

# How Large Can Elliptical Arguments Be in Japanese?

*Abstract:* This paper studies the nature and size of elliptical arguments in Japanese in connection with Case and explores its implications for Case valuation/checking. Available evidence from the absence of the Transitivity Restriction exhibited by null objects in the context of genitive subjects in Japanese (Hiraiwa 2000; Miyazawa 2001; Saito 2004, 2007) indicates that elliptical objects in Japanese do not need Case. This pattern follows from the Argument Ellipsis theory advanced in the recent literature (Oku 1998; Kim 1999; Saito 2007; Takahashi 2008a, b, 2014). Here, I present novel data bearing on the interaction of the Double-*o* Constraint (Harada 1973; Shibatani 1973, 1978; Kuroda 1978) with sloppy/quantificational interpretations of null arguments to show that elliptical objects must have Case in certain syntactic environments such as causative constructions. To accommodate these conflicting observations regarding the role of Case under ellipsis, I propose that argument ellipsis may apply freely either to a bare NP without Case or to a KP with the unvalued Case slot, with illegitimate derivational choices being ruled out by independently motivated constraints such as the Double-*o* Constraint and the Inverse Case Filter. The proposed analysis also straightforwardly derives the observation (Takahashi 2006; Saito 2007) that argument ellipsis tolerates case mismatches between antecedent NPs and their corresponding elliptical arguments. One of the important theoretical implications of the proposed analysis is that the traditional case assignment theory (Kuroda 1978, Fukui 1986, Saito 1982), recently revived as the Merge-based Case Theory of Saito (2012), is superior to Chomsky's (2000, 2001) Agree-based alternative in capturing the distribution of Case marking in Japanese.

## 1. Introduction

Previous works (Oku 1998; Kim 1999; Saito 2007, Takahashi 2008a, b, 2014, among many others) have amassed a considerable variety of arguments to show that certain instances of

elliptical arguments in Japanese cannot be accommodated 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 technically implemented in terms of PF-deletion or LF-copy. One important research 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 question in connection with Case marking: do they get elided with their Case properties included, or do they get elided to the exclusion of Case properties?

Saito (2004, 2007) is the only study that I know of which addresses 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 NP 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 is correctly derived by the argument ellipsis theory of null objects, according to which NPs may undergo argument ellipsis in the object position without 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 properties, contrary to Saito's conclusion. Oku (1998) and Takahashi (2008a, b) point out that the availability of sloppy/quantificational interpretations of null arguments is a diagnostic tool for argument ellipsis. Using this diagnostics and the so-called Double-*o* Constraint (Harada 1973; Shibatani 1973, 1978; Kuroda 1978), I will demonstrate that those null objects which exhibit these interpretations must be Case-marked in the syntactic causative construction.

To accommodate the apparently conflicting observations regarding Case under argument ellipsis noted above, I will propose that this process may freely apply either to an

NP (without Case) or to a K(ase)P (with the Case slot), with unwanted derivational results being excluded by independently motivated constraints active in Japanese grammar. I will propose that, when a KP is the target of argument ellipsis, it is introduced into the ellipsis site with the unvalued Case feature {Case:\_\_\_}. Adopting Saito's (2012) Merge-based Case theory of Japanese, I will argue that the Case feature is subsequently valued through Merger; it is valued as nominative by merger with T-C and as accusative by merger with V-v. The proposed analysis also straightforwardly derives the observation (Takahashi 2006; Saito 2007) that argument ellipsis tolerates case mismatches between antecedent NPs and their corresponding elliptical arguments. To the extent that the proposed analysis of the empirical facts regarding the transitivity restriction and the Double-*o* Constraint is on the right track, it lends further support for the Merge-based Case valuation system for Japanese as an alternative to Chomsky's (2000, 2001) Agree-based Case valuation system widely adopted in the minimalist literature.

## 2. Argument Ellipsis in Japanese and 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 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 one central argument in favor of this argument ellipsis hypothesis based on sloppy/quantificational interpretations of null arguments (Oku 1998; Kim 1999; Takahashi 2008a, b, 2014). Consider (1).<sup>1</sup>

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<sup>1</sup> Abbreviations: ACC, accusative; CAUS, causative; CL, classifier; COP, copular; DAT, dative; GEN, genitive; HAB, habitual; INFL, inflection; LINK, linker; NEG, negation; NOM, nominative; PASS, passive; PAST, past tense; PRES, present tense; TOP, topic marker.

- 74 (1) a. Taroo-wa zibun-no sensei-o sonkeisiteiru.  
 75 Taro-TOP self-GEN teacher-ACC respect  
 76 ‘Taro respects his teacher.’
- 77 b. Ziroo-mo *e* sonkeisiteiru. (strict/sloppy)  
 78 Jiro-also respect  
 79 ‘*Lit.* Jiro also respects *e*.’
- 80 c. Ziroo-mo *kare-o* sonkeisiteiru. (strict/\*sloppy)  
 81 Jiro-also he-ACC respect  
 82 ‘Jiro also respects him.’

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84 Suppose that the elliptical construction in (1b) is preceded by the full-fledged construction in  
 85 (1a) so that the null object in the former is understood as anaphoric to the overt object in the  
 86 latter. In this context, the null object allows both strict and sloppy interpretations. In other  
 87 words, the sentence in (1b) can mean either that Jiro respects Taro’s teacher (the strict  
 88 interpretation) or that Jiro respects his own (= Jiro’s) teacher (the sloppy interpretation). The  
 89 example in (1c) shows that the overt pronoun *kare-o* ‘he-ACC’ only yields the strict  
 90 interpretation. Under the reasonable heuristic assumption that the syntactic and semantic  
 91 properties of null pronouns mirror those of overt pronouns, the sloppy interpretation of the  
 92 elliptical object in (1b) cannot be accounted for by the uniform *pro*-analysis (Kuroda 1965;  
 93 Ohso 1976; Hoji 1985; Saito 1985), for the overt pronoun may not give rise to the sloppy  
 94 interpretation. The argument ellipsis theory correctly predicts the sloppy interpretation in (1b),  
 95 whether it is implemented in terms of PF-deletion, as shown in (2), or LF-copy, as shown in (3).  
 96 The sloppy interpretation obtains when *zibun-no sensei-o* ‘self’s teacher-ACC’ is bound to the  
 97 subject *Ziroo* ‘Jiro’ in the elliptical clause either before it undergoes PF-deletion, as in (2), or  
 98 after it undergoes LF-copy, as in (3). Here and throughout this paper, I follow the technical

implementation of argument ellipsis through PF-deletion, unless the distinction between this and the LF-deletion alternative becomes pertinent (see note 4).<sup>2</sup>

- (2) PF: Taroo-wa [NP zibun-no sensei-o] sonkeisiteiru.  
 Taro-TOP self-GEN teacher-ACC respect  
 ‘Taro respects his teacher.’
- PF: Ziroo-mo ~~[NP zibun-no sensei-o]~~ sonkeisiteiru. (PF-Deletion)  
 Jiro-also self-GEN teacher-ACC respect  
 ‘Jiro also respects self’s (= Jiro’s) teacher.’

- (3) LF: Taroo-wa [NP zibun-no sensei-o] sonkeisiteiru.  
 Taro-TOP self-GEN teacher-ACC respect  
 ‘Taro respects his teacher.’
- LF: Ziroo-mo [NP zibun-no sensei-o] sonkeisiteiru. (LF-Copy)  
 Jiro-also self-GEN teacher-ACC respect  
 ‘Jiro also respects self’s (= Jiro’s) teacher.’

The application of argument ellipsis is diagnosed in a similar manner by the availability of what Takahashi (2008a, b) calls the quantificational interpretation of null arguments. This interpretation is illustrated in (4b).

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

<sup>2</sup> See Takahashi (2013a, b) for a PF-deletion theory of argument ellipsis and Oku (1998), Shinohara (2006) and Saito (2007, 2015) for an LF-copy alternative.

