrelevant to the AI reading. The acceptability of (28) can also be accounted for under the topicdeletion analysis by assuming that the adjunct moves to a peripheral position inside the CP. I thank the reviewer for their valuable comments.

Finally, I present two pieces of direct counterevidence to the covert RD analysis of AI interpretations. First, Tanaka's (2023) reasoning for the contrast in (29) is self-contradictory. While he attributes the unacceptability of (29a) to a contradiction between the antecedent clause and the elliptical clause (Tanaka 2023: 18), he overlooks the fact that the same contradiction is mirrored in (29b) as well. The antecedent clause "Hanako does not wash the car at all" contradicts the elliptical clause "Hanako washed the car, but not in a careful manner."

(29) a. #Taro-wa suugaku-o benkyoosi-tei-na-i-yo, tyuutohanpani [Taro-wa suugaku-o Taro-TOP math-ACC study-ASP-NEG-PRES-PRT halfheartedly Taro-TOP math-ACC benkyoosi-tei-na-i]. study-ASP-NEG-PRES

Lit. 'Taro does not study math at all, and he does not study math halfheartedly.'

 Hanako-wa kuruma-o araw-anakat-ta-yo, *teineini* [Hanako-wa kuruma-o Hanako-TOP car-ACC wash-NEG-PST-PRT carefully Hanako-TOP car-ACC araw-anakat-ta].
 wash-NEG-PST

Lit. 'Hanako did not wash the car at all, and she washed the car, but not in a careful manner.'

Thus, Tanaka's RD analysis incorrectly predicts that the off-cited example from Oku (1998) in (29b) should be unacceptable due to inconsistency, which is contrary to fact.<sup>16</sup>

Second, if covert RD were the source of AI readings, then the contrast between (6) (VN + light verb) and (7) (native verb), as discussed in Section 3 should also be observed in their RDed counterparts. However, no such contrast is found. Example (30) with *manab*- 'study' is just as unacceptable as (30) with the VN + *su benkyoo-s*- 'study-do'.<sup>17</sup>

 (30) #Taro-wa suugaku-o {benkyoo-si-tei / manan-dei}-na-i-yo, tyuutohanpani. Taro-TOP math-ACC study-do-ASP / study-ASP-NEG-PRS-SFP halfheartedly
 'Taro is not studying math, (I mean) halfheartedly.'

The contrast between (6) and (7) does not carry over to the pair in (30), further undermining the RD analysis.<sup>18</sup>

(i) \*When John visited there<sub>i</sub> for the first time, he didn't take a Taxi in Tokyo<sub>i</sub>.

<sup>&</sup>lt;sup>16</sup> I sincerely thank an anonymous reviewer for highlighting this fundamental flaw in the RD analysis.

<sup>&</sup>lt;sup>17</sup> Some may suggest that *tyuutohanpani-wa* 'halfheartedly-TOP' improves the data. While I agree to some extent, our argument still holds because (30) improves regardless of the verb used.

<sup>&</sup>lt;sup>18</sup> I sincerely thank an anonymous reviewer for emphasizing the need to consider data such as (30) discussed in Tanaka (2023). I speculate that (30) is degraded because adjuncts generally cannot refer backward, as exemplified by an English example in (i) (Satoshi Oku p.c.).

In this section, I have demonstrated that Tanaka's (2023) RD analysis of AI interpretations is untenable. Therefore, I have suggested two alternative analyses of null adjuncts: VSVPE and Adjunct Ellipsis. While Funakoshi (2016) and other advocates of the head-stranding ellipsis analysis (Sato & Hayashi 2018; Sato & Maeda 2021: among many others) argue that null adjuncts are derived via string-vacuous overt verb-raising and the subsequent remnant phrasal ellipsis, Oku (2016), Kobayashi (2020; 2025), Landau (2020; 2023), and Tanabe & Kobayashi (2024a), inter alia, argue against such an approach and propose an alternative analysis based on argument ellipsis with no recourse to syntactic verb-raising. Further research is needed to determine which of these two accounts more adequately captures the nature of null adjuncts and the AI interpretation. This remains an open question for future research.

