How Large Can Elliptical Arguments Be in Japanese?

Abstract: This paper addresses the previously unexplored question of how large elliptical arguments can be in Japanese with special reference to Case. Evidence from the absence of the intervention effect exhibited by null objects in the context of genitive subjects in Japanese (Hiraiwa 2000; Miyazawa 2001; Saito 2004) as well as Case mismatches between antecedent and elliptic arguments (Oku 1998; Saito 2004, 2007) indicates that elliptical objects in Japanese do not need to check Case, a pattern which naturally falls out from the LF-copy Theory of argument ellipsis advanced in the recent literature on Japanese ellipsis (Oku 1998; Kim 1999; Saito 2007; Takahashi 2008a, b, 2014). However, I present novel data bearing on the interaction of the so-called *Double-o Constraint* (Harada 1973; Shibatani 1973; Kuroda 1978) with sloppy/quantificational interpretations of elliptic arguments (Oku 1998; Takahashi 2008a, b) to show that elliptical objects are actually Case-marked under certain syntactic circumstances such as causative constructions. To account for these apparently conflicting observations regarding Case under argument ellipsis, I propose that LF-Copy can apply freely either to an NP without Case or a KP with Case (Bittner and Hale 1996), with illegitimate derivational choices being ruled out by independently motivated LF constraints in Japanese.

1. Introduction

Previous works (see Oku 1998, Kim 1999, Saito 2007, and Takahashi 2008a, b, 2014, among others) have amassed a considerable variety of arguments showing that certain instances of null arguments in Japanese cannot be dealt with by the traditional uniform *pro*-analysis (Kuroda 1965; Ohso 1976; Hoji 1985; Saito 1985), but instead must be analyzed through argument ellipsis, whether it is implemented in terms of PF-deletion or LF-copy. One important question which has heretofore not received enough theoretical attention in the

relevant literature, however, is the precise nature and size of the elliptical arguments in connection with Case marking: do those argument NPs get elided with their Case properties included, or do they get elided on their own to the exclusion of Case properties? To the best of my knowledge, Saito (2004) is the only study to address this important question. Hiraiwa (2000) and Miyazawa (2001) observe that the so-called transitivity restriction in the nominative-genitive conversion (Harada 1971, 1976; Watanabe 1996; Ochi 2001, 2009; Maki and Uchibori 2008; Miyagawa 2011) – the inability of the direct object to be marked with the accusative case *–o* in the presence of the genitive subject – is lifted when the object in question is unpronounced. Saito (2004) argues that this observation straightforwardly falls out from the argument ellipsis analysis of null objects in Japanese, according to which NPs are copied onto the elliptic object position without Case. Saito (2007) points out that this analysis is further supported by the observation (see also Oku 1998) that the antecedent NPs and corresponding elliptic NPs do not need to bear the same morphological case, a pattern which also follows if argument ellipsis applies to NPs themselves to the exclusion of Case.

Against this background, the present paper provides novel examples to show that there are constructions such as syntactic causatives in which elliptical objects must undergo argument ellipsis together with their Case features, contrary to Saito's conclusion. Oku (1998) and Takahashi (2008a, b) show that null arguments which exhibit sloppy/quantificational interpretations are derived by argument ellipsis. Using this interpretive property as an important diagnostic tool for argument ellipsis and the so-called Double-*o* Constraint (Harada 1973; Shibatani 1973; Kuroda 1978), I show that those null objects which exhibit sloppy/quantificational interpretations must be Case-marked in the syntactic causative construction. I propose then that argument ellipsis may freely apply to either an NP (without Case) or a KP (with Case) in Japanese, with unwanted derivational results being independently excluded by LF interface constraints. As one of the important

theoretical consequences, the present analysis suggests that the Double-*o* Constraint as observed in syntactic causative constructions must be formulated as an LF constraint, a conclusion which receives independent support from Poser's (2002) observation that the relevant constraint persists even when the direct object of the embedded transitive verb is topicalized and hence has its surface accusative case particle omitted.