123        b. Ziroo-mo        *e*        sonkeisiteiru.        (E-type/quantificational)

124                Jiro-also                respect

125                ‘*Lit.* Jiro also respects *e*.’

126        c. Ziroo-mo        *karera-o*        sonkeisiteiru.        (E-type/\*quantificational)

127                Jiro-also        they-ACC        respect

128                ‘Jiro also respects them.’

129

130    Takahashi points out that the null object construction in (4b), which is intended to follow the  
131    full-fledged construction in (4a), has two interpretations, the second of which is of our  
132    primary interest. One is the E-type interpretation (Evans 1980) according to which Taro and  
133    Jiro respect the same set of three teachers. The other is the quantificational interpretation  
134    where the set of three teachers whom Taro respects may differ from the set of three teachers  
135    whom Jiro respects. The E-type interpretation is easily explained by the *pro*-analysis, for the  
136    overt pronoun *karera-o* ‘they-ACC’ independently allows this interpretation, as shown in (4c).  
137    The drawback of the *pro*-analysis is that the quantificational interpretation in (4b) would  
138    remain mysterious under this analysis, for the overt pronoun cannot yield this interpretation, as  
139    shown in (4c). Takahashi shows that the quantificational interpretation is accommodated rather  
140    straightforwardly by the argument ellipsis theory. According to this theory, the elided argument  
141    position in (4b) is either occupied by the overt quantified phrase *san-nin-no sensei-o* ‘three-  
142    teachers-ACC’ before PF-deletion or reconstructed by copying the same phrase in the ellipsis  
143    site. Then, it comes as no surprise that the quantified phrase *san-nin-no sensei-o* ‘three-  
144    teachers-ACC’ in (4b) may behave independently of its antecedent in (4a) in terms of  
145    quantification. Thus, the quantificational interpretation of a null argument presents itself as  
146    another solid litmus test for the application of argument ellipsis in Japanese together with the  
147    sloppy interpretation.

In this section, I reviewed one central argument for the argument ellipsis theory of null arguments in Japanese based on sloppy/quantificational interpretations. Note that I have assumed in (2) and (3), without argument, that what is deleted/copied is the NP, together with its 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, I will review Saito’s (2004) observation regarding the nominative-genitive conversion, which shows that the target of argument ellipsis is actually the NP *without* Case.

### 3. The Transitivity Restriction under Genitive Subjects and Case-Mismatch Effects

It is well known that the subject NP, which is otherwise marked with the nominative case particle *-ga*, is optionally marked instead with the genitive case particle *-no* when it occurs within a relative clause (Harada 1971, 1976; Miyagawa 1993, 2011; Watanabe 1996; Hiraiwa 2000; Ochi 2001, 2009; Maki and Uchibori 2008). This nominative-genitive conversion is illustrated in (5a). The conversion is restricted to relative clauses, for the genitive subject option is blocked in a regular declarative clause, as shown in (5b).

- (5) 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 (Harada 1971, 1976; Shibatani 1978; Miyagawa

173 1993; Watanabe 1996) that accusative objects are prohibited in the presence of genitive  
174 subjects. This restriction – widely known as the Transitivity Restriction – is illustrated in (6).

175

176 (6) a. Taroo-ga hon-o katta mise  
177 Taro-NOM book-ACC bought shop  
178 ‘the shop where Taro bought a book’

179 b.\* Taroo-no hon-o katta mise  
180 Taro-GEN book-ACC bought shop  
181 ‘the shop where Taro bought a book’

182 c. Taroo-ga/-no kinoo itta tokoro  
183 Taro-NOM/-GEN yesterday went place  
184 ‘the place where Taro went yesterday’

185 d. Taroo-ga/-no<sub>i</sub> *t<sub>i</sub>* taihos-are-ta tokoro  
186 Taro-NOM/-GEN arrest-PASS-PAST place  
187 ‘the place where Taro was arrested’

188 e. Hon-o<sub>i</sub> Taroo-ga/\*-no *t<sub>i</sub>* katta mise  
189 book-ACC Taro-NOM/-GEN bought shop  
190 ‘the shop where Taro bought a book’

191 ((6a, b) from Saito (2004:103), (6c, d, e) from Saito (2004:107))

192

193 The contrast between (6a) and (6b) shows that, when the subject is marked with the genitive  
194 case particle *–no*, the direct object cannot be marked with the accusative case particle *–o*.  
195 This restriction created by the genitive subject does not obtain when the accusative direct  
196 object is replaced by adverbs such as *kinoo* ‘yesterday’, as illustrated in (6c), as they do not  
197 have accusative Case. (6d) shows that the NP trace also does not bring about the Transitivity



Restriction, again, as predicted, since the trace is not marked with the accusative Case. By contrast, the trace of the scrambling chain does induce the relevant effect, as shown in (6e). This pattern makes sense since the tail of the chain in question requires accusative Case. Hiraiwa (2000) and Saito (2004) present analyses of the Transitivity Restriction, as shown in (7) and (8), 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.

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

(8) 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 Transitivity Restriction illustrated in (6) is lifted when the accusative direct object is null, as shown by the contrast between (9a) and (9b).

(9) 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))

(9a) illustrates the Transitivity Restriction induced by the genitive subject. (9b) shows that this restriction does not hold when the object is phonetically unrealized. Examples (10) from Miyazawa (2001) further confirm this observation.

(10) a. Ziroo-ga hazimete Nagoya-ni kuru-node, minna-ga iroirona

Jiro-NOM for the first time Nagoya-to come-since everyone-NOM various

basho-ni kare-o tureteiku yotei-desu.

place-to 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))

b. 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))

c. 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))

d. Hanako-ga/-no *e*<sub>DP</sub> 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))

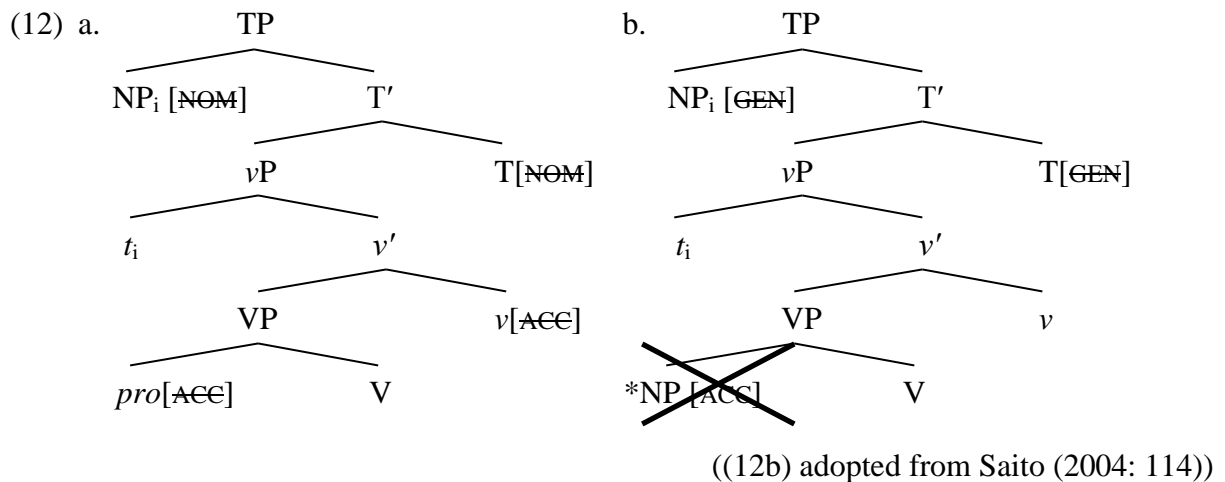
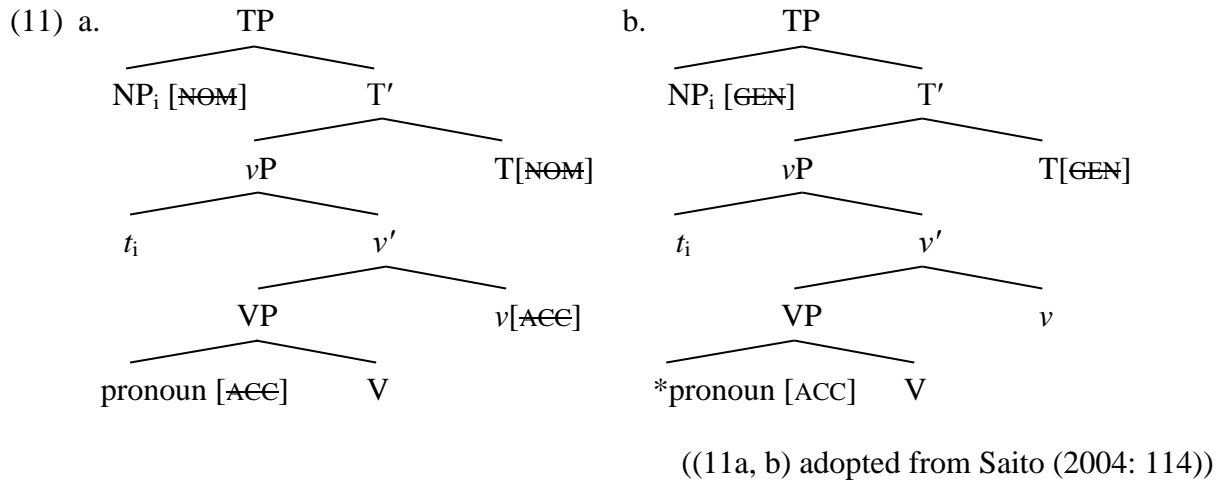
The examples in (10b–d) are all intended as utterances to follow the one in (10a). (10b) illustrates the standard case of the Transitivity Restriction on the accusative-marked object

