Notes on Ellipsis in Japanese

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1. Introduction

Recent years have witnessed a renewed interest in ellipsis (see Lasnik 2001, Merchant 2001, and the papers collected in Johnson 2008, among numerous others), which directly bears on certain, increasingly sharpened questions regarding how derivations proceed and how syntax interacts with the linguistic interfaces, both phonological and semantic (Chomsky 1995, 2001, 2008 for discussion of the general framework).

The present paper is concerned with the ongoing debate over how exactly ellipsis should be characterized. More specifically, the question is whether it involves deletion at PF (Lasnik 2001, Merchant 2001) or copying at LF (Chung *et al*. 1995, Lobeck 1995). Here focus will be on two cases of ellipsis in Japanese, that is, argument ellipsis and sluicing. I will argue contra Oku (1998), Shinohara (2006), and Saito (2008) that argument ellipsis results from PF-deletion. I will also consider sluicing and conclude that it too results from PF-deletion, as has already been suggested in the literature (see Merchant 2001 for relevant discussion).

This paper is organized as follows. Section 2 is a brief comparison between the two PF-based and LF-based approaches to ellipsis. Section 3 discusses argument ellipsis in Japanese (Oku 1998, Takahashi 2008 among others). It has been claimed that argument ellipsis provides evidence for the copy analysis (Shinohara 2006, Saito 2008). I will show that this is not the

case, presenting an alternative account using PF-deletion. At the same time, I will present considerations in favor of PF-deletion over LF-copying. Section 4 examines sluicing in Japanese in reference to Merchant's (2001) arguments for PF-deletion and against LF-copying. It will be shown that most of them extend to relevant Japanese cases, which reinforces the view that ellipsis uniformly involves PF-deletion within and across languages. Section 5 wraps up the discussion.

2. PF-deletion versus LF-copying

There are two kinds of structure-based analyses of ellipsis. One, devised by Ross (1969) and later elaborated by Chomsky and Lasnik (1993), Lasnik (2001), and Merchant (2001) among others, regards ellipsis as an essentially phonological phenomenon and takes it to involve nonpronunciation of syntactic structure at PF. The other, advocated by Chung *et al*. (1995), Lobeck (1995) and others, relies on LF operations that retrieve the content of an empty constituent by copying its antecedent.

To illustrate these analyses, consider the typical example of sluicing in (1).

(1)   John bought something, but I don't know what.

Under the deletion analysis, *what* in the second conjunct is generated in the object position of the embedded clause and undergoes regular *wh*-movement, as shown in (2). After the movement, the TP from which the *wh*-phrase originates gets deleted in PF (deletion is indicated by strikethrough).[1]

(2)   John bought something, but I don't know [$_{CP}$ what [$_{TP}$ ~~he bought t_i~~]].

On the other hand, the copy-based analysis claims that an empty TP occupies the complement position of the [+WH] C in syntax. Thus, the syntactic representation of (1) looks like (3).

(3) John bought something, but I don't know [$_{CP}$ what [$_{TP}$ e]].

In LF the TP in the first conjunct replaces its empty counterpart, yielding the representation in (4).

(4) John bought something, but I don't know [$_{CP}$ what [$_{TP}$ John bought something]].

It is widely assumed that indefinites are not quantificational but merely introduce variables (Heim 1982). Then the copied indefinite *something* in the second conjunct of (4) can successfully be bound by the *wh*-phrase *what* (indirectly via existential closure; see Heim 1982 for details).

There has been a debate over which of these analyses is on the right track. However, Merchant (2001), in his comprehensive, cross-linguistic study of elliptical constructions, argues convincingly for the deletion analysis. One may well wonder whether his basic claim extends to languages where LF-copying has been proposed to account for ellipsis.

In the sections to follow, I examine one such language, namely, Japanese. It will be argued that the two types of ellipsis in the language, argument ellipsis and sluicing, both involve PF-deletion rather than LF-copying.

3. Argument Ellipsis

Oku (1998) maintains that arguments can undergo ellipsis in Japanese, citing examples of the following sort (see also Takahashi 2008):[2]

(5) a. Ken-ga   zibun-no seikoo-o   iwatta.
         Ken-NOM   self-GEN success-ACC celebrated
         'Ken celebrated his success.'
     b. Mari-mo   *pro* / [z̶i̶b̶u̶n̶-̶n̶o̶ ̶s̶e̶i̶k̶o̶o̶-̶o̶]   iwatta.
         Mari-also   self-GEN success-ACC celebrated
         'Mari also celebrated his/her success.'

c. Mari-mo   sore-o   iwatta.
   Mari-also   that-ACC   celebrated
   'Mari also celebrated it.'

