Object Drop in Japanese: Evidence for the VP-Ellipsis Analysis

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1. Introduction

In this paper, I present new evidence for one of the competing analyses of object drop phenomenon in Japanese: the VP-ellipsis analysis (Huang 1991 and Otani and Whitman 1991). In Japanese, objects can be relatively freely dropped, as shown in (1b), in which the object is null and interpreted most naturally as referring to *ringo* 'apple'.

(1) a. John-ga *ringo-o* tabeta.
   John-NOM apple-ACC ate
   'John ate an apple.'

   Bill-also ate
   Lit. "Bill ate, too."= "Bill ate an apple, too."

There have been three major approaches to analyze this phenomenon: the *pro* analysis, the VP-ellipsis analysis, and the argument ellipsis analysis. The *pro* analysis analyzes null objects as empty pronouns, as illustrated in (2a). Under the VP-ellipsis analysis, the object drop sentences are considered to involve VP-ellipsis. As shown in (2b), VP-ellipsis yields a null object sentence if V moves out of VP while an object stays in-situ. Oku (1998) argues that arguments in Japanese can be elided because selectional features or θ-features are weak in Japanese. In this analysis, only argument, but not adjuncts, can be elided.

   Bill-mo *pro* tabeta.
   Bill-also *pro* ate

b. VP-Ellipsis Analysis (Huang 1991, Otani and Whitman 1991)
   Bill-mo [____*ringo-o*____] tabeta
   Bill-also apples-ACC ate

   Bill-mo *ringo-o* tabeta.
   Bill-also apples-ACC ate

An argument for the *pro* analysis can be constructed on the basis of condition B of the binding theory. As shown in (3), when there is no linguistic antecedent, null objects cannot take subjects as its antecedent. The sentence is acceptable only under the meaning...
that John criticized something or someone other than John.

(3)  *John\textsubscript{1}-ga [e\textsubscript{1}] \semata.  
John-NOM criticized  
Lit. 'John criticized.' ≠ "John criticized himself." (Takahashi 2008)

If the null object is an empty pronoun \textit{pro}, this fact can be treated as the violation of condition B. However, if null objects were always pronominal, the following examples in (4) could not be accounted for. As shown in (4), when there is a linguistically expressed antecedent like (4a), the null object can be anaphoric to the subject.

(4)  a.  John\textsubscript{1}-ga zibun\textsubscript{1}-o \semata.  
John-NOM self-ACC criticized  
"John criticized himself."

b.  Bill\textsubscript{1}-mo [e\textsubscript{1}] \semata.  
Bill-also criticized  
Lit. "Bill criticized, too." = "Bill criticized himself, too." or = "Bill criticized John, too."

If the null object in (4b) were \textit{pro}, the coreferential reading should be ruled out due to the condition B violation. The ellipsis approaches (the VP-ellipsis analysis and the argument ellipsis analysis) can accommodate this fact. According to these analyses, the underlying representations of (4b) are as the followings.

(5)  a.  Bill\textsubscript{1}-NOM self-ACC criticized (the argument ellipsis analysis)  

b.  Bill\textsubscript{1}-NOM [VP self-ACC \textit{criticized}] criticized (the VP-ellipsis analysis)

In both representations, \textit{zibun} 'self' is an object and elided, yielding the coreferential reading.\footnote{Elliptic strategy cannot be used in (3) since ellipsis is surface anaphora, which requires the presence of linguistically expressed antecedents (Hankamer and Sag 1976).} Therefore, these facts lead to the conclusion that in addition to the \textit{pro} strategy, Japanese has some kind of elliptic strategy to yield object drop sentences.

The aim of this paper is to provide novel empirical evidence that Japanese uses VP-ellipsis rather than argument ellipsis as elliptic strategy for object drop. In section 2, I will consider three constructions in which objects or some VP internal PPs are forced to move out of VP. The VP-ellipsis analysis makes a prediction about this structure. As shown in (6), if objects (or PPs) are moved out of VP, it cannot yield object drop (or PP drop) sentences even if VP is elided.