(i.e., *Ziroo-o* ‘Jiro-ACC’) created by the genitive subject, on a par with the examples in (6b, e) and (9a). The example in (10c) shows that the same restriction persists when the proper name object is replaced by the overt pronoun (i.e., *kare-o* ‘he-ACC’). Interestingly, however, the restriction is lifted when the pronoun is replaced by the null object, as shown in (10d).

The lack of the Transitivity Restriction in (9b) and (10d) 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 lack phonetic content so that the syntactic properties of the former closely mirror those of the latter, including Case. Under this standard assumption, then, the *pro*-theory would predict that the examples in (9b) and (10d) with the null object should induce the Transitivity Restriction on a par with the example in (10c) with the overt pronoun.

Saito (2004) proposes that Hiraiwa’s (2000)/Miyazawa’s (2001) observation illustrated in (9b) and (10d) straightforwardly follows if the elided objects in these examples are not *pro*’s, but instead derived through argument ellipsis. Given the Transitivity Restriction otherwise imposed on accusative-marked direct objects in the presence of genitive subjects, the grammaticality of these examples shows that null objects do not need to check Case. Saito suggests (p. 112–114) that this pattern is derived under the PF-deletion theory of argument ellipsis, coupled with the notion of PF-repair (Lasnik 1995, 2001). Suppose that the accusative Case feature of the direct object must be checked and deleted so that it is properly interpreted in the PF component. Then, the standard cases of the Transitivity Restriction, illustrated in (6b, e), (9a), and (10b, c), are due to the fact that the direct objects cannot have their accusative Case feature checked against the *v* head, which does not have the accusative Case feature: recall the co-occurrence restriction on genitive T and the accusative Case feature of *v* in (7–8). To illustrate, consider the syntactic derivations for the examples in (10c) and (10d), shown in (11a, b) and (12a, b), respectively. (11a, b) illustrate the two possible derivations for the example in

(10c), depending on whether T checks the nominative or genitive Case feature. Similarly, (12a, b) illustrate the two possible derivations for the example in (10d) under the same Case-checking possibilities on T.



In (11a), the accusative Case feature of the overt pronoun is properly checked against the same feature of the *v* head. In (11b), on the other hand, the accusative Case feature of the same pronoun remains unchecked, causing the derivation to crash, because the *v* head cannot possess the same feature due to the co-occurrence restriction noted in (7–8) when the T head checks the genitive Case against the subject NP. The two derivations thus correctly predict

the Transitivity Restriction illustrated in (10c). Let us now turn to the derivations for the null object case in (10d). When the T head checks the nominative Case against the subject NP, as shown in (12a), the accusative Case feature of the  $v$  head is checked, by hypothesis, by the *pro*, which is endowed with the same Case feature.<sup>3</sup> When the T head checks the genitive Case against the subject NP, as shown in (12b), the  $v$  head does not possess the accusative Case feature. Note that the derivation in (12b) should crash, as it is, since the accusative Case feature of the direct object remains unchecked. Saito argues that PF-deletion underlying argument ellipsis removes the uninterpretable Case feature of the null object from the PF-representation, thereby saving the derivation from crashing in the PF component; since the direct object NP is deleted, so is its Case-feature, as shown in (12b). This way, the apparently unexpected lack of the Transitivity Restriction with null objects follows from the interaction of the PF-deletion theory of argument ellipsis coupled with PF-repair.<sup>4</sup>

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<sup>3</sup> As far as I can see, Saito (2004) does not discuss the derivation in (12a) for the null object under the nominative subject variant. For the purposes of this paper, I took the liberty of assuming here that the NP in this derivation is a *pro*, which checks the accusative Case of the  $v$  head. However, the object may well be the NP endowed with the Case feature in Saito's system. Under this view, the NP checks the accusative Case feature against the  $v$  head before it is elided at PF, a derivational order which intrinsically follows if Case checking occurs in the narrow syntax, as is commonly assumed in the minimalist literature. Thanks to an anonymous reviewer for bringing the issue discussed here to my attention.

<sup>4</sup> Saito notes (p. 115) that the lack of the Transitivity Restriction with null objects can also be derived under the LF-copy theory of argument ellipsis. This theory would say that the antecedent NP is copied onto the null object position in (12b). Since the NP must already have its Case feature checked before LF-copy targets the NP and hence it does not have its Case feature anymore, the relevant observation follows without resorting to PF-repair. Note, however, that this LF-Copy theory would wrongly exclude the derivation shown in (12a) with the nominative-accusative pattern since the  $v$ 's accusative Case feature would remain unchecked. We have to conclude then that the identity of the null object in (12a) should be a *pro* in this alternative.

#### 4. How Large Can Elliptical Arguments be in Japanese?

In the previous section, I reviewed Saito's (2004) argument from the lack of the Transitivity Restriction with null objects in the presence of genitive subjects to show that argument ellipsis may apply to argument NPs themselves to the exclusion of their Case features. In this section, I will introduce novel examples showing that this conclusion is not always correct. More specifically, I will present evidence, based on the interaction of the so-called Double-*o* Constraint with sloppy/quantificational interpretations of null objects, that argument ellipsis must target NPs inclusive of their Case feature in syntactic causative constructions.

It is well-known in the literature on Japanese syntax (Harada 1973; Shibatani 1973, 1978; Kuroda 1978; Hiraiwa 2010) that Japanese syntactic causatives are subject to the Double-*o* Constraint. One version of this constraint, due to Shibatani (1978), is formulated as in (13).

(13) Shibatani's (1978: 262) Double-*o* Constraint

There cannot be more than one accusative Case in a sentence.

To see how this constraint works in the syntactic causative construction, consider (14).

(14) a. Taroo-ga Ziroo-ni/-o Tokyo-e ik-ase-ta. (base verb = intransitive)

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. (base verb = transitive)

Taro-NOM Jiro-DAT/-ACC article-ACC read-CAUS-PAST

'Taro made Jiro read an article.'

