Remarks on verb echo answers and head movement in Japanese

Tomoya Tanabe and Ryoichiro Kobayashi
Hokkaido University and Tokyo University of Agriculture

1 Introduction
Japanese is a strictly head-final language. For this reason, it has been hotly debated whether syntactic head movement exists in the language. While scholars such as Otani & Whitman (1991), Funakoshi (2014), and Hayashi & Fujii (2015), argue for its existence, researchers such as Hoji (1998), Fukui & Sakai (2003), and Kobayashi (2016, to appear) argue against it. Recently, Sato & Maeda (2021) have presented an argument for the existence of syntactic head movement in Japanese based on their observations of Verb-Echo Answers (VEAs). A VEA can be used as a response to a polar question. (1A), in which only the verbal complex is expressed, is interpreted as an affirmative answer to (1Q).

(1) Q: Naomi-wa sara-o arai-masi-ta-ka?
Naomi-top dish-acc wash-pst-q
‘Did Naomi wash the dishes?’
wash-pst-prt
lit. ‘Washed.’ (‘Yes, Naomi did.’)

Sato & Maeda (2021) follow Holmberg (2016) and propose that (1A) is derived via Verb-stranding TP Ellipsis (VTPE) as in (2) (see also Sato & Hayashi 2018).

(2) \[
\text{CP} \{ \text{TP} \{ \text{Subject} \text{Subject} \text{Object} \text{Object} \text{V} \text{V} \text{T} \text{T} \text{C} \text{C} \} \} \text{V-T-C}
\]

This paper argues against this line of argument for head movement by proposing the following alternative analysis. In (3), all the heads stay in-situ in syntax and the arguments are elided via Argument Ellipsis (AE) (Oku 1998, Saito 2007, Takahashi 2006, among many others).\footnote{For ease of exposition, the subject is in [Spec, TP] in (2). However, we are completely agnostic about whether the subject in Japanese raises to the TP-domain.} The V-T-C complex is then formed by a morpholog-

\footnote{See Landau (2020), who proposes that AE can apply to multiple arguments in a sentence}\footnote{Another possibility is that VEAs involve pro-drop, as depicted in (i).}
ical merger (Halle & Marantz 1993) in the post-syntactic component.

(3) \[ \text{CP}_{\text{TP}} \text{Subject} \left[ \text{VP Object V} \right] \text{T} \text{C} \]

This paper shows that our alternative analysis in (3) is empirically superior to the VTPE analysis in (2), and concludes that VEAs in Japanese are explained with no recourse to head movement.

The rest of this paper is organized as follows. Section 2 provides novel data which cannot be explained by the VTPE analysis. Section 3 reconsiders Sato and Maeda’s (2021) observation that a voice mismatch is prohibited in VEAs and argues that a voice mismatch in a VEA results in unacceptability, rather than ungrammaticality. Section 4 discusses Sato and Maeda’s (2021) argument that the scope relation between disjunction/only and negation reverses in VEAs due to syntactic NEG-raising. We extend Tanabe & Hara (2021) and demonstrate that our AE analysis coupled with discourse-based analyses accounts for a wider range of data. Section 5 concludes the paper.

2 Adverb-inclusive reading in Verb-echo answers
Sato & Maeda (2021) attempt to exclude the AE analysis of VEAs in (3) based on observations of null adjuncts (see also Sato & Hayashi 2018). Sugimura (2011) observes that not only arguments but also adjuncts can be null in Japanese VEAs, as (4) shows. As an answer to (4Q), (4A) has the adjunct-inclusive reading.

(4) Q: Kazuma-wa sara-o teineini arai-masi-ta-ka?
   Kazuma-top dish-acc carefully wash-pol-pst-q
   ‘Did Kazuma wash the dishes carefully?’
   wash-pol-pst-prt
   ok: ‘Yes, Kazuma washed the dishes carefully.’ (adjunct-inclusive)

The adjunct-inclusive reading in (4A) is unexplained by the AE analysis because AE cannot apply to adjuncts (Oku 1998). In contrast, the adjunct-inclusive reading is explained if we assume that (4A) is derived via VTPE since it elides the adjunct as well as the arguments as shown in (5) (cf. Hayashi & Fujii 2015, Funakoshi 2016).