Suppose that (5a) is followed by (5b) or (5c). (5b), where the object is missing, is ambiguous. It can mean either that Mari celebrated Ken's success (*strict reading*) or that Mari celebrated Mari's success (*sloppy reading*). (5c), on the other hand, has only one interpretation, where the pronominal expression *sore* 'that-ACC' refers to Ken's success. Since Japanese is a *pro*-drop language, *sore-o* in (5c) can be replaced by a *pro*, which produces (5b) with the strict reading. But what about the sloppy reading in (5b)? Oku claims that it must be due to ellipsis, which has been known to license sloppy interpretations when necessary conditions are met (see Ross 1967, Fiengo and May 1994, Fox 2000 among others).

It has been noted that not only DP arguments but also CP arguments can be elided in Japanese (Shinohara 2006, Tanaka 2008). Observe (6).

(6) a. Ken-ga   [zibun-ga seikoo-suru to] omotteiru.
        Ken-NOM   self-NOM   succeed   that think
        'Ken thinks that he will succeed.'
     b. Mari-mo   *pro* / [~~zibun-ga seikoo-suru to~~]   omotteiru.
        Mari-also   self-NOM   succeed   that   think
        'Mari also thinks that s/he will succeed.'
     c. Mari-mo soo   omotteiru.
        Mari-also so   think
        'Mari thinks so too.'

Just like (5b), (6b) is ambiguous. It permits both the strict reading (shared by (6c)) where *zibun* 'self' refers to Ken and the sloppy one where *zibun* refers to *Mari*. This indicates that the clausal complement in (6b) can undergo ellipsis.

Building on Bošković and Takahashi's (1998) theory of scrambling, Oku (1998) suggests that argument ellipsis in Japanese involves LF-copying.

Under his analysis, no element is base-generated in the ellipsis site, and an appropriate antecedent is copied into the empty θ-position at LF.[3] This is possible precisely because θ-features are "weak" in Japanese and their checking can be postponed until LF (cf. Chomsky 1995, chap. 3).[4]

In his discussion of argument ellipsis in Japanese, Saito (2008) cites Shinohara 2006 as an argument for the copy analysis and against the deletion analysis. Shinohara's argument is based on examples such as (7) (taken from Saito 2008:157):

(7) *Sono hon-o$_i$ Taroo-wa [Hanako-ga t_i katta   to]   itta si,
      that book-ACC Taro-TOP   Hanako-NOM bought that   said and
      sono hon-o$_j$ Ziroo-mo [~~Hanako-ga t_j katta   to~~]   itta.
      that book-ACC Ziro-also   Hanako-NOM bought that   said
      'Taro said that Hanako bought that book, and Ziro also said that she bought that book.'

(7) is a case of CP argument ellipsis, which we have already seen is possible in (6). (7) differs from (6) in that it involves scrambling out of the embedded clause. In particular, the embedded object *sono hon-o* 'that book-ACC' appears at the beginning of the sentence. In sharp contrast to (6), (7) is ruled out.

Shinohara (2006) claims that (7) cannot be accounted for by the deletion analysis. The trace within the elided clausal complement should not cause the ungrammaticality, because there are cases, such as sluicing in English (see (1)), where constituents containing traces can undergo ellipsis (at PF). Shinohara concludes that the interaction between ellipsis and scrambling poses a serious problem for the deletion analysis, suggesting that argument ellipsis involves LF-copying.

Saito (2008) puts forth an updated version of Shinohara's (2006) copy analysis, due to Kensuke Takita. The first question one must ask with respect to (7) is: what is the LF representation of the antecedent clausal complement which is eventually copied into the empty slot in the second conjunct? Saito adopts his earlier proposal that scrambling of the relevant

sort is undone at LF (Saito 1989). Given this proposal, the scrambled object will be put back to its original site. Then the embedded clause in the first conjunct will be copied into the empty position, leading to the following portion of LF representation:

(8) *sono hon-o   Ziroo-mo [Hanako-ga   sono hon-o   katta   to] itta
      that book-ACC Ziro-also Hanako-NOM that book-ACC bought that said
      'Ziro also said that Hanako bought that book'

(8) is supposed to be illegitimate because it contains two instances of the embedded object *sono-hon* 'that book.' In short, the LF-copy analysis, coupled with total reconstruction of scrambling, can explain the ungrammaticality of (7).