2. Argument Ellipsis in Japanese: Evidence from Sloppy/Quantificational Interpretations

As stated in the previous section, various researchers working on elliptical arguments in Japanese over the last 15 years or so (see the works cited at the beginning of section 1) have produced considerable empirical evidence that certain instances of such arguments in this language cannot be wholly accounted for by *pro*, but instead must be analyzed in terms of ellipsis which directly applies to arguments themselves. Here, I review two of the central arguments for this argument ellipsis theory based on sloppy (Oku 1998) and quantificational interpretations (Takahashi 2008a, b) of null arguments. Consider first Examples (1). [1]

(1) a. Taroo-wa zibun-no sensei-o sonkeisiteiru.
Taro-TOP self-GEN teacher-ACC respect
'Taro respects three teachers.'

b. Ziroo-mo *e* sonkeisiteiru. (strict/sloppy)
Jiro-also respect
'*Lit.* Jiro also respects *e*.'

c. Ziroo-mo *kare-o* sonkeisiteiru. (strict/*sloppy)
Jiro-also he-ACC respect
'Jiro also respects him.'

[1] Abbreviations: ACC, accusative; CAUS, causative; CL, classifier; COP, copular; DAT, dative; GEN, genitive; NOM, nominative; PASS, passive; PAST, past tense; TOP, topic marker.

Let us suppose that the elliptical construction in (1b) is preceded by the full-fledged construction in (1a) so that the null object in the former is understood as anaphoric to the overt object in the latter. In this context, the null object allows both strict and sloppy interpretations. In other words, the sentence in (1b) can mean either that Jiro respects Taro's teacher (the strict interpretation) or that Jiro respects his own (= Jiro's) teacher (the sloppy interpretation). The example in (1c) shows that the overt pronoun *kare-o* 'he-ACC' only yields the strict interpretation. Under the reasonable heuristic assumption that the syntactic and semantic properties of null pronouns mirrors those of overt pronouns, the sloppy interpretation of the elliptical object in (1b) cannot be accounted for by the uniform *pro*-analysis (Kuroda 1965; Ohso 1976; Hoji 1985; Saito 1985), for the overt pronoun may not give rise to the sloppy interpretation. Oku (1998) proposes then that null objects with the sloppy interpretation, like the one in (1b), are derived by copying the overt antecedent object from (1a) onto the elliptical object position in (1b) at LF in the manner schematically represented in (2).

(2) LF: Taroo-wa [$_{NP}$ zibun-no sensei-o] sonkeisiteiru.
Taro-TOP self-GEN teacher-ACC respect
'Taro respects three teachers.'
LF: Ziroo-mo [$_{NP}$ zibun-no sensei-o] sonkeisiteiru.
Jiro-also respect
'Jiro also respects self's (= Jiro's) teacher.'

The sloppy interpretation in (1b) obtains when *zibun-no sensei*' self's teacher' is copied onto the elliptic object site, as shown in (2), so that the reflexive anaphor *zibun* 'self' may be bound to the subject *Ziroo* 'Jiro' in the elliptical clause subsequent to the application of LF-

copy. Here and throughout this paper, I follow Oku's (1998) implementation of argument ellipsis through LF-Copy, unless the distinction between this and the PF-deletion alternative becomes pertinent (see note 2). See Shinohara (2006) and Saito (2007) for an empirical argument for the LF-copy theory of argument ellipsis from the interaction of long-distance scrambling with CP ellipsis.

Takahashi (2008a, b) shows that the argument ellipsis theory is further motivated by what he calls the *quantificational* interpretation of null arguments. This interpretation is illustrated in (3b).

(3) a. Taroo-wa san-nin-no sensei-o sonkeisiteiru.
Taro-TOP three-CL-GEN teacher-ACC respect
'Taro respects three teachers.'

b. Ziroo-mo *e* sonkeisiteiru. (E-type/quantificational)
Jiro-also respect
'*Lit.* Jiro also respects *e*.'

c. Ziroo-mo *karera-o* sonkeisteiru. (E-type/*quantificational)
Jiro-also they-ACC respect
'Jiro also respects them.'