(5) \[ \text{CP}_{\text{TP}} \text{Kazuma} \left[ \text{VP dish carefully } t \right] \text{t-V-T-C} \]

However, the rest of this section demonstrates that null adjuncts are observed in VEAs when VTPE is not an available option in syntax. It follows that adjunct-inclusive readings in VEAs do not substantiate the VTPE analysis.

2.1 Verbal Identity in Verb-stranding TP-ellipsis
Funakoshi (2014, p. 347) proposes that verb-stranding VP ellipsis must satisfy an identity condition, which can be summarized as follows:

(6) The stranded verbs must be identical. If they are not identical, they must at least be contrasted in meaning.
Since what is important is the identity of the stranded verb (not the category of
the elided constituent), the condition should also hold for VTPE. Thus, the VTPE
analysis predicts that null adjuncts are observed only in constructions which satisfy
(6). With this in mind, consider (7). The verbs in question, namely *humitsubusu*
‘trample down’ and *moyasu* ‘burn’ are neither identical nor contrasted in meaning;
hence (6A) does not satisfy the identity condition in (6). Accordingly, the VTPE
analysis predicts that null adjuncts are not derived in (7A). However, the fact is that
when (7A) follows (7Q), it has the adjunct-inclusive reading.

(7) Q: Gozira-ga [AdvP issyunnoutini] biru-o humitsubusi-ta-no?
Godzilla-nom in.an.instant building-acc trample-pst-q
‘Did Godzilla trample down the building in an instant?’
A: (Iya,) Moyasi-ta-yo.
no burn-pst-prt
ok: ‘Godzilla burned down the building in an instant.’ (adverb-inclusive)

(8) as a whole can be naturally interpreted as follows: “Did Godzilla trample down
the building in an instant? – No, he burned down the building in an instant”. This
poses problems for the VTPE analysis of null adjuncts. Likewise, in (8), the verbs,
*taosu* ‘defeat’ and *nomikomu* ‘gulp down’ do not satisfy (6). Nonetheless, the un-
pronounced adjunct *ikioiyoku* ‘vigorously’ is interpreted in (8A); the interpretation
that *Kirby gulped down Yoshi vigorously* is easily accessible.

(8) Q: Kaabii-ga [AdvP ikioiyoku] Yosshii-o taosi-ta-no?
Kirby-nom vigorously Yoshi-acc defeat-pst-q
‘Did Kirby vigorously defeat Yoshi?’
A: (Iya,) Nomikon-da-yo.
no gulp.down-pst-prt
ok: ‘Kirby vigorously gulped down Yoshi.’ (adverb-inclusive)
(Note: In Smash Bros., Kirby may gulp down his enemies, but he does
not defeat them by doing so.)

The data show that adjuncts can be null in a VEA even if (6) is not satisfied. Put in
another way, the results indicate that null adjuncts can be derived without VTPE.

Based on the observation, we propose that null adjuncts in VEAs are derived by
Adjunct Ellipsis (Collins 2015, 2017, Oku 2016, Kobayashi 2020). The analysis is
precisely illustrated in (9), where adjunct ellipsis applies to the adjunct alone and
AE applies to the arguments. Since adjunct ellipsis does not need to satisfy the
identity condition in (6), (8) explains why the adjunct can be null in (7).

(9) \[
\begin{array}{c}
\text{CP} \\
\text{TP} \quad \text{Subject} \quad \text{VP} \quad \text{Adjunct} \quad \text{Object} \\
\end{array}
\]

2.2 Adverbs outside the scope of negation
As illustrated in (10), applying VTPE in a negative sentence requires V to undergo
a V-to-NEG-to-T-to-C movement. Thus, under the VTPE analysis, elements elided
via VTPE always fall within the scope of negation (indicated by shading).