336 When the embedded verb is an intransitive verb, such as *ik* ‘to go’, the causee argument can  
 337 be marked with either the dative case particle *–ni* or the accusative case particle *–o*, as  
 338 illustrated in (14a). However, when the embedded verb is a transitive verb, such as *yom* ‘to  
 339 read’, which selects an accusative theme argument, the causee argument is marked with the  
 340 dative case particle, but cannot be marked with the accusative case particle, as shown in (14b).

341 Keeping this Double-*o* Constraint in mind, let us now consider (15–16).

342

343 (15) [Context: My grandfather and father have their own reading rooms, but I don’t have one.

344 My grandfather used to let my father use his (= my grandfather’s) room to study for his  
 345 exams when he was young. I thus expected my father to let me use either my  
 346 grandfather’s or his own reading room during my upcoming exam season.]

347 a. Sohu-wa            benkyoo-beya-tosite    titi-ni            zibun-no    shosai-o  
 348        grandfather-TOP   study-room-as            father-DAT   self-GEN    reading room-ACC  
 349        tukaw-ase-te-age-te-ita-noni,    \* titi-no-hoo-wa            *watasi-o*    *e*<sub>DP</sub>  
 350        use-CAUS-INFL-let-INFL-HAB-but    father-GEN-part-TOP    I-ACC  
 351        tukaw-ase-te-kure-nai.  
 352        use-CAUS-INFL-let-NEG

353 ‘My grandfather used to let my father use his own reading room as a study room, but  
 354 my father won’t let me use his (=my grandfather’s) or his own (=my father’s)  
 355 reading room.’

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361 b. Sohu-wa benkyoo-beya-tosite titi-ni zibun-no shosai-o  
 362 grandfather-TOP study-room-as father-DAT self-GEN reading room-ACC  
 363 tukaw-ase-te-age-te-ita-noni, titi-no-hoo-wa *watasi-ni* *e*<sub>DP</sub>  
 364 use-CAUS-INFL-let-INFL-HAB-but father-GEN-part-TOP I-DAT  
 365 tukaw-ase-te-kure-nai. (strict/sloppy)  
 366 use-CAUS-INFL-let-NEG  
 367 ‘My grandfather used to let my father use his own reading room as a study room, but  
 368 my father won’t let me use his (=my grandfather’s) or his own (=my father’s)  
 369 reading room.’

370

371 (16) [Context: Taro and Hanako are a married couple with one son and one daughter. They  
 372 often invite their children to read picture books before they go to bed. Last night, the  
 373 children read three of their own favorite picture books.]

374 a. Sakuya Taroo-wa musuko-ni san-satu-no ehon-o yom-ase-ta.  
 375 last night Taro-TOP son-DAT three-CL-GEN picture book-ACC read-CAUS-PAST  
 376 \* (Tuma-no) Hanako-wa *musume-o* *e*<sub>DP</sub> yom-ase-ta.  
 377 wife-LINK Hanako-TOP daughter-ACC read-CAUS-PAST  
 378 ‘Last night, Taro let his son read three picture books. His wife, Hanako, let her  
 379 daughter read them/three picture books.’

380 b. Sakuya Taroo-wa musuko-ni san-satu-no ehon-o yom-ase-ta.  
 381 last night Taro-TOP son-DAT three-CL-GEN picture book-ACC read-CAUS-PAST  
 382 (Tuma-no) Hanako-wa *musume-ni* *e*<sub>DP</sub> yom-ase-ta. (E-type/quantificational)  
 383 wife-LINK Hanako-TOP daughter-DAT read-CAUS-PAST  
 384 ‘Last night, Taro let his son read three picture books. His wife, Hanako, let her  
 385 daughter read them/three picture books.’



386 The examples in (15a) and (16a) illustrate that the syntactic causative construction with the null  
 387 theme object is ungrammatical when the causee argument receives accusative case marking.  
 388 However, the construction becomes grammatical instead with dative case marking on the  
 389 causee argument, as shown in (15b) and (16b). The contrast between (15a)/(16a) and  
 390 (15b)/(16b), therefore, clearly shows that the former involve the violation of the Double-*o*  
 391 Constraint. The examples in (15b) and (16b) further show that the null object of the embedded  
 392 verb allows sloppy/quantificational interpretations. Thus, (15b) allows the sloppy interpretation  
 393 whereby my father won't allow me to use his own reading room. Similarly, (16b) allows the  
 394 quantificational interpretation whereby Taro let her son read three picture books which may  
 395 differ from the set of three picture books that Hanako let her daughter read last night.

396 Recall from section 2 that the availability of these interpretations has been commonly  
 397 used as diagnostics for the application of argument ellipsis. The presence of the  
 398 sloppy/quantificational interpretations in (15b) and (16b), then, means that the elliptical direct  
 399 objects, designated there as  $e_{DP}$ , are not *pro*'s, but rather derived by argument ellipsis.  
 400 Suppose here that elliptical objects derived by this process do not need to check accusative  
 401 Case, as argued by Saito (2004) on the basis of the lack of the Transitivity Restriction  
 402 exhibited by null objects under genitive subjects. If so, we would wrongly predict that the  
 403 causee argument should be able to be marked with accusative Case, without any problem,  
 404 because the examples in (15a) and (16a) would involve only one accusative Case in a single  
 405 clause, in conformity with the formulation of the Double-*o* Constraint shown in (13). The  
 406 persistence of the Double-*o* effect in (15–16) with the null object, then, leads us to the  
 407 conclusion, contrary to the one reached by Saito (2004), that elliptical objects do need Case.<sup>5</sup>

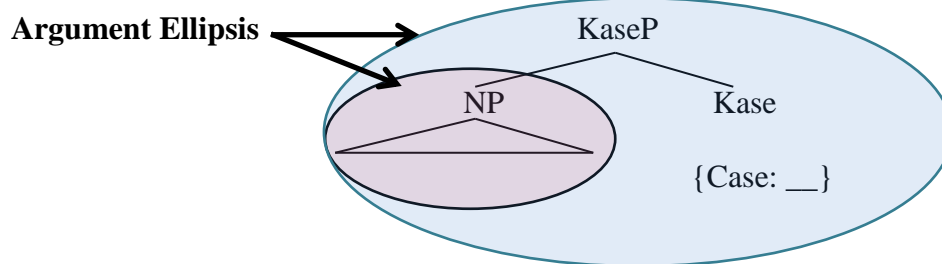
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<sup>5</sup> As an anonymous reviewer points out, Saito (p. 116) already points out that the Double-*o* Constraint effect in syntactic causatives is problematic for his view that null objects can arise through argument ellipsis/PF-deletion. His own example to make this point is shown in (i).

## 5. The Silent Syntax of Elliptical Arguments: A Merge-based Case Valuation System

In this section, I will present a new analysis of the conflicting observations discussed in the previous two sections regarding the role of Case under argument ellipsis. I will propose that argument ellipsis may freely apply to the NP (without Case feature) or the K(ase)P (with the unvalued Case feature), as shown in (17).

### (17) The Silent Syntax of Elliptical Arguments in Japanese



Following Lamontagne and Travis (1987), Bittner and Hale (1996), and Fukui and Takano (1998), the analysis here assumes that Japanese case-marked nominals head a separate functional projection KP which constitutes an extra layer for the NP.<sup>6</sup> I further assume, developing the basic proposal outlined in Saito (2012), that the K head is introduced in the syntactic derivation with the unvalued Case feature and that the feature in question is valued through Merge in Japanese, as shown in (18). The valued Case feature, in turn, is realized as a case particle at PF.

- 
- (i) Ziroo-ga kusuri-o motteki-ta-node Hanako-ga Taroo-ni/\*-o  $e_{DP}$  nom-ase-ta.  
 Jiro-NOM medicine-ACC bring-PAST-since Hanako-NOM Taro-DAT/-ACC drink-CAUS-PAST  
 ‘Since Jiro brought a medicine, Hanco made Taro drink it.’