Takahashi points out that the null object construction in (3b), which is intended to follow the full-fledged construction in (3a), has two interpretations, the second of which is of our primary interest. One is the E-type interpretation (Evans 1980) according to which Taro and Jiro respect the same set of three teachers. The other is the quantificational interpretation where the set of three teachers whom Taro respects may differ from the set of three teachers whom Jiro respects. The E-type interpretation is easily explained by the *pro*-analysis, for the

overt pronoun *karera-o* 'they-ACC' independently allows this interpretation, as shown in (3c). The drawback of the *pro*-analysis is that the quantificational interpretation in (3b) would remain mysterious under this analysis, for the overt pronoun cannot yield this interpretation, as shown in (3c). Takahashi shows that the quantificational interpretation is accommodated rather straightforwardly by the argument ellipsis theory. According to this theory, the elided argument position in (3b) is reconstructed at LF by copying the overt object argument from (3a) to that position in the same manner as shown in (2). Then, it comes as no surprise that the LF-copied quantified phrase *san-nin-no sensei-o 'three-teachers*' in (3b) may behave independently from its antecedent in (3a) in terms of quantification. Thus, the quantificational interpretation of a null argument presents itself as a solid litmus test for the application of argument ellipsis/LF-Copy in Japanese.

In this section, I have reviewed two central empirical arguments for the argument ellipsis theory of null arguments in Japanese based on sloppy and quantificational interpretation. We have seen that null objects which exhibit these interpretations are produced by copying an antecedent object onto the elliptic object position at LF, as shown in the schematic LF representation in (2). Note that I have assumed in (2) without argument that what is copied at LF is the NP, together with the accusative Case feature (i.e., *zibun-no sensei-o* 'self's teacher-ACC' instead of *zibun-no sensei* 'self's teacher'). This assumption is not at all innocuous. In fact, in the next section, we will review Saito's (2004) evidence from the nominative-genitive conversion and case-mismatch effects under argument ellipsis, which shows that the target of the argument ellipsis/LF-Copy is actually the NP *without* (accusative) Case.

3. Nominative-Genitive Conversion in Japanese and (the Lack of) Intervention Effects

It is well-known that the subject NP, which is otherwise marked with the nominative case particle *–ga*, can be optionally marked instead with the genitive case *–no* when it occurs

within a prenominal sentential modifier (Harada 1971, 1976; Watanabe 1996; Ochi 2001, 2009; Maki and Uchibori 2008; Miyagawa 1993, 2011; Hiraiwa 2000). This nominative-genitive conversion is illustrated in (4a). This case conversion is restricted to prenominal sentential modifiers, for the genitive subject option is blocked in a regular declarative clause, as shown in (4b).

(4) a. Taroo-ga/-no ai-ni itta hito
Taro-NOM/-GEN see-to went person
'the person whom Taro went to see'
b. Taroo-ga/*-no hito-ni ai-ni itta.
Taro-NOM/-GEN person see-to went
'Taro went to see a person.'

Among several syntactic restrictions observed with the nominative-genitive conversion in Japanese is the descriptive generalization (cf. Harara 1971, 1976; Shibatani 1978; Watanabe 1996; Miyagawa 2011) that accusative objects are disallowed in the presence of genitive subjects. This transitivity restriction is illustrated in (5).

(5) a. Taroo-ga hon-o katta mise
Taro-NOM book-ACC bought shop
'the shop where Taro bought a book'
b.* Taroo-no hon-o katta mise
Taro-NOM book-ACC bought shop
'the shop where Taro bought a book'

c. Taroo-ga/-no kinoo itta tokoro

Taro-NOM/-GEN yesterday went place

'the place where Taro went yesterday'

d. Taroo-ga/-no$_i$ t_i taihos-are-ta tokoro

Taro-NOM/-GEN arrest-PASS-PAST place

'the place where Taro was arrested'

e.* Hon-o$_i$ Taroo-ga/*-no t_i katta mise

book-ACC Taro-NOM/-GEN bought shop

'the shop where Taro bought a book'

((5a, b) from Saito (2004:103), (5c, d, e) from Saito (2004:107))

The contrast between (5a) and (5b) shows that, when the subject is marked with the genitive case *–no*, the direct object cannot be marked with the accusative case *–o*. This intervention effect created by the genitive subject is circumvented when the intervening expression is adverbs like *kinoo* 'yesterday', as shown in (5c), as they do not check accusative Case. The example in (5d) shows that the NP trace also does not bring about the intervention, again, as predicted, since the trace is not marked with the accusative Case. By contrast, the trace of the scrambling chain does induce the intervention effect, as shown in (5e). This pattern also makes sense as the tail of the relevant chain requires accusative Case checking. Hiraiwa (2000) and Saito (2004) present analyses of the intervention effect illustrated in (5), as shown in (6) and (7), respectively, both of which crucially hinge on the assumption that the accusative Case feature of *v* somehow cannot co-occur with the genitive Case feature of the adnominal T.