(10) \[
\begin{array}{c}
\text{CP} \\
\text{TP} \quad \text{Subject} \\
\text{TP} \quad \text{NegP} \quad \text{VP} \quad \text{Object} \\
\end{array}
\]
Indeed, one of Sato and Maeda’s (2021) arguments for the VTPE analysis of VEAs comes from their observation that the raised NEG in VTPE obligatorily takes scope over the elided elements in the TP, which we discuss in Section 4. It follows that the analysis predicts that elided adjuncts also fall within the scope of negation.

In order to test this prediction, we consider data involving the adjunct *iwaretatorinī* ‘as one was told’. The adjunct allows both the wide scope and the narrow scope readings in relation to negation; hence, it provides us with an empirical testing ground. (11) illustrates the ambiguity; it is ambiguous between the manner adverb interpretation of the adjunct (i.e., the NEG > Adjunct reading) and the sentential adverb interpretation of the adjunct (i.e., the Adjunct > NEG reading).

(11)  Kenta-wa iwaretatorinī geemu-o si-nak-atta.
      Kenta-top as.he.was.told dish-acc do-NEG-PST
      ok: ‘Kenta did not play the video game in the way he was told to.’ (NEG > Adjunct)
      ok: ‘Kenta did not play the video game following what he was told (he was told not to play the video game).’ (Adjunct > NEG)

The VTPE analysis predicts that if the adjunct is elided, the resulting VEA has only a NEG > Adjunct reading since NEG in the V-NEG-T-C complex scopes over the adjunct contained in the elided TP. To see whether the prediction is correct, consider the following example. Interestingly, (12A) allows an adjunct-inclusive reading not only under the NEG > Adjunct but also under the Adjunct > NEG reading.

(12) Q: Kenta-wa [Adv iwaretatorinī] geemu-o si-nak-atta(-no)?
      Kenta-top as.one.was.told game-acc do-NEG-PST-PRT
      ‘Did Kenta not play video games as he was told?’
A:  Si-nak-atta-yo.
      do-POL-NEG-PST-PRT
      ok: ‘Kenta did not play the video game in the way he was told to.’
      (NEG > Adjunct)
      ok: ‘Kenta did not play the video game following what he was told (he was told not to play the video game).’ (Adjunct > NEG)

For those who find the Adjunct > NEG reading difficult to get in (12A), specifying a context may be helpful. The context is such that the adjunct is unambiguous; it is understood only as a sentential adverb. Nonetheless, Kenta’s answer to Yuka’s question has the adjunct-inclusive reading.

(13) Context: *Yuka, Kenta’s* mother, told *Kenta* not to play video games over the weekend, when she was away from home. When she returned home at the end of the weekend, *Yuka* asks *Kenta:*

      *Yuka:* Anata-wa [Adv iwaretatorinī] geemu-o si-nak-atta(-no)?
      you-top as.one.was.told game-acc do-NEG-PST-PRT
      ‘Did you not play video games as he was told?’

      *Kenta:* Si-nak-atta-yo.
      do-POL-NEG-PST-PRT
      not: ‘I did not play the video game in the way you told me to.’ (NEG
The Adjunct \(\neg\) reading in the VEA is unexplained under Sato and Maeda’s (2021) VTPE analysis, where the raised NEG obligatorily takes the wide scope with respect to the TP-internal elements. (14) illustrates this point. NEG in VTPE ends up in a higher position than the adjunct, regardless of the adjunct’s position.

(14) \[CP \{TP \{Subj \{TP \{Adj \{TP [NegP \{VP \{Obj \{V \{t\} \neg \{V \{t\} \neg \{T \}] \}] \}] \}] \}] \}] \text{V-NEG-T-C}\]

Here again, the adjunct ellipsis analysis explains the result in (13).\(^4\) In (15), NEG does not raise, and hence the adjunct that is higher than NEG can be elided.

(15) \[CP \{TP \{Subject \{TP \{Adjunct \{TP [NegP \{VP \{Object \{V \{NEG\}] \}] \}] \}] \}] \text{C}\]

This section has shown that observations regarding adjunct-inclusive readings in VEAs are better explained by our analysis, which posits that VEAs are derived by applying AE to the arguments and adjunct ellipsis to the adjuncts.