(6)  SubjObj/PP \textsubscript{VP} \textsubscript{\textit{criticized}} V T

Thus, the VP-ellipsis analysis makes the following prediction.

(7)  When objects move out of VP, object drop cannot occur.

In the next section, I will show that the prediction in (7) is borne out and that it remains unclear why (7) holds under the argument ellipsis analysis. The section 3 is a brief summary.
2. New Evidence for VP-Ellipsis Analysis

2.1. Nominative Object Constructions

In Japanese, the object can be marked with either accusative or nominative if the predicate of the sentence is complex, made up of a verb and a stative suffix like -(rar)e 'can'. The examples in (8) illustrate this constructions.

   John-NOM vodka-only-ACC drink-can-PRES
   'John can drink only vodka.'
   "= It is drink only vodka that John can do." (can > only)
   "%= It is only vodka that John can drink." (only > can)

   John-NOM vodka-only-NOM drink-can-PRES
   'John can drink only vodka.'
   "≠ It is drink only vodka that John can do." (can > only)
   "≠ It is only vodka that John can drink." (only > can)

These sentences, however, are not completely synonymous. Sano (1985) observes that accusative objects take narrow scope with respect to -(rar)e 'can', as shown in (8a) while nominative objects have to take wide scope, as shown in (8b). 2 Given these facts, Tada (1992) proposes that nominative objects move to a position within the projection of -(rar)e for Case reasons, as illustrated in (9).

(9) John-NOM [CanP vodka-only-NOM [VP t_vodka drink] -can] -PRES

Assuming that the main verb drink moves at least to can, the structure in (9) has the structure that we need to test our prediction. First, let us consider an accusative object sentence. In (10b), the accusative object vodka-dake-o 'vodka-only-ACC' is elided.

   John-NOM vodka-only-ACC drink-can-PRES
   'John can drink only vodka.'

   Bill-also drink-can-PRES
   Lit. 'Bill can drink, too.'
   "= It is drink only vodka that Bill can do." (can > only)
   "≠ It is only vodka that Bill can drink." (only > can)

2 According to Koizumi (1995), there are two varieties of idiolects about sentences with accusative objects like (8a). Some speakers find (8a) unambiguous, with the narrow scope reading of objects. Others find it ambiguous.
As shown in (10b), the null object is allowed and the sentence has the narrow scope reading of the object. This is expected both under the argument ellipsis analysis and the VP-ellipsis analysis. According to the argument ellipsis analysis, the sentence in (10b) has the following representation.

(11) Bill·also \[CanP \[VP vodka only\_ACC t\_{drink} \] drink\_can\] -PRES

Any arguments can be elided under the argument ellipsis analysis. Thus, the deletion of the object in (11) is unproblematic under this analysis. Under the VP-ellipsis analysis, (10b) has the following representation under the narrow scope reading of the object:

(12) Bill·also \[CanP \[vodka only\_ACC t\_{drink} \] drink\_can\] -PRES

As shown in (12), the accusative object stays within VP and the main verb moves out of VP. Thus, the deletion of the VP yields the object drop sentence in (10b). Therefore, the availability of the narrow scope reading of the object in (10b) is expected both under the argument ellipsis analysis and the VP-ellipsis analysis.

In contrast with an accusative object sentence, when a nominative object is elided, the sentence loses any quantificational meanings, as shown in (13b): it has neither narrow scope nor wide scope readings of the object.

(13) a. John\_NOM vodka\_only\_NOM drink\_can\_PRES

'John can drink only vodka.'

b. Bill\_also drink\_can\_PRES

Lit. 'Bill can drink, too.'

"≠ It is drink only vodka that Bill can do." (\textit{can} > only)

"≠ It is only vodka that Bill can drink." (\textit{only} > \textit{can})

The unavailability of the wide scope reading is expected under the VP-ellipsis analysis since the underlying representation of (13b) is as the following.