(6) Spell-out of morphological accusative case by *v* triggers nominative Case checking on T in the next strong phase. (Hiraiwa (2000: 114))

(7) When an adnominal T checks genitive, it absorbs the Case-feature of *v*.

(Saito (2004:106))

Notably, Hiraiwa (2000) and Miyazawa (2001) point out that the intervention effect illustrated in (5) is lifted when the accusative object is null, as illustrated by the contrast between (8a) and (8b).

(8) a. John-ga/*-no hon-o kasita hito
John-NOM/-GEN book-ACC lend-PAST person
'the person whom John lent a book'

b. John-ga/-no e_{DP} kasita hito
John-NOM/-GEN lend-PAST person
'the person whom John lent (a book)' (Hiraiwa (2000:114))

The example in (8a) illustrates the transitivity restriction induced by the genitive subject. The example in (8b) shows that this restriction does not hold when the object is phonetically unrealized. Examples (9 –12) from Miyazawa (2001) further confirm this observation.

(9)Ziroo-ga hazimete Nagoya-ni kuru-node, minna-ga iroirona basho-ni
Jiro-NOM for the first time Nagoya-to come-since everyone-NOM various place-to
kare-o tureteiku yotei-desu.
he-ACC take plan-COP
'Since Jiro is coming to Nagoya for the first time, the plan is for everyone to take him to various places.' (Miyazawa (2001), as cited in Saito (2004:108))

(10) Hanako-ga/*-no *Ziroo-o* tureteiku tokoro-wa Nagoya-zyoo-desu.
Hanako-NOM/GEN Jiro-ACC take place-TOP Nagoya-castle-COP
'The place that Hanako is taking Jiro is the Nagoya Castle.'

(Miyazawa (2001), as cited in Saito (2004:108))

(11) Hanako-ga/*-no *kare-o* tureteiku tokoro-wa Nagoya-zyoo-desu.
Hanako-NOM/GEN he-ACC take place-TOP Nagoya-castle-COP
'The place that Hanako is taking him is the Nagoya Castle.'

(Miyazawa (2001), as cited in Saito (2007:221))

(12) Hanako-ga/-no e_{DP} tureteiku tokoro-wa Nagoya-zyoo-desu.
Hanako-NOM/GEN take place-TOP Nagoya-castle-COP
'The place that Hanako is taking (him) is the Nagoya Castle.'

(Miyazawa (2001), as cited in Saito (2004:108))

The examples in (10–12) are all intended as utterances to follow the one in (9). The example in (10) illustrates the standard case of the intervention effect on the accusative-marked object (i.e., *Ziroo-o* 'Jiro-ACC') created by the genitive subject, on a par with the examples in (5b, e) and (8a) (with the genitive subject). The example in (11) shows that the same effect remains when the proper name object is replaced by the overt pronoun (i.e., *kare-o* 'he-ACC'). Interestingly, however, the effect is lifted when the pronoun is replaced by the null object, as shown in (12).

The lack of the intervention effect in (8b) and (12) appears to be quite surprising under the traditional *pro*-theory of null arguments. It is standardly assumed that *pro* is nothing but the unpronounced variant of an overt pronoun which happens to have no phonetic content so that

the syntactic properties of the former closely mirror those of latter, including Case. Under this standard assumption, then, the *pro*-theory would predict that the examples in (8b)/(12) with the null object should induce the intervention effect on a par with the example in (11) with the overt pronoun.