3 Voice mismatches in Verb-echo answers

Sato & Maeda (2021) argue that a voice mismatch in VEAs results in ungrammaticality, as in (16A). They claim that the impossibility of voice mismatches in VEAs supports their VTPE analysis because sluicing in English, which can be analyzed as an instance of TP-ellipsis, disallows voice mismatches in (17b) (Merchant 2001).

(16) Q: Kenta-wa Yuka-o sikari-masi-ta-ka?
   Kenta-top Yuka-acc scold-POL-PST-Q
   ‘Did Kenta scold Yuka?’
A: *Shikar-are-masi-ta-yo.
   scold-PASS-POL-PST-PRT
   lit. ‘Was scolded.’ (Intended: ‘Yuka was scolded by Kenta.’)

(17) a. I know someone scolded John, but I don’t know who.
    b. *I know someone scolded John, but I don’t know by whom.

If (16A) involves VTPE, then a syntactic identity condition which prohibits voice mismatches in TP-ellipsis explains the ungrammaticality of both (16A) and (17b).\(^5\) While we agree that (16A) is “bad” to some degree, we argue that (16A) is not ungrammatical due to syntactic identity but it is unacceptable due to discourse factors.

First of all, the unacceptability of voice mismatches does not characterize VEAs in Japanese. (18) is a case of AE rather than TP-ellipsis, and yet a voice mismatch is unacceptable to some extent. The fact is not surprising since congruent question-answer pairs normally do not tolerate a voice mismatch (see Weir 2017, for detailed

\(^4\)As mentioned above, the pro-analysis of null arguments in VEAs is also a potential alternative.

\(^5\)The line of arguments was first presented in Sato & Hayashi (2018).
discussion). Yet, some speakers find (18A) more acceptable than (16A), and one may claim that the contrast supports the VTPE analysis.

(18)  Q: Kenta-wa Yuka-o sikari-masi-ta-ka?
      Kenta-top Yuka-acc scold-pol-pst-q
      ‘Did Kenta scold Yuka?’
A: ??Yuka-wa sikar-are-masi-ta-yo.
      Yuka-top scold-pass-pol-pst-prt
      lit. ‘Yuka was scolded.’ (Intended: ‘Yuka was scolded by Kenta.’)

Nonetheless, we maintain that the contrast (if exists) is also explained by a pragmatic analysis as follows: In (16A), neither of the arguments is expressed. Thus, a heavy burden is on the listener to infer ‘who was scolded by whom’ from contextual clues, which are absent in the constructed example. (18A) may be more acceptable than (16A) because the information about ‘who was scolded’ is expressed, and the information about ‘by whom Yumi was scolded’ is easily inferred on the basis of the question being addressed by the conversation participants. The line of pragmatic analysis is supported by (19). (19A) is a VEA, and yet it is more acceptable than (16A) arguably because it is clear in the discourse that the utterer of (19A) is the one who was scolded by Kenta (as pointed out by Satoshi Oku (p.c.)).

(19)  Q: Kenta-wa anata-o sikari-masi-ta-ka?
      Kenta-top you-acc scold-pol-pst-q
      ‘Did Kenta scold you?’
A: Shikar-are-masi-ta-yo.
      scold-pass-pol-pst-prt
      lit. ‘Was scolded.’ (Intended: ‘I was scolded by Kenta.’)

Importantly, the contrast between (16A) and (19A) is not explained if they are derived via VTPE. Sato and Maeda’s (2021) analysis based on syntactic identity on TP-ellipsis wrongly predicts (19A) to be ungrammatical on a par with (16A).

In this section, we have shown that the alleged impossibility of voice mismatches in VEAs does not support Sato and Maeda’s (2021) VTPE analysis.

4 Negative scope reversal in Verb-echo answers?
Now we discuss scopal interactions between disjunction/only and NEG in VEAs. We demonstrate that scope patterns support our analysis over the VTPE analysis.

4.1 Disjunction and negation
In languages like English, a disjunction can take both a wide and narrow scope with respect to its clause-mate negation, as in (20). In Japanese, however, disjunction does not take scope below its clause-mate negation, as in (21) (Goro 2007). While (21) means that (Hayato didn’t eat bread) or (Hayato didn’t eat rice) (or>neg), it cannot mean that Hayato didn’t eat bread or rice (neg>or).