(14) Bill·also \[CanP vodka\_only\_NOM \[VP t\_{vodka} t\_{drink} \] drink\_can\] -PRES

In (14), the nominative object moves out of VP for Case reasons and the main verb also moves out of the VP. Thus, even if the VP is elided, object drop sentences like (13b) do not obtain. Therefore, the VP-ellipsis analysis correctly predicts that the sentence in (13b) does not have the wide scope reading of the object. In contrast, under the argument ellipsis analysis, the unavailability of the wide scope reading in the nominative object sentence is unexpected because the nominative object, like the accusative object, is an argument, which can be elided under the argument ellipsis analysis.

The unavailability of the narrow scope reading of the object in (13b) is also expected under the VP-ellipsis analysis, given some notion of Parallelism. If the underlying representation of (13b) has the accusative object instead of the nominative one as in (12)
above, then, the sentence should be acceptable under the narrow scope reading. In this case, however, the deletion of VP should be prohibited either by syntactic Parallelism or semantic Parallelism. As for syntactic Parallelism, the deletion is not allowed since the object in the antecedent clause (13a) and the one in the elided clause are different: it is marked with nominative in the antecedent clause while it is marked with accusative in the elided clause. Regarding semantic Parallelism, the deletion is prohibited because the antecedent clause and the elided clause have different scope interpretations: the wide scope of the object in the antecedent clause and the narrow scope of the object in the elided clause (cf. Fox 1995).

To sum up, the object drop sentence involving nominative objects confirms our prediction that object drop is not allowed when the object moves out of VP. The difference between accusative objects and nominative objects in deletability can be neatly explained by the VP-ellipsis analysis. On the other hand, the difference remains a mystery under the argument ellipsis analysis.

Before closing this subsection, I would like to point out that it is predicted under the present approach that in nominative object sentences like (13), the wide scope reading of the object is obtained if CanP, instead of VP, is elided. This is illustrated in (15).

(15)  Bill-also  [CanP vodka-only-NOM [VP drink-can] -PRES  

This prediction is borne out as shown in (16).

     John-NOM  vodka-only-NOM  drink-can-PRES  
     'John can drink only vodka.'

     Bill-also  be.PRES  
     Lit. 'Bill can drink, too.'

"≠ It is drink only vodka that Bill can do." (can > only)
"= It is only vodka that Bill can drink." (only > can)

In (16b), where da 'be.PRES' can be considered to be a morpheme that supports the stranded tense morpheme, the wide scope reading of the object is obtained.

2.2. Focus Particle Constructions

In Japanese, a focus particle -dake 'only' can attach to PP. It has been observed that -dake can appear either after a postposition or between the complement of a postposition and the postposition, as shown in (17).

(17)  a.  Mary-to-dake 'Mary-with-only'; Mary-dake-to 'Mary-only-with'  

b.  Mary-ni-dake 'Mary-to-only'; Mary-dake-ni 'Mary-only-to'  

c.  basu-de-dake 'bus-with-only'; bus-dake-de 'bus-only-with'

Shoji (1986) and Harada and Noguchi (1992) observe that the order between -dake and
postpositions affects the scope pattern of -dake. When -dake is before a postposition (hereafter the internal -dake), the PP can take narrow scope under -(rar)e 'can', as shown in (18a). In contrast, when -dake is after a postposition (hereafter the external -dake), the sentence only allows the wide scope of PP, as shown in (18b) and (19b).

(18)  
        John-TOP Mary-only-with play-can-PRES  
   'John can play only with Mary.'
       "= The only person John can play with is Mary." (only > can)  
       "= John can play with Mary alone (without playing with others)." (can > only)  
        John-TOP Mary-with-only play-can-PRES  
   'John can play only with Mary.'
       "= The only person John can play with is Mary." (only > can)  
       "≠ John can play with Mary alone." (can > only)  

(19)  
   a. Giants-ni-wa bus-dake-de ik-e-ru.  
        Giants-to-TOP bus-only-with go-can-PRES  
   '(I) can get to Giants only by bus.'
       "= Bus is the only means by which I can get to Giants." (only > can)  
       "= I can get to Giants by bus alone." (can > only)  
   b. Giants-ni-wa bus-de-dake ik-e-ru.  
        Giants-to-TOP bus-with-only go-can-PRES  
   '(I) can get to Giants only by bus.'
       "= Bus is the only means by which I can get to Giants." (only > can)  
       "≠ I can get to Giants by bus alone." (can > only)  

Shoji (1986) accounts for the difference between the internal -dake and the external -dake by assuming that PP with the external -dake is forced to move to the focus position, which is outside of vP, leading to the wide scope reading of -dake while PP with the internal -dake stays in-situ, resulting in the narrow scope reading of -dake.