Saito (2004) propose that the absence of the intervention effect with empty objects with genitive subjects follows if they are not *pro*'s, but instead are derived by argument ellipsis. Given the transitivity restriction otherwise imposed on accusative-marked direct objects in genitive subjects, the grammaticality of the examples in (8b)/(12) shows that null objects do not need to check Case. This possibility, Saito argues, is nicely accommodated if argument ellipsis targets NPs themselves. Suppose that the null object position in these examples is reconstructed at LF by copying the overt antecedent object (i.e., *hon-o* 'book-ACC' in (8b) and *Ziroo-ga* 'Jiro-NOM' in (12)) onto that position. Since the copied NPs must have already have their Case checked against appropriate functional heads (either T or *v*), their Case checking requirements are already met before LF-copy takes place. Consequently, the copied NPs do not have Case. It follows then that the null objects in (8b) and (12) do not induce the intervention effect.[2]

There is an independent piece of evidence from case mismatches between antecedent and elliptical NPs (Oku 1998; Saito 2004, 2007) to support the view that LF-copied objects do not need to have their Case feature checked. Let us first note that the transitive verb

[2] In this paper, I assume Saito's (2004) analysis of the absence of the intervention effect with null objects vis-à-vis overt objects in terms of LF-copy. This is not meant to imply that the PF-deletion approach is inconsistent with the paradigm discussed thus far. Saito (pp. 112 –114) actually argues that the same effect is derived under the PF-deletion theory of null objects, when coupled with the notion of PF-repair (Lasnik 1995, 2001). Suppose that the Case feature of the direct object must be checked and deleted so that it is interpreted properly in the PF component. Then, the standard cases of intervention effect illustrated in (5b, e), (8a), (10) and (11) are due to the fact that the direct objects cannot have their uniterpretable accusative Case feature checked against the *v* head, which does not have the accusative Case checking ability, as per the co-occurrence restriction on genitive and accusative Cases stated as in (7). The lack of the intervention effect illustrated in (8b) and (12), on the other hand, obtains because PF-deletion underlying object ellipsis removes the uninterpretable Case feature of the null direct object from the PF-representation, thereby saving the derivation from crashing in the PF component.

denwasuru 'call' selects a dative argument, but not an accusative argument, as its idiosyncratic case-marking property, as shown in (13).

(13) Hanako-wa zibun-no hahaoya-ni/*-o denwasita.
Hanako-TOP self-GEN mother-DAT/-ACC called
'Hanako called her mother.' (adopted from Saito (2007: 217))

Keeping this property in mind, consider now Example (14). This example allows the sloppy interpretation where Hanako called her own (= Hanako's mother). Given our results in section 2, this reading ensures that the elliptic object in the second clause is derived by argument ellipsis/LF-copy. Importantly, if we were to copy the antecedent NP object *zibun-no hahaoya-o* 'self's mother-ACC' including its Case feature, the sentence should be incorrectly ruled out because we have just seen that *denwasuru* 'called' requires a dative NP.

(14) Taroo-wa zibun-no hahaoya-o tazune, Hanako-wa e_{DP} denwasita. (sloppy)
Taro-TOP self-GEN mother-ACC visit Hanako-TOP called
'Taro visited his mother, and Hanako called her mother.'
(adopted from Saito (2007: 217))

The grammaticality of the example in (14), then, indicates that the target of argument ellipsis does not need to be checked for Case at LF.

4. How Large Can Elliptical Arguments be in Japanese?

In the previous section, I have reviewed Saito's (2004, 2007) argument from the lack of the intervention effect with null objects in the nominative-genitive conversion and case

mismatches between antecedent and elliptical NPs in favor of the view that argument ellipsis or LF-copy applies to argument NPs themselves without Case. In this section, I introduce novel examples showing that this conclusion is not always correct. More specifically, I present evidence, based on the interaction of the so-called *Double-o Constraint* with the sloppy/quantificational interpretations of null arguments, that LF-copy targets NPs inclusive of their Case feature in syntactic causative constructions. To account for the apparently conflicting results discussed in the previous and current sections, I propose that LF-copy may freely apply to either NPs (without Case) or KPs (with Case), with unwanted derivational choices being correctly blocked by independently motivated LF constraints active in Japanese grammar.

4.1. *LF-Copy Involves NPs with Case: Evidence from the Double-*o *Constraint*

It is well-known in the literature on Japanese syntax (Harada 1973; Shibatani 1973; Kuroda 1978) that Japanese syntactic causatives are subject to the Double-*o* Constraint. One version of this constraint is formulated as shown in (15).