Saito (2008) goes on to mention that the LF-copy analysis can deal with the following example, which minimally differs from (7):

(9) Sono hon-o$_i$ Taroo-wa [Hanako-ga t_i katta   to]   itta si,
      that book-ACC Taro-TOP   Hanako-NOM bought that   said and
      Ziroo-mo [Hanako-ga   sono hon-o   katta   to]   itta.
      Ziro-also Hanako-NOM that book-ACC bought that   said
      'Taro said that Hanako bought that book, and Ziro also said that she
      bought that book.'

The difference between (7) and (9) lies in the presence/absence of scrambling in the second conjunct. Recall that the copy analysis assumes that the scrambled argument in the first conjunct occupies its θ-position in the embedded clause at LF. Then all you need to do to obtain a well-formed LF representation in (9) is to copy the embedded clause into the ellipsis site.

It is worth pointing out here that the copy analysis raises a serious conceptual question. As Saito (2008:158, fn. 4) mentions, Shinohara (2006) reaches the equivocal conclusion that argument ellipsis involves LF-copying whereas sluicing (not only in English but also in Japanese) involves PF-deletion.[5] An important question arises as to why there must

be a difference between the two kinds of ellipsis. More generally, one must ask whether UG permits two distinct operations that seemingly yield the same result (even within the same language). This issue of redundancy is especially acute because we are dealing with inaudible elements: children acquiring a language are supposed to have no direct evidence regarding silence. Ellipsis phenomena, then, should be a direct reflection of innate aspects of UG and, viewed from a minimalist perspective, must ideally be captured by a single linguistic mechanism.

Therefore, I propose to reanalyze data like (7) that led Shinohara and Saito to argue against the deletion account of argument ellipsis. I will show how (7) can be handled by the deletion analysis.

Notice that the above argument against PF-deletion hinges on the (tacit) assumption that scrambling (of the relevant kind), just like *wh*-movement in English, is syntactic movement (Saito 1985, 1989 among others). If this premise is wrong, then the argument does not hold. As a matter of fact, Ueyama (1998, 2003), based on various theoretical as well as empirical considerations, argues that long-distance scrambling of the kind involved in (7) is not syntactic movement but PF-movement. Her argument has gained substantial support from Hoji 1998, which compares Saito's approach to scrambling and Ueyama's in detail and concludes that the latter is empirically superior. Additional support for Ueyama's proposal has been provided by Sauerland and Elbourne (2002), who extensively argue that total reconstruction of the kind seen in (7) is a signature property of PF-movement. Furthermore, Nakamura (2009b) presents arguments in favor of Ueyama's theory based on what Nakamura (2009a:321) calls the Ellipsis Movement Generalization:

(10) *The Ellipsis Movement Generalization* (EMG):
     If a certain category can undergo ellipsis, it cannot undergo movement except when it is phonologically null.

Nakamura (2009b) shows that the behavior of argument DPs (and CPs) in Japanese in terms of ellipsis and scrambling complies fully with the EMG.

Let us assume then that the scrambling in (7) actually takes place not in syntax but in PF. Given this assumption, the deletion analysis can explain why (7) is ruled out. The reason is simple and straightforward. One cannot move anything that is not there in the first place. After PF-deletion of a constituent, nothing contained in that constituent can be affected by another PF-operation. In order for this account to work, it is crucial to assume that PF-deletion precedes PF-movement. This ordering is a natural consequence of Holmberg's (2001) phase-based analysis of ellipsis as nonpronunciation of domains that are spelled out cyclically (see Nakamura 2009a for extensions). The deletion theory of ellipsis makes the following prediction:[6]

(11) Syntactic movement can take place out of an ellipsis site, whereas PF-movement cannot.

(Long-distance) scrambling as PF-movement simply cannot take place out of an ellipsis site and that is exactly why (7) is excluded. Sluicing examples such as (1) are grammatical because *wh*-movement *is* syntactic and can successfully escape the spell-out domain targeted by ellipsis (see Bošković 2007 for relevant discussion).