If this is correct, it is expected under the VP-ellipsis analysis that (i) when PP with the internal -dake is dropped, only the narrow scope reading of PP is allowed and that (ii) when PP with the external -dake is dropped, the sentence is unacceptable. (i) is predicted because VP-deletion yields a PP drop sentence when PP stays in-situ while VP-deletion does not yield a PP drop sentence when PP moves to the focus position. This is illustrated in (20).

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3 Shoji (1986) judges sentences like (18a) and (19a) as unambiguous, allowing only the narrow scope of PP. However, Harada and Noguchi (1992) and Futagi (2004) find the sentences ambiguous, allowing both the narrow scope and wide scope of PP. The author's judgment agrees with the latter.
(20) a. \[\text{TP Subj } [\text{CanP } \text{NP-dake-P} \text{ V-can} ] \text{ T}\]
    b. \[\text{FP } [\text{PP NP-dake-P} ] [\text{TP Subj } [\text{CanP } \text{V-can} ] \text{ T}]\]

(ii) is predicted since PP with the external -dake has to move to the focus position. The prediction in (i) is borne out as shown in (21) and (22).

    John-\text{TOP} Mary-only-with play-can-PRES
    'John can play only with Mary.'
    Bill-also play-can-PRES
    Lit. 'Bill can play, too.'
    "≠ The only person Bill can play with is Mary." (only > can)
    "= Bill can play with Mary alone (without playing with others)." (can > only)

(22) a. Giant-ni-wa bus-\textbf{dake}-de ik-e-ru.
    Giant-\text{TOP} bus-only-with go-can-PRES
    '(I) can get to Giant only by bus.'
    Shoppers-to-also go-can-PRES
    Lit. '(I) can get to Shoppers, too.'
    "≠ Bus is the only means by which I can get to Shoppers, too." (only > can)
    "= I can get to Shoppers by bus alone." (can > only)

The PP drop sentences in (21b) and (22b) are acceptable only under the narrow scope reading of PP. The prediction in (ii) is also borne out, as shown in (23) and (24).\textsuperscript{4}

    John-\text{TOP} Mary-with-dake play-can-PRES
    'John can play only with Mary.'
    Bill-also play-can-PRES
    Lit. 'Bill can play, too.'

(24) a. Giant-ni-wa bus-de-\textbf{dake} ik-e-ru.
    Giant-\text{TOP} bus-with-only go-can-PRES
    '(I) can get to Giant only by bus.'
    Shoppers-to-also go-can-PRES

\textsuperscript{4} The undeletability of the external -dake PP is observed by Futagi (2004). However, she argues that the internal -dake PP cannot be dropped either. Thus, according to her judgment, the sentences like (21b) and (22b) are unacceptable. However, I have a strong intuition that the sentences are acceptable under the narrow scope reading of PP. All Japanese speakers that I have consulted agreed to my judgment.
Lit. '(I) can get to Shoppers, too.'

The argument ellipsis analysis might also account for the difference between the internal -\textit{dake} and the external -\textit{dake} in the deletability by assuming that PPs with the internal -\textit{dake} are an argument while PPs with the external -\textit{dake} are an adjunct. According to the argument ellipsis analysis, arguments, but not adjuncts, can be dropped. However, even if such a somewhat stipulative assumption is adopted, the unavailability of the wide scope reading of PP with the internal -\textit{dake} cannot be accounted for since the structural position of arguments does not matter under the argument ellipsis analysis.

To sum up, PP with the internal -\textit{dake} can be dropped only under the narrow scope reading while PP with the external -\textit{dake} cannot be dropped at all. These facts can be easily accounted for under the VP-ellipsis analysis while remains a mystery under the argument ellipsis analysis.