(15) The Double-*o* Constraint (Harada 1973; Shibatani 1973; Kuroda 1978)

There cannot be more than one DP marked with accusative Case in a single clause.

To see how this constraint works in syntactic causative constructions, consider Examples (16).

(16) a. Taroo-ga Ziroo-ni/-o Tokyo-e ik-ase-ta.

Taro-NOM Jiro-DAT/-ACC Tokyo-to go-CAUS-PAST

'Taro made Jiro go to Tokyo.'

b. Taroo-ga Ziroo-ni/*-o ronbun-o yom-ase-ta.
Taro-NOM Jiro-DAT/-ACC article-ACC read-CAUS-PAST
'Taro made Jiro read an article.'

When the embedded verb is an intransitive verb, such as *ik* 'go', the causee argument can be marked with either the dative case *–ni* or the accusative case *–o*, as illustrated in (16a). However, when the embedded verb is a transitive verb, such as *yom* 'read', which selects an accusative theme argument, the causee argument is marked with the dative case, but cannot be marked with the accusative case, as shown in (16b). This example thus violates the Double-*o* Constraint.

Keeping this Double-*o* Constraint in mind, let us now consider Examples (17–18).

(17) Taroo-wa insei-ni zibun-no ronbun-o inyoos-ase-ta-ga, Ziroo-wa
Taro-TOP graduate student-DAT self-GEN article-ACC cite-CAUS-PAST-but Jiro-TOP
gakubusei-ni/*-o e_{DP} inyoos-ase-ta. (?strict/sloppy)
undergraduate student-DAT/-ACC cite-CAUS-PAST
'Intended: Taro made his graduate students cite his article, but Jiro made his undergraduate students cite his article.'

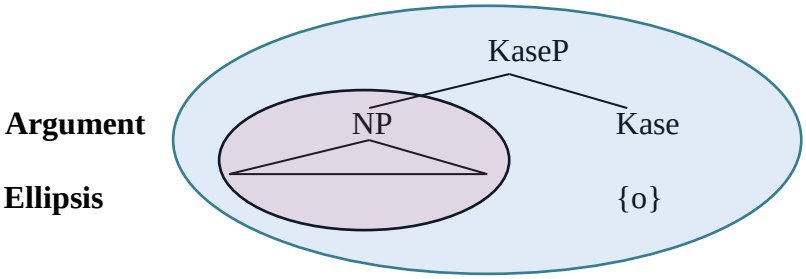
(18) Taroo-wa insei-ni san-bon-no ronbun-o inyoos-ase-ta-ga,
Taro-TOP graduate student-DAT three-CL-GEN article-ACC cite-CAUS-PAST-but
Ziroo-wa gakubusei-ni/*-o e_{DP} inyoos-ase-ta. (?E-type/quantificational)
Jiro-TOP undergraduate student-DAT/-ACC cite-CAUS-PAST
'Intended: Taro made his graduate students cite three articles, but Jiro made his undergraduate students cite three articles.'

The example in (17) allows the sloppy interpretation for the null object of the embedded transitive verb whereby Jiro made his undergraduate students cite his own (=Jiro's) article. Similarly, the example in (18) allows the quantificational interpretation for the null object within the embedded clause whereby Jiro made his undergraduate students cite the set of three papers which may differ from the set of three papers that Taro made his graduate students cite. Recall from section 2 that the availability of sloppy/quantificational readings for null objects diagnoses them as being derived through argument ellipsis/LF-Copy. The presence of the sloppy/quantificational interpretations in (17–18), therefore, means that the elided objects, designated here as e_{DP}, are not instances of *pro*'s, but instead must be the product of argument ellipsis/LF-copy. Suppose here that LF-copied objects do not need to check (accusative) Case, as argued by Saito (2004) on the basis of the lack of the intervention effect with null objects within genitive subject sentences. Then, we would wrongly predict that the causee argument in (17–18) (i.e., *gakubusei* 'undergraduate student') should be able to be marked with the accusative Case, without any problem, because the examples would only involve one accusative Case in a single clause, in conformity with the formulation of the Double-*o* Constraint in (15). Therefore, the persistence of the relevant effect in (17–18) leads us to the conclusion, opposite from the one reached by Saito (2004), that LF-copied objects do need Case.