The well-formedness of (9) poses no problem for the deletion analysis. This is because nothing precludes the PF-movement of the embedded object in the first conjunct. In LF the elided clause has exactly the same structure as its antecedent clause.

Therefore, the alleged argument against the deletion analysis is not valid, because it crucially makes the false assumption that long-distance scrambling takes place in syntax.

From the present perspective, one may hope to find evidence *for* the deletion analysis of argument ellipsis. It is instructive to observe the following examples, which highlight the nature of case under argument ellipsis (taken from Saito 2008:164):

(12) a.   Taroo-wa [zibun-no hahaoya-o] tazune, Hanako-wa   [~~zibun-no~~
        Taro-TOP   self-GEN mother-ACC visit   Hanakko-TOP self-GEN
        ~~hahaoya-ni~~] denwa-o   sita.
        mother-DAT phone-ACC did
        'Taro visited his mother, and Hanako called her mother.'

    b.   Taroo-wa [zibun-no hahaoya-ni] atta ga, Hanako-wa   [~~zibun-no~~
        Taro-TOP   self-GEN mother-DAT met but Hanakko-TOP self-GEN
        ~~hahaoya-o~~] oikaesita.
        mother-ACC chased-away
        'Taro met his mother, but Hanako chased her mother away.'

As these examples show, argument ellipsis does not require the case of the elided argument to match with that of its correlate (see also Oku 1998). In (12a) the dative argument undergoes ellipsis in spite of the fact that its correlate bears accusative case. In (12b) one finds the reverse situation where ellipsis targets the accusative argument, whose antecedent is the dative argument.

Adopting LF-copying, Saito (2008) suggests that the case feature of the antecedent must have already been checked and deleted before it is copied. If, for example, the antecedent DP with the dative case feature is copied into the second conjunct in (12b), there will necessarily be a clash in case: the predicate *oikaesu* 'chase away' only takes accusative objects. But if a copy with no case feature gets inserted into the second conjunct, a serious question arises as to how the accusative case feature on the verbal category, if any, can be checked and erased. Saito avoids this potential problem by siding with Chomsky (2000), who regards case as a side effect of ϕ-agreement. Thus for Saito, v does not possess any uninterpretable case feature to begin with and, as far as Japanese is concerned, it does not need to have an uninterpretable ϕ-feature, either (cf. Kuroda 1988).

However, the set of assumptions Saito makes leads to another problem surrounding case in Japanese, as he himself seems to admit (Saito 2008:164-165). Under Saito's analysis, case should only be optional in Japanese, simply because agreement is optional in the language. This is

clearly not true. Then the very existence of (DP) argument ellipsis seems problematic as long as one assumes the copy analysis.[7]

Data such as (12a,b) cease to be a problem if we adopt the deletion theory. All we need to do is to assume that case differences are ignorable for the purpose of argument ellipsis. This is a natural assumption, given the grammaticality of examples like the following (taken from Kehler 2002):

(13) a. This problem was to have been looked into, but obviously nobody
did [$_{VP}$ ~~look into this problem~~].

   b. Actually, I have implemented it (=a computer system) with a
manager, but it doesn't have to be [$_{VP}$ ~~implemented with a manager~~].

(13a,b) contain what Merchant (2008) calls voice mismatches. In (13a) the first conjunct is in passive voice, whereas the second one with VP-ellipsis is in active voice. In (13b), on the other hand, the antecedent clause is active, whereas the elided constituent is passive. What is noteworthy is the fact that the case mismatches regarding *this problem* in (13a) and *it* in (13b) are tolerated. In brief, case differences under ellipsis do not matter as long as DPs in question are properly licensed.

It is also worth pointing out that the fact that argument DPs in Japanese comply with the EMG (Nakamura 2009b) provides empirical support for the deletion analysis. As pointed out by Nakamura (2009a: 337-338), the negative correlation, captured by the EMG, between the possibility of ellipsis of a certain category and the impossibility of overt category movement of the same category is explainable in terms of a modified version of Transfer (Chomsky 2001, Hiraiwa 2003), which applies only to elements with phonological features (see Nakamura 2009a for details). This implies that elliptical processes in conformity with the EMG must involve PF-deletion of transferred categories. The copy analysis of ellipsis provides no principled reason why the EMG holds in the first place. Therefore, the conclusion is that argument ellipsis in Japanese is indeed a case of PF-deletion.