2.3. Indefinites and NPIs

Shinohara (2004) observes that an NPI \textit{nanimo} 'anything' can be dropped when there is an indefinite like \textit{nanika} 'something' in the antecedent clause, as illustrated in (25).

(25) Sono toki, John-wa \textit{nanika} katta ga, that time John-TOP something bought though
Mary-wa [c] kawa-nak-atta.
Mary-TOP buy-not-PAST
Lit. 'At that time, John bought something, but Mary did not buy'
"= At that time, John bought something, but Mary did not buy anything."

Saito (2007) points out that this fact indicates that \textit{nanimo} 'anything' is a morphological variant of \textit{nanika} 'something': they are not separate lexical entries. Following this insight, suppose that \( \exists \) is an underlying form of both \textit{nanika} 'something' and \textit{nanimo} 'anything' and that \( \exists \) is realized as \textit{nanimo} when it is in the scope of negation while it is realized as \textit{nanika} when it is outside of the scope of negation. This is illustrated in (26) and (27).

\begin{align*}
(26) & \text{a. John-NOM} & [\text{NegP [VP } \exists \text{ buy] -NEG] -T} & \rightarrow \\
& \text{b. John-NOM} & [\text{NegP [VP anything buy] -NEG] -T} \\
(27) & \text{a. John-NOM} & [\text{NegP [VP } \exists \text{ buy] -NEG] -T} & \rightarrow \\
& \text{b. John-NOM} & \text{something} & [\text{NegP [VP buy] -NEG] -T} \\
\end{align*}

Given these, we can account for the fact that when \textit{nanika} 'something' appears in the object position of a negative sentence, like in (28a), it must take scope under negation: the sentence cannot mean that John did not eat anything. This is because the sentence must have the underlying representation like (28b).

\begin{align*}
(28) & \text{a. John-ga} & \text{nanika} & \text{tabe-nak-atta.} \\
& \text{John-NOM} & \text{something} & \text{eat-NEG-PAST} \\
\end{align*}
'John did not eat something.'

In (28), ∃ is moved out of NegP for some reasons. Thus, ∃ is realized as nanika. If ∃ stays in the scope of the negation, it should be realized as nanimo.

With this in mind, notice that the sentence in (25) cannot have the same meaning as the sentence in (29).

(29) Sono toki John-wa nanika katta ga, that time John-TOP something bought though
Mary-wa nanika kawa-nak-atta.
Mary-TOP something buy-not-PAST

'At that time, John bought something, but Mary did not buy something.'

This fact indicates that ∃ cannot be dropped when it moves out of the scope of negation. This is easily accounted for under the VP-ellipsis analysis. The elided sentence in (25) has the underlying representation in (30a) when it yields the NPI reading (i.e. ∃ is in the scope of negation), while it has the underlying representation in (30b) when it yields the existential meaning (i.e. ∃ is out of the scope of negation).

(30) a. Mary-TOP [NegP [VP ∃ t_buy] buy-NEG] -PAST
   b. Mary-TOP ∃ [NegP [VP t_buy] buy-NEG] -PAST

When VP is elided in (30a), it yields an object drop sentence. In contrast, in (30b), VP-ellipsis does not yield an object drop sentence. Therefore, the elided sentence in (25) cannot have the existential meaning. Notice that this fact remains a mystery under the argument ellipsis analysis since the structural position of an argument does not affect the deletability under the argument ellipsis. Thus, the fact that the elided sentence in (25) does not have the existential meaning supports the VP-ellipsis analysis.

3. Conclusion

In this paper, I have provided novel empirical evidence for the VP-ellipsis analysis for object drop in Japanese. I showed that in constructions in which objects were forced to move out of VP, object drop was not allowed. This fact can be easily accommodated under the VP-ellipsis analysis but remains a mystery under the argument ellipsis analysis.

Given that VP-ellipsis can be used to derive object drop sentences in Japanese, an interesting question arises: why languages like English, unlike Japanese, do not allow object drop sentences even if it allows VP-ellipsis? I pursue this question in Funakoshi (under review) and attribute the cross-linguistic difference in the availability of remnant VP-ellipsis to the parameters that are responsible for the availability of multiple-Specs and subject in-situ.
References
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