4.2. *The Silent Syntax of Elliptical Arguments in Japanese: NPs or KPs*

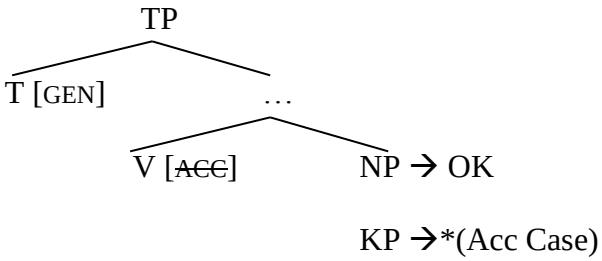
I propose that argument ellipsis in Japanese may freely apply to the NP (without Case) or the KP (with Case) which constitutes an extra layer for the NP, as shown in (19).

(19) The Silent Syntax of Elliptical Arguments in Japanese

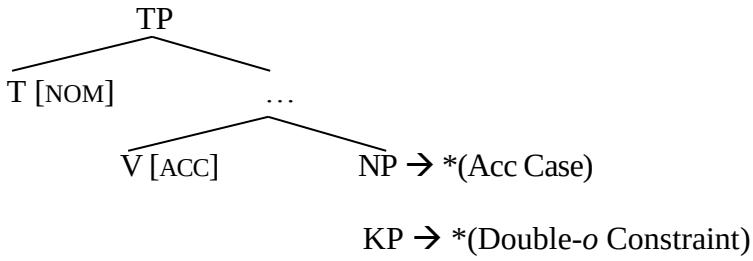


Let us see how this new approach to the size of the elliptical arguments can account for the conflicting results reached in sections 3 and 4.1. (20) is the partial LF-representation illustrating the absence of the intervention effect with null objects in genitive subject constructions whereas (21) is the partial LF-representation involving the persistence of the Double-*o* Constraint with null objects in syntactic causative constructions.

(20)



(21)



Let us assume that (abstract) Accusative Case feature (designated here as [ACC]) must be checked by LF in Japanese. If we copy the NP into the null object position in (20), the derivation converges, for the verb does not have the Accusative Case feature to be checked

(recall (7)). If we copy the KP into the same position, on the other hand, the derivation crashes since the Accusative Case feature of the KP remains unchecked at LF. The grammaticality of the examples in (8b) and (12) thus follows from the LF-copy of the NP, an option independently available in Japanese grammar, as shown in (19). Turning now to the derivation in (21), the NP-copy option would result in the derivational crash, because the Accusative Case feature of the verb remains unchecked. The KP-copy option would check/delete the verb's Case feature, but then the derivation ends up violating the Double-*o* Constraint at LF. Thus, neither the KP nor NP-deletion, which is in principle available in Japanese argument ellipsis, yields a convergent result. Consequently, the ungrammaticality of the examples in (17) and (18) ensues.

Note that my current analysis crucially hinges on the assumption that checking/deletion of the Accusative Case feature takes place at LF in Japanese. Poser (2002) presents an independent piece of evidence in favor of this assumption. In Japanese, topicalization of an accusative-marked DP results in the obligatory deletion of the accusative particle, as shown in (22).

(22) a. Kiyoto-ga kurusi-o non-da.
Kiyoko-NOM medicine-ACC drink-PAST
'Kiyoko drank the medicine.'

b. Kusuri-wa Kiyoko-ga non-da.
medicine-TOP Kiyoko-NOM drink-PAST
'As for the medicine, Kiyoko drank.'

c.* Kusuri-o-wa Kiyoko-ga non-da.
medicine-TOP Kiyoko-NOM drink-PAST
'As for the medicine, Kiyoko drank.'

The example in (22a) shows that the verb *nom* 'drink' selects an accusative-marked object. When this object is topicalized to the clause-initial position, the object ends up only with the topic-marker *–wa* without the accusative case marker *–o*, as illustrated in (22b). The example in (22c) shows that the two markers cannot co-occur following the topicalized NP.