(20) Ronald did not eat bread or rice. (or>neg, neg>or)
(21) Hayato-wa pan-ka-kome-o tabe-nak-atta. (OR>NEG, *NEG>OR)
    Hayato-top bread-or-rice-acc eat-NEG-PST
    lit. ‘Hayato did not eat bread or rice.’

Sato & Maeda (2021) adopt Shibata (2015) and assume that the or>NEG reading is derived in the structure (22), where the disjunctive phrase occurs higher than NegP.\(^6\)

(22) \[
\begin{array}{c}
\text{CP} \\
\text{TP Subject} \\
\text{TP bread-or-rice} \\
\text{TP} \\
\text{NegP} \\
\text{VP bread-or-rice V} \\
\text{NEG}] T \\
\end{array}
\]

Based on this assumption, Sato & Maeda (2021) provide the following example to support their VTPE analysis of VEAs. They report that the otherwise unavailable NEG>OR reading becomes available in the VEA in (23A). Interestingly, (23A) does not seem to allow the OR>NEG reading (see also Funakoshi 2013, Maeda 2019).

(23) Q: Hayato-wa pan-ka-kome-o tabe-ta-no?
    Hayato-top bread-or-rice-acc eat-PST-PRT
    ‘Did Hayato eat bread or rice?’
A: Tabe-nak-at-ya-yo. (*OR>NEG, NEG>OR)
    eat-NEG-PST-PRT
    lit. ‘Did not eat.’

Sato & Maeda (2021) propose that the observation can be explained by the VTPE analysis in (24), in which the raised NEG takes scope over the disjunction.

(24) \[
\begin{array}{c}
\text{CP} \\
\text{TP Subject} \\
\text{TP bread-or-rice} \\
\text{TP} \\
\text{NegP} \\
\text{VP bread-or-rice V} \\
\text{NEG}] T \\
\end{array}
\]

However, as Sato & Maeda (2021, p. 370) themselves acknowledge in a footnote, the VTPE analysis faces the counter-example in (25). The VEA which follows the negative question has the OR>NEG reading (see also Sakamoto 2016, Maeda 2019). This is unaccounted for if the VEA is derived via VTPE as illustrated in (24).

(25) Q: Hayato-wa pan-ka-kome-o tabe-nak-at-ta-no? (OR>NEG, *NEG>OR)
    Hayato-top bread-or-rice-acc eat-NEG-PST-PRT
    ‘Did Hayato not eat bread or rice?’
A: Tabe-nak-at-ya-yo. (OR>NEG, *NEG>OR)
    eat-NEG-PST-PRT
    lit. ‘Did not eat.’

Our analysis straightforwardly explains the OR>NEG reading in (25A). As depicted in (26), the subject and the disjunctive phrase are elided by AE. Since the disjunctive phrase falls within the scope of negation, the OR>NEG reading in (25A) is obtained.

(26) \[
\begin{array}{c}
\text{CP} \\
\text{TP Subject} \\
\text{TP bread-or-rice} \\
\text{NegP} \\
\text{VP bread-or-rice V} \\
\text{NEG}] T \\
\end{array}
\]

On the other hand, the AE analysis does not explain the NEG>OR reading in (23A).

\(^6\)Shibata (2015) proposes that the disjunction “acyclically” merges to the argument only after it moves to a position above NegP. For ease of exposition, the analysis is not precisely illustrated in (22).
However, we point out that the judgement reported in Sato & Maeda (2021) is dubious. For us and five informants we consulted, the most likely interpretation of (23A) is that Hayato ate neither bread nor rice rather than it is not the case that Hayato ate bread or rice (i.e., $\text{neg}>\text{or}$). Given this, we propose that the source of the seemingly available $\text{neg}>\text{or}$ reading in (23A) is (27A). Notice that (27A) does not involve disjunction, and yet it is truth-conditionally equivalent to $\text{neg}>\text{or}$.