This particular example, however, can be accommodated if the null object here is simply *pro*. The examples in (15–16) constitute a more conclusive empirical argument against Saito’s conclusion than (i), for the former clearly ensure that the elided object is the product of argument ellipsis and hence should not need accusative Case under his system, but nonetheless exhibits the Double-*o* Constraint effect.

<sup>6</sup> See Sato and Ginsburg (2007) for a suggestive empirical argument for the KP hypothesis in Japanese from what they call case-stranding nominal ellipsis.

(18) a. The Case feature on KP is valued as nominative by merger with T-C.

b. The Case feature on KP is valued as accusative or dative by merger with V-v.

(cf. Saito (2012: 116))

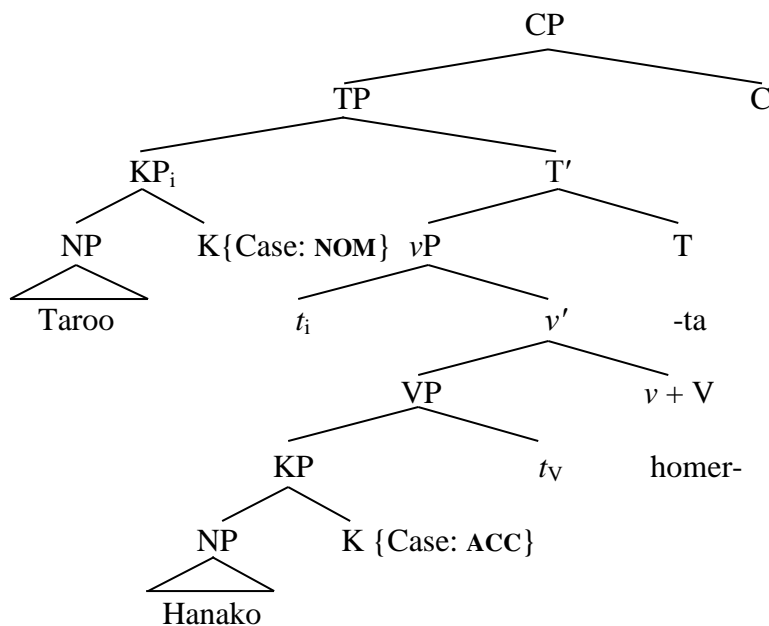
To see how this Merge-based Case valuation system works, consider a Japanese transitive sentence shown in (19a) whose syntactic derivation is shown in (19b).

(19) a. Taroo-ga Hanako-o home-ta.

Taro-NOM Hanako-ACC praise-PAST

‘Taro praised Hanako.’

b.



In (19b), the Case feature of the K head of the direct object is valued as accusative which is later realized as *-o* in the PF component because it is merged with the V-*v* complex. On the other hand, the Case feature of the K head of the subject is valued instead as nominative, later manifested as *-ga* in the PF component, because the KP is merged with the T-C complex.

A qualification is in order here regarding the Case valuation rule in (18b). It is an undeniable fact of Japanese grammar that some transitive verbs such as *homer* ‘to praise’ select an accusative theme argument whereas other transitive verbs such as *aw* ‘to meet’ select a dative theme argument, as shown in (20–21).

(20) Taro-ga Hanako-\*ni/-o home-ta.  
 Taro-NOM Hanako-DAT/-ACC praise-PAST  
 ‘Taro praised Hanako.’

(21) Taro-ga Hanako-ni/\*-o at-ta.  
 Taro-NOM Hanako-DAT/-ACC meet-PAST  
 ‘Taro met Hanako.’

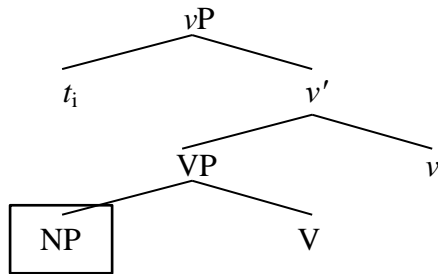
I assume therefore that the Case valuation of the direct object merged with a V-*v* complex as accusative or dative is determined by the idiosyncratic Case-marking properties of the V head. See section 6 for theoretical/empirical ramifications of the Merge-based Case valuation system for a general minimalist theory of syntax as well as comparative syntax of Japanese and English.

### 5.1. *Deriving the Double-o Effect and the Lack of the Transitivity Restriction with Null Objects*

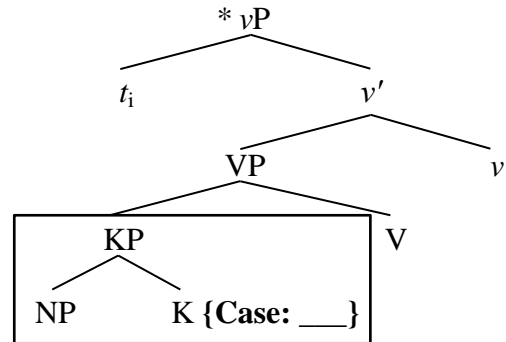
With the Merge-based Case valuation system in place, let us now consider how the conflicting results reached in sections 3 and 4 can be accounted for under the hypothesis that argument ellipsis may apply either to an NP or to a KP. (22a, b) are the partial syntactic derivations for examples such as (9b) and (10d) which involve the null object in the context of genitive subjects.

(23a, b) are the partial syntactic derivations for the same null object examples with nominative subjects.

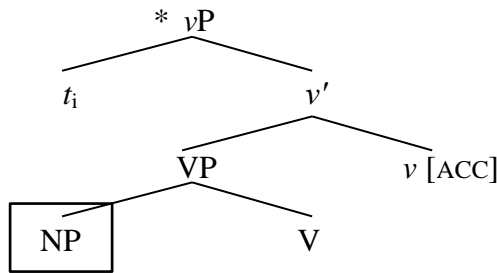
(22) a.



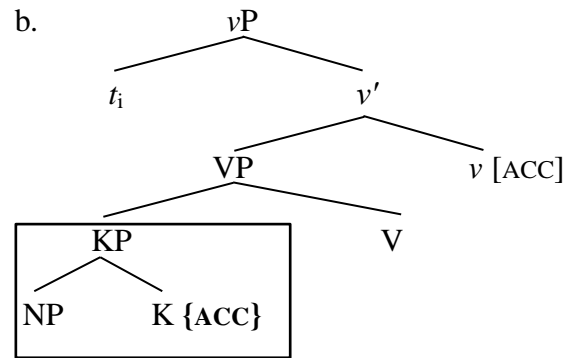
b.



(23) a.



b.

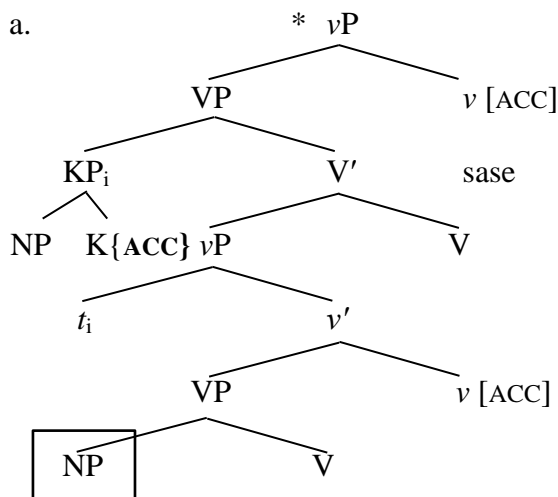


By hypothesis, argument ellipsis/PF-deletion applies to the NP or KP in the context of genitive subjects, as shown in (22a) and (22b), respectively. Recall from section 2 that the  $\nu$  head loses the accusative Case feature in this context (see (7) and (8)). The derivation in (22a) converges because neither the NP nor the  $\nu$  head has any need for Case assignment/discharge. The derivation in (22b), on the other hand, crashes because the Case feature of the K head of the direct object remains unvalued, causing the derivation to crash in the narrow syntax. Consider now the two derivations for the null object in the context of nominative subjects, shown in (23a, b). Here, the  $\nu$  head is endowed with the accusative Case property. If the NP were merged in the object position, as shown in (23a), the  $\nu$ 's Case assignment property would remain unassigned to any nominal expression. This configuration