To sum up, the existent argument, originally due to Shinohara (2006),

for the copy analysis and against the deletion analysis is ill-founded. Furthermore, the copy analysis seems to face an inherent, case-related problem (highlighted by such examples of case mismatches as (12a,b)) in its dealing with argument ellipsis it is designed to account for. Also, one can construct an argument for the deletion analysis and against the copy one on the basis of the observation that the EMG successfully captures the relevant behavior of arguments in Japanese.

4. Sluicing

Section 3 has shown that the argument against the deletion analysis based on the interaction between argument ellipsis and scrambling is unwarranted. Let us now turn to sluicing in Japanese in search of evidence for the deletion theory and against the copy theory.

Merhcant (2001:146-158) critically examines the copy analysis of ellipsis defended by Chung *et al*. (1995), demonstrating that it has several empirical problems. For instance, he presents the following three kinds of evidence.

First, the LF-copy analysis fails to capture data where the content in the sluiced *wh*-phrase is incompatible with that of its correlate. Consider (14) (Merhcant 2001:150).

(14) a. She has five CATS, but I don't know how many DOGS.

b. We know which streets are being re-paved, but not which avenues.

As Merchant correctly points out, examples like (14) are problematic for the copy analysis because after copying the antecedent TP into the ellipsis site, the *wh*-phrase will necessarily have two different restrictions, leading to a semantic clash.

Secondly, there are cases where the alleged correlation between the indefiniteness of the correlate and the possibility of sluicing breaks down. Observe (15) (Merchant 2001:151).

(15) a. More than three of the boys quit, but I can't remember which/who.
    b. Most of the boys passed, but I don't know exactly how many.

Notice that the correlates in (15) *more than three of the boys* and *most of the boys* are not indefinite in the sense of Heim (1982) and hence do not introduce variables. Nevertheless, they qualify as legitimate correlates for the *wh*-phrases, contrary to what the copy approach predicts.

   Thirdly, Chung *et al.* (1995) cannot explain the form-identity effects discussed extensively by Merchant (2001) (see Ross 1969 for initial observations). Merchant (2001:91-92) reaches the following generalizations:

(16) *Form-identity generalization I: Case-matching*
    The sluiced wh-phrase must bear the case that its correlate bears.
(17) *Form-identity generalization II: Preposition-stranding*
    A language L will allow preposition stranding under the sluicing iff L allows preposition stranding under regular wh-movement.

The generalization in (16) can be illustrated by examples of sluicing such as (18) from German (Merchant 2001:89).

(18) Er   will   jemandem   schmeicheln, aber sie   wissen nicht,
      he   wants someone.DAT flatter   but   they know   not
      {*wer /   *wen   /   wem}.
        who.NOM   who.ACC   who.DAT
      'He wants to flatter someone, but they don't know who.'

In the above example, the correlate *jemandem* 'someone' bears dative case assigned by the verb *schmeicheln* 'flatter.' The remnant wh-phrase in the second conjunct must bear dative case in conformity with (16). (18) will be ruled out if the wh-phrase does not match with its correlate in case.[8] Merchant (2001) mentions that the case-matching effects are found in a variety of languages such as Greek, Russian, Polish, Czech, Slovene, Finnish, Hindi, Hungarian, Basque.

The generalization in (17) captures the sharp contrast between (19) and (20). (Merchant 2001:92-94):

(19) a.　Peter was talking with someone, but I don't know (with) who.

　　 b.　Who was he talking with?

(20) a.　Anna hat mit　jemandem gesprochen, aber ich　weiß nicht,

　　　　Anna has with someone　spoken　　　 but　I　　know not

　　　　*(mit) wem.

　　　　 with who

　　　　'Anna has spoken with someone, but I don't know (with) who.'

　　 b. *Wem hat sie mit gesprochen?

　　　　who has she mit spoken

　　　　'Who has she spoken with?'

As is well known, wh-movement can strand prepositions in English (see (19b)). (17) rightly predicts that preposition-stranding should also be possible under sluicing, as shown in (19a) where the preposition *with* can be omitted. Turning now to the German counterparts of (19a,b), we see in (20b) that German does not allow preposition-stranding. (20a) shows that German does not allow the wh-object of a preposition to stand alone under sluicing either and must be accompanied by the preposition, just as (17) expects. Merchant (2001) demonstrates that the correlation between regular wh-movement and sluicing in terms of the (im)possibility of preposition-stranding is observable in a number of languages (see Merchant 2001:91-107 for details).