(27) Q: Hayato-wa pan-ka-kome-o tabe-ta-no? Hayato-top bread-or-rice-ACC eat-PST-PRT ‘Did Hayato eat bread or rice?’

A: (Iya,.) Hayato-wa pan-mo kome-mo tabe-nak-atta-yo. no Hayato-top bread-also rice-also eat-NEG-PST-PRT ‘Hayato ate neither bread nor rice.’

Thus, the structure of (23A) is (28), where all the arguments are elided by AE.

(28) $\left[\text{cp} \left[\text{TP} \left[\text{Subject} \left[\text{negP} \left[\text{VP bread-also rice-also V} \right] \text{NEG} \right] \text{T} \right] \text{C} \right] \text{T} \right] \text{T}$

While the AE analysis accounts for the observations in (23) and (25), a question remains as to why (23A) does not have the $\text{or}>\text{neg}$ reading. AE should be able to derive a structure like (26), in which the disjunctive phrase above NEG is elided.

Yet, this seemingly mysterious scope pattern can be explained by Tanabe and Hara’s (2021) analysis based on question-answer congruence. Let us reconsider the question-answer pair in (23). (23Q) asks whether there is a food among bread and rice that Hayato ate. Notice that the $\text{or}>\text{neg}$ reading of (23A), (Hayato didn’t eat bread) or (Hayato didn’t eat rice) does not provide an answer. (29) shows that the $\text{or}>\text{neg}$ reading is false if and only if both Hayato ate bread (p) and Hayato ate rice (q) are true. This means that answering (23Q) by (23A) under the $\text{or}>\text{neg}$ reading amounts to providing an insufficient answer as follows: Hayato may have eaten bread or rice, but he may have eaten neither. At least, he did not eat both. This provides neither an affirmative answer nor a negative answer to (23Q).

(29)

<table>
<thead>
<tr>
<th>$p \lor q$</th>
<th>$p$</th>
<th>$q$</th>
<th>$\neg p$</th>
<th>$\neg q$</th>
<th>$\neg (p \lor q)$</th>
<th>$\neg p \lor \neg q$</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>T</td>
<td>T</td>
<td>F</td>
<td>F</td>
<td>F</td>
<td>F</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>T</td>
<td>F</td>
<td>T</td>
<td>F</td>
<td>T</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>T</td>
<td>F</td>
<td>T</td>
<td>F</td>
<td>T</td>
</tr>
<tr>
<td>F</td>
<td>F</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
</tr>
</tbody>
</table>

In contrast, asserting that Hayato ate neither bread nor rice provides a negative answer to (23Q), and thus it is available in (23A). This reveals that the otherwise available $\text{or}>\text{neg}$ reading of (23A) can be excluded by question-answer congruence.

The line of pragmatic analysis is compatible with the observation that the $\text{or}>\text{neg}$

---

Funakoshi (2013) also suggests that an apparently available $\text{neg}>\text{or}$ reading in a null object construction is not derived from the $\text{neg}>\text{or}$ structure but from pro. As repeatedly mentioned above, the pro analysis is also a potential alternative analysis to the VTPE analysis.
reading is available if the question is a negative question, as in (25). The negative question in (25Q) asks whether there is a food among bread or rice that Hayato did not eat. The or\textgreater\textsc{neg} reading of (25A), which asserts that there is a food among bread or rice that Hayato did not eat gives an affirmative answer to (25Q).

To summarize our discussion in this subsection, we have shown that the AE analysis coupled with a discourse-based analysis successfully explains the contrast between (23A) and (25A), which the VTPE analysis cannot explain.