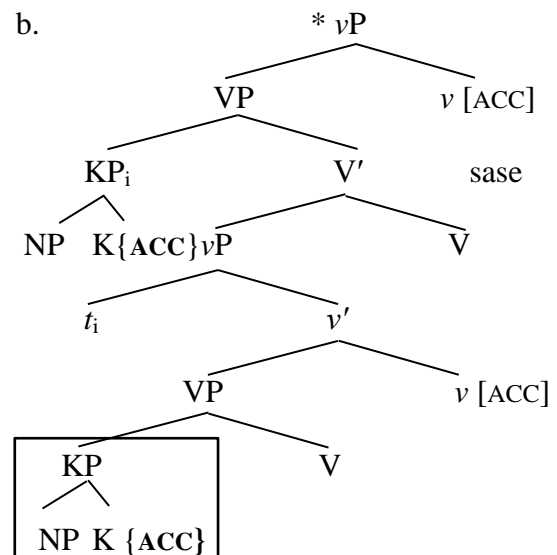
is thus excluded by the Inverse Case Filter (Fukui and Speas 1986; Bošković 1997, 2002) to the effect that Case assigners such as T and  $v$  must discharge/assign their Case property/feature to some assignee. The derivation in (23a) thus crashes in the narrow syntax. By contrast, this violation won't arise when the KP is merged in the object position, as shown in (23b), in which case the KP becomes the suitable recipient of the  $v$ 's Case feature by virtue of participating in the accusative Case valuation through merger with the V- $v$  complex. In other words, the KP is the only grammatically available option in the case of the nominative subject. It follows then that there is no transitivity restriction imposed on direct objects in the context of nominative subjects. The analysis above, thus, correctly derives the insight behind Saito's (2004) analysis that elliptical objects do not need Case in the presence of the genitive subject/adnominal T.

Let us consider now the partial syntactic derivations shown in (24a, b) which illustrate the persistence of the Double-*o* Constraint with null objects in syntactic causative constructions.

(24) a.



b.



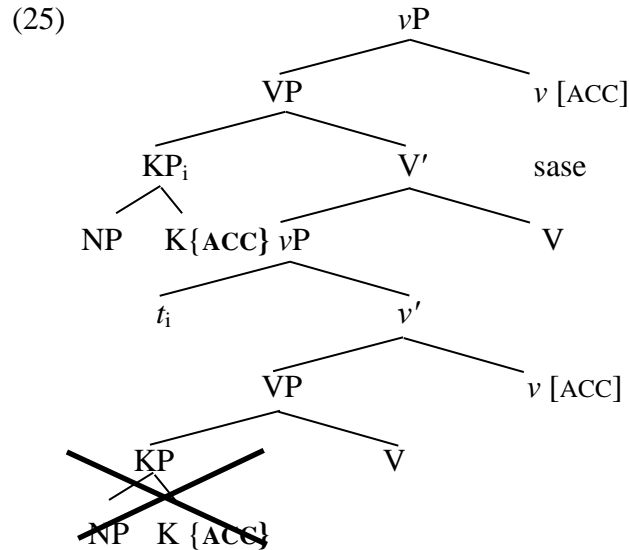
The derivation in (24a) involves the NP in the embedded object position whereas the derivation in (24b) involves the KP in the same position. The former crashes in the narrow syntax because the  $\nu$  head cannot discharge its accusative Case property/feature in violation of the Inverse Case filter on a par with the derivation in (23a). The latter also crashes because the Case feature of the same KP is valued as accusative via merger with the V- $\nu$  complex, thereby yielding two accusative Case objects within a single clause, in violation of the Double-*o* Constraint formulated in (13). This way, neither the KP- nor NP-option, which is in principle an available target for argument ellipsis/PF-deletion, yields a convergent result. Consequently, the ungrammaticality of the null object examples in (15a) and (16a) with the accusative causee argument ensues. The Double-*o* Constraint violation, however, is circumvented by the dative-marked causee, as shown in (15b) and (16b). Inoue (1969) and Shibatani (1978) propose a transformational rule to the effect that, when two NPs are marked with the accusative case particle in a clause, the first NP be marked with the dative case particle. This rule can be successfully grafted into our current Merge-based Case valuation system if the productive causative suffix (*s*)*ase* is endowed with either the dative or accusative Case-marking abilities (cf. (18b)). Under this assumption, the examples in (15b) and (16b) are correctly predicted as grammatical.<sup>7</sup>

It is important to point out here that my proposed analysis above yields a new insight regarding the nature of the Double-*o* Constraint. More specifically, the analysis stands on the assumption that the Double-*o* Constraint is a computational constraint imposed on the syntactic derivation of the syntactic causative construction rather than a PF constraint. Suppose that the Double-*o* Constraint is a PF ban against the occurrence of two accusative cases in a single clause/TP. Then, we would wrongly predict that the derivation in (24b) should converge, because the accusative Case feature of the direct object KP would be

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<sup>7</sup> See Miyagawa (1999) and Harley (2008) for a suggestive analysis of the evasion of the Double-*o* Constraint by dative causee marking within the Dependency Case Theory (Marantz 1991; Bobaljik 2006).

removed from the PF-representation as the result of the object ellipsis, as shown in (25), so that the entire clause would end up containing only one accusative Case.



This derivation is correctly blocked, on the other hand, if the Double-*o* constraint is a derivational constraint which prohibits two accusative Cases within a single clause/TP. The derivation is terminated at the point when the causee argument is marked with accusative Case through merger with the V-*v* complex. Consequently, the PF-deletion of the direct object to remove the accusative Case applies too late to save the derivation from crashing.

Our derivational characterization of the Double-*o* Constraint, in fact, receives independent support from Poser's (2002) observation regarding the interaction of topicalization with the constraint. In Japanese, topicalizing an accusative-marked object results in the obligatory deletion of the accusative marker, as shown in (26c).

- (26) a. Kiyoko-ga kusuri-o non-da.  
 Kiyoko-NOM medicine-ACC drink-PAST  
 'Kiyoko drank the medicine.'



572        b. Kusuri-wa        Kiyoko-ga        non-da.

573                medicine-TOP   Kiyoko-NOM        drink-PAST

574                ‘As for the medicine, Kiyoko drank it.’

575        c.\* Kusuri-o-wa        Kiyoko-ga        non-da.

576                medicine-ACC-TOP   Kiyoko-NOM        drink-PAST

577                ‘As for the medicine, Kiyoko drank.’

578

579        (26a) shows that the verb *nom* ‘drink’ selects an accusative-marked object. When this object  
580        is topicalized to the clause-initial position, the object ends up only with the topic-marker *–wa*  
581        without the accusative case marker *–o*, as illustrated in (26b). (26c) shows that the two  
582        markers cannot co-occur following the topicalized NP.

583        With this property in place, let us consider how the Double-*o* Constraint plays out when  
584        one of the accusative case markers is eliminated by NP-topicalization. (27b) is a case in point.

585

586        (27) a. Isao-ga        Kiyoko-ni/\*-o        kusuri-o        nom-ase-ta.

587                Isao-NOM   Kiyoko-DAT/-ACC   medicine-ACC        drink-CAUS-PAST

588                ‘Isao made Kiyoko drink the medicine.’

589        b. Kusuri-wa        Isao-ga        Kiyoko-ni/\*-o        *t<sub>i</sub>*        nom-ase-ta.