The form-identity effects of this sort pose a serious problem for the copy theory of ellipsis in which the remnant wh-phrase never undergoes syntactic movement. It is far from clear how the case feature of the wh-remnant base-generated in Spec of CP is checked and why it must match with that of its correlate. Furthermore, the generalization regarding preposition-stranding is a mere coincidence under analyses utilizing LF-copying. The deletion theory, on the other hand, offers a principled reason why the generalizations in (16) and (17) should obtain.

Let us now see whether Merchant's arguments summarized above for the deletion analysis extend to sluicing in Japanese, which, under Hiraiwa and Ishihara's (2002) analysis, involves the wh-phrase moving to Spec of Focus Phrase (Rizzi 1997) headed by the (optional) copula and the nominalized complement of the Focus head undergoing deletion. First, consider the following examples, which mimic English (14a,b):

(21) a. Kanozyo-wa go-hiki-no   NEKO-o katteiru kedo,
         she-TOP   five-CL-GEN cat-ACC   keep   but
         boku-wa   nan-biki no   INU-o   (da) ka (wa) sira-nai.
         I-TOP   what-CL-GEN dog-ACC COP Q   TOP know-not
         'She keeps five CATS, but I don't know how many DOGS.'
      b. Boku-wa   dono sinkansen-ga   seibisareteiru   ka sitteiru
         I-TOP   which Shinkansen line-NOM being.construted Q know
         kedo, dono kokudoo-ga   (da) ka (wa) sira-nai.
         but   whch national road-NOM COP Q   TOP know-not
         'I know which Shinkansen (bullet train) lines are being
         constructed, but not which national roads.'

As shown above, the Japanese counterparts of (14a,b) are grammatical. Thus, they pose the same kind of problem that (14a,b) do for approaches that posit LF-copying.

Consider (22a,b) in connection to Merchant's second argument:

(22) a. San-nin izyoo-no   gakusei-ga   taigakusita kedo,
         three-CL more.than-GEN student-NOM   dropped out but
         boku-wa   dare-ga   (da) ka oboetei-nai.
         I-TOP   who-NOM COP Q remember-not
         'More than three of the students dropped out, but I don't
         remember who.'

b. Hotondo no gakusei-ga   gookakusita kedo, boku-wa
   most-GEN   student-NOM passed   but   I-TOP
   seikakuni nan-nin   (da) ka sira-nai.
   exactly   what-CL COP Q know-not
   'Most of the students passed, but I don't know exactly how many.'

(22a,b) are similar to English (15a,b), respectively. In (22a) the subject containing *izyoo* 'more than' is the correlate of the wh-phrase, whereas in (22b) that containing *hotondo* 'most' is. These subjects are not semantically indefinite and hence should not license ellipsis under the copy analysis, contrary to fact. Thus (22a,b) constitute additional piece of evidence against LF-copying.

Turning now to form-identity effects in Japanese, observe the following examples:

(23) Kare-wa   dareka-ni   atta ga, boku-wa dare{*-ga / *-o / -ni}
     he-TOP   someone-DAT met but I- TOP   who-NOM/ACC/DAT
     (da)   ka   sira-nai.
     COP   Q   know-not
     'He met someone, but I don't know who.'
(24) Ken-wa   dareka-kara   tegami-o   moratta ga,   boku-wa
     Ken-TOP   someone-from letter-ACC   received but   I-TOP
     dare(-kara) (da)   ka   sira-nai.
     who(-from) (COP) Q   know-not
     'Ken received a letter from someone, but I don't know (from) who.'

(23) is similar to German (18) in that the case of the remnant wh-phrase in sluicing must be the same as that of its correlate. In particular, *dare* 'who' must bear dative case rather than nominative or accusative one.[9] This suggests that Merchant's original argument, based on (16), against the copy analysis extends to Japanese.[10]

(24) is related to the generalization in (17), though Japanese has postpositions rather than prepositions. Superficially, Japanese appears to

pattern with English (see (19)) because the postposition *kara* 'from' in (24) is optional. However, Japanese does not allow anything like postposition stranding.[11]

(25) *Dare$_i$ Ken-wa t_i kara   tegami-o   moratta no?
      who Ken-TOP   from   letter-ACC received Q
      Lit. 'Who, Ken received a letter from?'