With this property in place, let us consider how the Double-*o* Constraint plays out when one of the accusative case markers is eliminated by NP-topicalization.

(23) a. Isao-ga Kiyoko-ni/*-o kusuri-o nom-ase-ta.
Isao-NOM Kiyoko-DAT/-ACC medicine-ACC drink-CAUS-PAST
'Isao made Kiyoko drink the medicine.'

b. Kusuri-wa Isao-ga Kiyoko-ni/-*o t_i nom-ase-ta.
medicine-TOP Isao-NOM Kiyoko-DAT/-ACC drink-CAUS-PAST
'As for the medicine, Isao made Kiyoko drink it.' (Poser (2002:5))

(23a) is a standard case of the Double-*o* Constraint violation. Crucially, (23b) manifest the same violation even though the accusative case particle *–o* is removed from the topicalized object through DP-topicalization. The ungrammaticality of (23b) would remain mysterious if the constraint were to be stated at PF, since then the derivation of this example would not involve two instances of accusative Case within a single clause. The pattern straightforwardly falls out, on the other hand, once we assume that the Double-*o* Constraint is active at LF; the topicalized DP *kusuri* 'medicine' bears abstract Accusative Case feature in the object position which must be checked at LF. It thus comes as no surprise that the relevant effect remains irrespective of the surface manifestations of the accusative Case feature.

Finally, let us see how my proposed analysis can take care of the case-mismatch effect discussed in section 3. The relevant example is repeated here.

(24) Taroo-wa zibun-no hahaoya-o tazune, Hanako-wa e_{DP} denwasita. (Sloppy) (= (14))
Taro-TOP self-GEN mother-ACC visit Hanako-TOP called
'Taro visited his mother, and Hanako called her mother.' (Saito (2007: 217))

We have seen in section 3 that the verb *denwasur* 'call' obligatorily selects a dative-marked NP as its direct object. Given this fact, it appears at first sight that neither NP-copy nor KP-copy would yield a convergent derivation for (24), erroneously ruling out this example. If the NP were copied onto the null object position, the dative Case feature of the verb would remain unchecked, since the NP does not have any Case feature. Similarly, if the KP were copied onto the same position, the verb would not be able to have its Dative Case feature checked against the KP, which should have the accusative instead of the dative Case feature.

A new analysis for the apparent case-mismatch effect in (24) suggests itself, however, in light of my current assumption that Case checking/deletion takes place at LF in Japanese. Under this assumption, there is no reason to believe that a particular surface case at PF should stand in a strict one-to-one relationship with an abstract Case (feature) at LF. The Double-*o* effect in (17), (18), and (23) provides independent confirmation for this position. Let us hypothesize, then, that the dative case particle *–ni* as selected by *denwasur* 'call' and the accusative case particle *–o* as selected by the verb *tazuner* 'visit' in (24) are actually nothing but two allomorphic variations in the PF component of the underlying Accusative Case feature active in the narrow syntactic computation including LF. That is, the two transitive verbs are both endowed with the accusative Case feature for the purposes of syntactic computation, but their morphological manifestations at PF are different simply due to their unreducible, idiosyncratic case-marking properties. Under this hypothesis, the example in (24) does not involve any case mismatch whatsoever, for both the LF-copied KP and the verb in the elliptical clause are endowed with accusative Case features.

5. Conclusions

This paper has presented new evidence drawing on the interaction of the Double-*o* Constraint with sloppy/quantificational interpretations of null arguments to show that the target of argument ellipsis must involve copying of NPs together with abstract Case features. This result is in conflict with Saito's (2004, 2007) argument from the lack of the transitivity restriction with null objects in genitive subject constructions and case mismatches under NP-ellipsis that argument ellipsis may copy NPs themselves without abstract Case features. I have argued that these apparently conflicting results can be reconciled once we assume that LF-Copy underlying argument ellipsis can freely apply to either NPs or KPs, with unwanted results being blocked by independent LF constraints such as the ban against unchecked/deleted Case features and the Double-*o* Constraint. The present paper thus not only contributes a new body of knowledge to the debate concerning the precise nature and size of elliptical arguments in Japanese grammar but also advances our understanding of the mechanism of the Japanese Case/case system within the generative architecture.

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