590                medicine-TOP   Isao-NOM   Kiyoko-DAT/-ACC        drink-CAUS-PAST

591                ‘As for the medicine, Isao made Kiyoko drink it.’                                (Poser (2002:5))

592

593        (27a) is a standard case of the Double-*o* Constraint violation. Crucially, (27b) manifests the same  
594        violation even though the accusative case particle *–o* is removed from the topicalized object  
595        through topicalization. The ungrammaticality of (23b) would remain mysterious if the constraint  
596        were to be stated simply in PF terms, 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 a derivational constraint in Japanese grammar; the topicalized KP *kusuri* ‘medicine’ has its Case feature valued as accusative through merger with the V-*v* complex in the direct object position before it undergoes topicalization. Accordingly, the Double-*o* constraint effect remains even though one of the accusative case particles is removed from the PF-representation by topicalization.

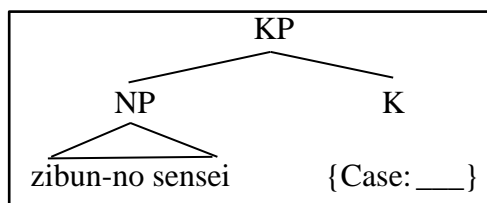
## 5.2. *New Predictions of the Proposed Analysis: Case-Mismatch under Argument Ellipsis*

Our analysis crucially assumes that the Case feature of the K head of the KP gets valued only by merger with appropriate functional heads along the lines suggested in (18a, b). In other words, the KP enters the syntactic derivation with the unvalued Case feature/slot. According to this analysis, then, the sloppy interpretation for the null object in (1b), for example, is derived by base-generating the KP *zibun-no sensei* ‘self’s teacher’ with the unvalued Case feature; the K head subsequently has its Case feature valued as accusative through merger with the transitive V-*v* complex and later undergoes PF-deletion. The relevant parts of the syntactic derivation for the examples in (1a, b) are shown in (28a, b), respectively.<sup>8</sup> The KP in (28b) subsequently undergoes PF-deletion, yielding the sloppy interpretation.

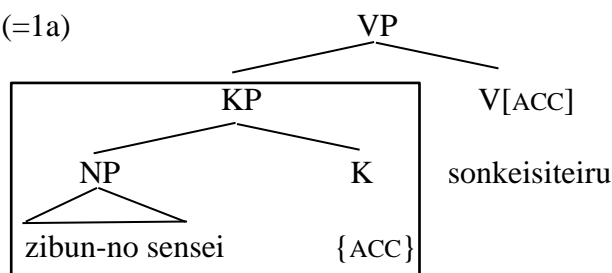
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<sup>8</sup> Note that the KP is the only grammatical option here since the NP option would incur the violation of the Inverse Case Filter on the part of the transitive V-*v* complex.

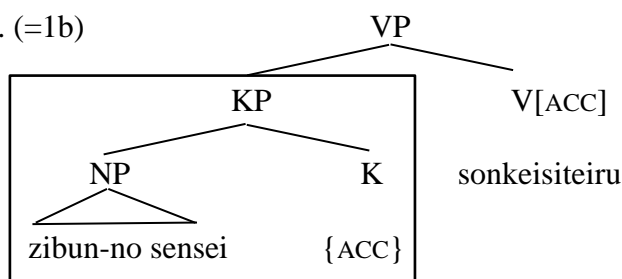
(28)



a. (=1a)



b. (=1b)



Since the KP to be introduced into the syntactic derivation has its Case feature unspecified, my proposed analysis makes the empirical prediction that argument ellipsis should be able to tolerate differences between antecedent and elliptical arguments in terms of case marking. This prediction is indeed borne out by case-mismatch phenomena observed in argument ellipsis (Takahashi 2006; Saito 2007). Let us first note that the transitive verb *denwasur* ‘to call’ selects a dative argument, but not an accusative argument, as its idiosyncratic case-marking property, as shown in (29).

(29) 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 (30).

646 (30) Taroo-wa zibun-no hahaoya-o tazune, Hanako-wa *e*<sub>DP</sub> denwasita. (sloppy)

647 Taro-TOP self-GEN mother-ACC visit Hanako-TOP called

648 ‘Taro visited his mother, and Hanako called her mother.’

649 (adopted from Saito (2007: 217))

650

651 This example allows the sloppy interpretation where Hanako called her own (= Hanako’s

652 mother). Given our results in section 2, this interpretation ensures that the elliptic object in

653 the second clause is derived by argument ellipsis. The availability of the case-mismatch under

654 object ellipsis in (30), then, provides support for the Merge-based Case valuation system

655 which my current hypothesis on argument ellipsis adopts as its crucial analytical premise.<sup>9</sup>

656 My proposed analysis also correctly predicts the possibility of object ellipsis in (31b).

657

658 (31) a. Taroo-wa zibun-no gakusei-o gurando-de asob-ase-ta.

659 Taro-TOP self-GEN student-ACC ground-in play-CAUS-PAST

660 ‘Taro made his students play on the ground.’

661 b. Ziroo-wa *e*<sub>DP</sub> kyositu-o soozis-ase-ta. (strict/sloppy)

662 Jiro-TOP classroom-ACC clean-CAUS-PAST

663 ‘Jiro made Taro’s/Jiro’s students clean the classroom.’

664

665

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<sup>9</sup> An anonymous reviewer finds a clear contrast between examples such as (30) with case-mismatch effects and those such as (1) without and reports that the former do not sound very natural, unlike the latter, though not necessarily ungrammatical. I can only speculate that those speakers like the reviewer who find (30) degraded may be imposing an additional parallelism constraint on argument ellipsis to the effect that the antecedent and elliptical phrases must match in Case morphology. One technical way to incorporate this constraint within our present system is to assume that those speakers opt for the KP with the valued Case (i.e., the boxed KP in (28a)) over the KP with the unvalued Case feature (i.e., the input boxed KP on the left-hand side of (28)) as input for the syntactic derivation to ensure case-matching.

666 c. Ziroo-wa zibun-no gakusei-ni/\*-o kyositu-o soozis-ase-ta.  
667 Jiro-TOP self-GEN student-DAT/-ACC classroom-ACC clean-CAUS-PAST  
668 ‘Jiro made his students clean the classroom.’  
669

670 The example in (31b) with the null causee object readily allows the sloppy interpretation. The  
671 example in (31c) shows that the causee argument must be marked with the dative case *-ni*  
672 instead of the accusative case *-o* so as to avoid the violation of the Double-*o* Constraint. Given  
673 this fact, the elliptical causee argument in (31b) should be receiving dative marking. The  
674 examples in (31a, b), thus, instantiate another case of case-mismatch under argument ellipsis.<sup>10</sup>  
675 Under my analysis, the KP is introduced in the derivations for (31a) and (31b), with its Case  
676 feature unvalued. The feature is valued in these examples as accusative and genitive,  
677 respectively, through merger with the V-*v* complexes. The lack of the Double-*o* Constraint  
678 violation in (31b) follows from the Case-based valuation system adopted in the current analysis.  
679

## 680 **6. Implications of the Analysis for Argument Ellipsis and the Role of Case in Japanese**

681 My analysis of the lack of the Transitivity Restriction with null objects under genitive subject  
682 constructions and of their Double-*o* Constraint effect under causative constructions has several  
683 important implications for the general theory of syntax and of other Japanese phenomena with  
684 respect to argument ellipsis and Case. I discuss some of these ramifications below.  
685

### 686 *6.1. How Large Can Elliptical Arguments be in Japanese?*

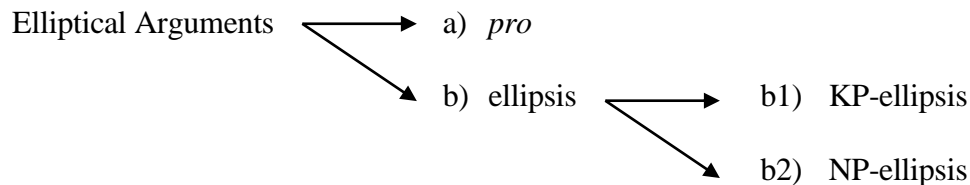
687 My analysis proposes that argument ellipsis/PF-deletion can freely apply to either the NP  
688 (without the Case feature) or the KP (with the unvalued Case feature) as long as this otherwise  
689 free application is blocked by independently motivated constraints such as the Double-*o*

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<sup>10</sup> I would like to thank an anonymous reviewer for providing me with the examples in (31).