Is (24) a counterexample to (17)? In fact, it is not. Consider (26).

(26) Ken-wa   dareka-kara   tegami-o   moratta ga, boku-wa
      Ken-TOP   someone-from letter-ACC   received but I-TOP
      sore-ga   dare (da)   ka sira-nai.
      it-NOM   who (COP) Q know-not
      Lit. 'Ken received a letter from someone, but I don't know who it is.'

Notice that the first conjunct in (24) and that in (26) are identical. Unlike (24), (26) is not a genuine case of sluicing. Specifically, its wh-phrase functions as a predicate, with the subject position occupied by a pronominal expression *sore* 'it.' (24) with the wh-remnant without the postposition can be derived by dropping the pronominal subject, Japanese being a *pro*-drop language. Thus, (24) is not problematic for (17), but at the same time, it cannot be used to argue against the copy analysis.

 In a nutshell, Merchant's (2001) arguments against the copy analysis of sluicing are valid even in Japanese except the one based on preposition stranding.

5. Conclusion

 To recapitulate, I have presented a short case study of the two types of elliptical processes in Japanese, argument ellipsis and sluicing, in relation to the controversy over whether ellipsis involves PF-deletion or LF-copying. It

has been argued contra Shinohara (2006), Saito (2008) and others that they are both derived by PF-deletion, supporting Merchant's (2001) general approach to ellipsis.

As noted in passing above, this is a desirable outcome from the viewpoint of language acquisition for familiar reasons and points to the strong hypothesis that all instances of ellipsis in all languages are in fact nonpronunciation of transferred materials at PF. Certainly, more work needs to be done to verify the hypothesis.

Notes

1. See Merchant 2001 for detailed discussion of the licensing conditions imposed on ellipsis.
2. The following abbreviations are used in the glosses:

ACC-accusative	CL-classifier	COP-copula	DAT-dative
GEN-genitive	NOM-nominative	Q-question marker	TOP-topic

Throughout the rest of the paper, ellipsis is indicated only by strikethrough.
3. Thus Oku's analysis is slightly different from the one that posits empty categories (see Chung *et al*. 1995, Lobeck 1995).
4. Oku (1998) argues that English does not allow argument ellipsis because θ-features in the language are "strong." However, his account, inspired by Bošković and Takahashi 1998, is untenable for both theoretical and empirical reasons (see Nakamura 2009b). This implies that Saito's (2008) elaboration of Oku's proposal is not fully workable (see below). I must leave open the important question of what distinguishes between languages that allow argument ellipsis and those that do not, but I suspect that the distinction between syntactic Case and morphological case might play a role (see note 7).
5. See note 10.
6. I must relegate a careful examination of (11) beyond Japanese scrambling to future work.

7. Saito (2008:165) alludes to a departure from Chomsky 2000 and writes "even if overt DPs are introduced into a derivation with uninterpretable Case features, the discussion so far suggests that the main role of those features is not to accommodate agreement and further, that those features are not deleted through agreement." A way out for Saito suggests itself. In particular, one can assume following the basic intuition of Kuroda (1965) that case in Japanese is not a matter of syntax or LF but a matter of PF (see Harada 2002 for an implementation of this idea within the minimalist context). Then it is only natural that case has nothing to do with agreement in syntax or copying at LF.

8. Unlike in Japanese (12) and English (13), case mismaches are never permitted under sluicing because the elided constituent contains exactly the same predicate in the same voice as the one in the antecedent clause.

9. The case-marker on the wh-phrase can in fact be dropped because (23) has an alternative derivation where the wh-phrase is used as a predicate. See (26) below.

10. Recall that the copy analysis must assume that under argument ellipsis, case features are not present at LF (because of case mismaches). If one wants to apply the analysis to sluicing, it must be assumed that case features *are* somehow present at LF (because of case-matching). This means that the copy analysis fails to provide a unified account of argument ellipsis and sluicing (cf. Shinohara 2006).

11. One may ask about the nature of the clause-internal scrambling in (25): does it take place in syntax or PF? I assume with Ueyama (1998, 2003) that short scrambling can be either syntactic (making use of a null operator) or phonological (see Nakamura 2009b for relevant discussion). In the present context, what matters is that syntactic short scrambling does not allow postposition-stranding.

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