4.2 -\textit{dake} ‘only’ and negation

This subsection demonstrates that the scope patterns of -\textit{dake} ‘only’ in relation to negation is also better explained by the AE analysis. Sato & Maeda (2021) claim that the negation obligatorily takes scope over -\textit{dake} ‘only’ in (30A).

\begin{equation}
(30) \text{Q: Kana-wa pan-dake tabe-ta-no?} \\
\text{Kana-top bread-only eat-pst-prt} \\
\text{‘Did Kana eat only bread?’} \\
\text{A: Tabe-nak-atta-yo. (*only}\textgreater\textsc{neg}, \textsc{neg}\textgreater\textit{only}) \\
\text{eat-NEG-pst-prt} \\
\text{lit. ‘Did not eat.’}
\end{equation}

Sato & Maeda (2021) propose to explain the \textsc{neg}\textgreater\textit{only} reading in (30A) by the VTPE analysis in (31), where the raised NEG scopes over -\textit{dake} ‘only’.

\begin{equation}
\end{equation}

However, the VTPE analysis again faces the following counter-example. In (32), the VEA answers a negative question, and it has only the \textit{only}\textgreater\textsc{neg}.

\begin{equation}
(32) \text{Q: Kana-wa pan-dake tabe-nak-atta-no? (only}\textgreater\textsc{neg}, *\textsc{neg}\textgreater\textit{only}) \\
\text{Kana-top bread-only eat-NEG-pst-prt} \\
\text{‘Did Ken not eat only bread?’} \\
\text{A: Tabe-nak-atta-yo. (only}\textgreater\textsc{neg}, *\textsc{neg}\textgreater\textit{only}) \\
\text{eat-NEG-pst-prt}
\end{equation}

The AE analysis in (33) straightforwardly explains the observation. The subject and the object suffixed with -\textit{dake} ‘only’ are individually elided by AE.

\begin{equation}
\end{equation}

The contrast between (30A) and (32A) with regard to the availability of the \textit{only}\textgreater\textsc{neg} reading is again accounted for by Tanabe and Hara’s (2021) discourse-based analysis. That is, (30Q) presupposes that Kana ate bread and asks whether it is the case that she did not eat anything else. On the other hand, the \textit{only}\textgreater\textsc{neg} reading entails that Kana did not eat bread, which causes a presupposition failure. In contrast, (32A) with the \textit{only}\textgreater\textsc{neg} reading provides an affirmative answer to (32Q).

Yet, if NEG does not raise to C, a question arises as to why the \textsc{neg}\textgreater\textit{only} reading is derived in (30A). The \textsc{neg}\textgreater\textit{only} reading reported in Sato & Maeda (2021),
however, is arguably not real. To our ears, the most salient interpretation of (30A) is *Kana did not eat bread (to begin with)*, where the meaning of ‘only’ is not present (see also Akiyama 2014, Moriyama 2017, Sato 2020). As mentioned above, this interpretation causes a presupposition failure; hence, the VEA sounds more natural if we add a comment that cancels the presupposition, as in (34A).

(34) Q: Kana-wa pan-dake tabe-ta-no?
    Kana-top bread-only eat-pst-prt
    ‘Did Kana eat only bread?’

A: Iya, toiuka, tabe-nak-atta-yo. (*only>*NEG, ??NEG>ONLY)
    no in.fact eat-NEG-pst-prt
    ok: ‘In fact, Kana did not eat bread to begin with.’

The alleged NEG>ONLY reading in (30A) therefore is derived from (35), in which the subject and the object (without -dake ‘only’) are simply elided by AE. 8


Overall, we have shown that the scopal interactions between -dake ‘only’ and negation in VEAs are also explained by the AE analysis.

5 Conclusion

This paper has revealed that the VTPE analysis of Japanese VEAs is inadequate. We have also shown that our AE analysis is empirically superior to the VTPE analysis of VEAs. Therefore, we conclude that the relevant observations of VEAs do not constitute evidence that syntactic head movement exists in Japanese.

Acknowledgement

We thank the anonymous reviewers of CLS58 for their helpful comments. We also thank Satoshi Oku, Yurie Hara, and Kenta Mizutani for their valuable comments. This project is partially supported by JSPS KAKENHI Grant-in-Aid for Scientific Research (C) Grant Number JP21K00574 awarded to the second author. Needless to say, any shortcomings and errors of this paper are our own.

References


Collins, Chris. 2015. Adjunct deletion. Manuscript., NYU.

Collins, Chris. 2017. Incomplete comparatives as ellipsis. Manuscript., NYU.

---

8As repeatedly mentioned above, the pro analysis can also account for the data in (34).