Constraint and the Inverse Case Filter. In normal cases where the V-*v* complex retains its Case feature/property, the KP option must be selected, for the NP option would violate the Inverse Case Filter. Thus, the syntactic environments where the NP option would emerge as a grammatical derivational choice are severely restricted to those such as the genitive subject construction where the Case features of the verbal head are suppressed for independent syntactic reasons. It has been more or less commonly held in the recent literature on Japanese ellipsis that null objects are either *pro*'s, as the traditional analysis (Kuroda 1965; Ohso 1976; Hoji 1985; Saito 1985) suggests, or the result of argument ellipsis, but, as stated in the introduction, the exact identity of the target of such ellipsis has heretofore remained uninvestigated. The details of my proposed analysis developed in the previous sections, therefore, require (at least) a three-way classification shown in (32) for the identity of elliptical arguments in Japanese.<sup>11</sup>

(32) Identity of Elliptical Arguments in Japanese



It remains an important empirical question whether the NP-option is instantiated in some other syntactic contexts other than the genitive subject construction.

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<sup>11</sup> Another possibility is the so-called Verb-Stranding Verb Phrase Ellipsis (Huang 1987, 1991; Otani and Whitman 1991; Goldberg 2005; Funakoshi, to appear) where the null object is derived by overt V-to-T movement, followed by VP-ellipsis. I won't discuss this analytical possibility in this paper. See Hoji (1998), Oku (1998), Kim (1999), Saito (2007), and Takahashi (2008a, b, 2014) for a variety of empirical arguments against this analysis in Japanese, Korean and Chinese.

## 6.2. *Case Checking vs. Case Valuation in Japanese*

One of the most important theoretical proposals of my analysis is that, when the KP is merged in the syntactic derivation, the Case feature of the K head is unvalued and is later valued by appropriate functional heads such as V- $\nu$  or T-C. We saw in section 5.2 that this hypothesis correctly predicts the case-mismatch phenomenon under argument ellipsis. Suppose, for the sake of argument, that we adopt instead a version of Case theory (Chomsky 1995), according to which a nominal element is introduced in the syntactic derivation fully inflected with a particular Case feature. Under this theory, rather than assigning/transmitting a Case property to the NP, a functional head (such as  $\nu$  and T) is assumed to check its Case feature against the Case feature of the NP in a symmetrical fashion. The “checking” in this theory is to ensure that the two features agree in the particular pre-specified values (say, nominative or accusative). This theory, then, would incorrectly predict that case-mismatch configurations like the ones illustrated in (30) and (31) would result in ungrammaticality, for the Case feature of the nominal argument in an elliptical clause does not match with the Case feature of the verbal head. The configurations thus provide crucial support for a Case assignment/valuation theory over a Case checking alternative, which has been commonly assumed in the early stages of the minimalist program (Chomsky 1995).

Another important feature of the proposed analysis is that the Case feature of the KP is valued through Merge with an appropriate functional head. This idea thus supports the traditional view, developed in the literature on Japanese syntax (see, for example, Kuroda 1978, 1983, 1986, 1988, Saito 1982, Fukui 1986, 1988, and Fukui and Takano 1998), that Case in Japanese is assigned on the basis of syntactic configurations instead of some one-to-one formal relation such as Agree between the KP and a functional head in languages such as English. Thus, it has been typically assumed in recent minimalist inquiries (Chomsky 2000, 2001) that the Case feature of a nominal element/goal is valued by a functional head/probe (as nominative

by T or accusative by  $v$ ) by entering into Agree with the head. Agree is hypothesized to trigger assignment of the  $\phi$ -feature value of the goal to the unvalued  $\phi$ -slot of the probe; the goal, in turn, has its Case feature valued by the probe as a reflex of this agreement relation. Japanese raises non-trivial challenges for such an Agree-based Case system on two well-known empirical grounds. First, it has been a traditional assumption since Fukui (1986, 1988, 1995) and Kuroda (1988) that Japanese lacks any agreement system altogether. This characterization effectively means that the Japanese Case system cannot be driven by agreement, as argued by Chomsky. In a similar vein, Saito (2012) observes that not only DPs, but also PPs, receive case marking. In (33), for example, the PP subject *koko-kara-ga* ‘from here-NOM’ is marked with the nominative case particle. It is not obvious under the Agree-based Case system why the PP can be marked as such since PPs apparently lack  $\phi$ -features relevant for Agree.

(33) [<sub>PP</sub> *Koko-kara-ga*      *huzi-san-ni*      *nobori-yasu-i*.  
           here-from-NOM      Mt.Fuji-DAT      climb-easy-PRES  
           ‘It is easy to climb Mt. Fuji from here.’      (Saito (2012: 109))

Second, Japanese possesses a spectacular range of constructions where a strict one-to-one relationship between the so-called Case assigner/checker and Case assignee/checkee breaks down. The multiple nominative subject construction shown in (34) illustrates one such case.

(34) *Bunmeikoku-ga*      *dansei-ga*      *heikin-zyumyoo-ga*      *mizikai*.  
       civilized country-NOM      male-NOM      average-lifespan-NOM      short  
       ‘It is civilized countries that men’s average lifespan is short in.’      (Kuno (1973:71))



It is true that a number of minimalist works in the Japanese literature, such as Ura (1996) and Hiraiwa (2001), propose that Japanese allows one-to-many Case checking relationships by incorporating the feature [+multiple] for certain Case assigning heads (for Ura) or Multiple Agree (for Hiraiwa). However, this approach seems to basically stipulate that natural language allows two different modes of Case assignment/checking: a one-to-one relation or a one-to-many relation. Given the minimalist conjecture that Merge and Agree are two independently available primitive operations in syntax, the Merge-based Case assignment/valuation theory provides a more natural explanation for why some languages permit the one-to-many relation than the Agree-based alternative; the former, adopted by Japanese (an agreement-less language), values Case by Merge and hence allows one-to-many relations whereas the latter, adopted by English (an agreement language), values Case through Agree and hence allows only one-to-one relations: see also Fukui and Takano (1998) for related discussion. My proposed analysis of null objects developed in this paper, thus, can be taken as providing further supporting evidence for the Merge-based Case system which has been around in the Japanese literature for many years and has recently been resurrected in Saito (2012) within the minimalist framework.

## 7. Conclusions

In this paper, I have presented a new solution to an empirical paradox raised by argument ellipsis in Japanese; evidence from the absence of the Transitivity Restriction shows that null objects do not need Case whereas evidence from the persistence of the Double-*o* Constraint in causative constructions shows that such objects do need Case. The solution consists of two proposals. One is that argument ellipsis in Japanese can freely apply to either the NP (without Case feature) or the KP (with the unvalued Case feature), unless it is blocked from applying this way by independently motivated constraints in Japanese such as the Double-*o* Constraint

and the Inverse Case Filter. The other is the Merge-based Case valuation system developed by Saito (2012), whereby the KP is introduced into the syntactic derivation with the unvalued Case slot and has it valued by Merge with a proper functional head such as V-*v* and T-C. Under the proposed analysis, the lack of the Transitivity Restriction follows from the NP option whereas the presence of the Double-*o* Constraint follows from the KP option. Since the KP's Case value is underspecified when it is introduced into the derivation, my analysis predicts that argument ellipsis should tolerate case-mismatches between antecedent and elliptical arguments. I have shown that this prediction is indeed borne out. I have also briefly explored some ramifications of my proposed analysis for the proper theoretical mechanism of the Case system in Japanese. I have pointed out that the data examined in this paper support the long-held view in Japanese syntax that case marking in this language is governed by structural configurations, which allow one-to-many relations between Case assigners and Case assignees, rather than by agreement (Chomsky 2000, 2001), which only permits one-to-one relations between the relevant items.

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