#### **5** Conclusion

In this squib, I have argued against Tanaka's (2023) claim that adjuncts are generally not elidable in Japanese. It is inconclusive to claim that the language lacks VSVPE or Adjunct Ellipsis based solely on observations of the apparent lack of AI reading. I demonstrated that careful control of test sentences and discourse factors is necessary to guarantee the replicability of AI interpretations with null adjuncts. The observations, especially those in (7) and (12), provide further evidence of VSVPE (Funakoshi 2016) and/or Adjunct Ellipsis (Collins 2015; Oku 2016; Kobayashi 2020; 2025; Tanabe & Kobayashi 2024a). Nevertheless, the Adjunct Ellipsis analysis can be suggested to have broader empirical coverage. Previous studies such as Kobayashi (2020; 2025) and Tanabe & Kobayashi (2024a) provide empirical evidence against the VSVPE analysis of AI interpretation. Furthermore, I have mentioned in Footnote 3 that the observation from the previous literature in (2) that adjuncts cannot be elided independently does not support the conclusion that VSVPE is preferable to the Adjunct Ellipsis analysis. However, various other elliptical phenomena must be considered to determine which analysis is empirically and conceptually superior.

In addition to the open question of which of the two analyses is more appropriate, this paper leaves an important issue unresolved: Why is there individual variability in the judgment of AI interpretation?<sup>19</sup> Although I cannot fully discuss this issue in this squib, this paper at least demonstrates that the RD analysis of Tanaka (2023) does not sufficiently address this question. Based on the observations in this paper, I speculate that the inter-speaker variation in AI reading is not syntactic but instead due to pragmatic/discourse factors. This is because the availability of AI interpretation within a single speaker changes depending on the control of extra-syntactic factors, as seen in (6)/(7), (5)/(18), and (12), which is unexpected if inter- and intra-speaker variations are

<sup>&</sup>lt;sup>19</sup> Note that the inter-speaker variation of the AI reading is not limited to Japanese, but has been widely documented crosslinguistically in different languages, such as Hindi-Urdu (Manetta 2020), Russian (Gribanova 2017), and Persian (Toosarvandani 2019), among many others. I thank an anonymous reviewer for pointing this out.

attributable to the availability of specific syntactic structures.<sup>20</sup> Previous studies, such as Tanabe & Kobayashi (2024a; b), have argued that recovering adjunct meaning in ellipsis sites requires rigorous control of discourse properties, such as the Question Under Discussion, owing to the optional nature of adjuncts in the argument structure. Others, such as Landau (2023), claim that the AI interpretation is derived via *Pragmatic Enrichment*. In this pragmatic process, the elliptic site is enriched with an adjunct meaning that is recoverable from the preceding contexts. It is also conceivable that both are available in the human language. Regardless, there is no doubt that null adjuncts require heavy discourse/contextual clues and specific prosodic patterns that evoke them to obtain an AI reading (Kobayashi et al. 2024), possibly because of the optionality of adjuncts in contrast to arguments. Further investigation into this issue is left for future research. Nevertheless, this squib has undoubtedly raised questions regarding commonly held assumptions, and I believe that this opens up new avenues for future research on the hotly debated issues of null adjuncts, verb-raising in Japanese, and the ellipsis phenomena in general.

 $<sup>^{\</sup>rm 20}$  I sincerely thank two anonymous reviewers for clarification on this point.

# Abbreviations

ACC = accusative, ASP = aspect, CAUS = causative, COM = copula, DAT = dative, GEN = genitive, NOM = nominative, NEG = negation, PL = plural, PRS = present tense, PST = past tense, SFP = sentence final particles, TOP = topic

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## **Competing interests**

The author has no competing interests to declare.

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