Formal Approaches to Japanese Linguistics: Proceedings of FAJL 4 (2007) 197-204.

A New Type of Nominal Ellipsis in Japanese*

Yosuke Sato & Jason Ginsburg University of Arizona

This paper discusses and analyzes a unique type of Japanese nominal ellipsis that has never been documented in any other language in the literature. This ellipsis involves case-marked non-overt NPs. After showing that this ellipsis paradigm cannot be accounted for under any previous analyses that posit one or the other of the fixed generative inventory of empty categories (*pro*, PRO, or traces of A or A'-movement), we argue that the existence of this type of ellipsis is exactly what can be accounted for by the LF Copy Analysis recently proposed by Oku (1998), Kim (1999), and others.

1. Introduction

In this paper we discuss and analyze a new type of nominal ellipsis in Japanese fragments involving overtly case-marked null arguments that have not previously been documented in any other language in the literature. We first show that the elliptic arguments in this type of construction do not fit into the classical generative inventory of empty categories in Chomsky (1981, 1986) (i.e., *pro*, PRO, or traces of A or A'-movement). Then, we claim that the existence of this type of apparently atypical ellipsis is exactly what is predicted by recent LF Copy analyses of Japanese (Oku 1998, Kim 1999, Saito 2003, Takahashi 2006). To the extent that this analysis is correct, we provide further evidence for the LF copy analysis, which has been amply motivated on other independent grounds in the above-mentioned work.

2. Case-Stranding Null Arguments in Japanese

To the best of our knowledge, the nominal ellipsis in question came into use recently in colloquial dialogues such as (1).¹

^{*}Earlier drafts of this paper were presented at the Linguistic Colloquium of the University of Arizona in April, 2006 and at the 8th Seoul International Conference on Generative Grammar in August, 2006. We thank the audiences at those presentations for their insightful comments. We also thank the anonymous reviewers of our abstract, as well as Andy Barss, Mike Hammond, Heidi Harley, Simin Karimi, Myung-Kwan Park, and Dave Medeiros for comments and suggestions. Kumiko Nakamura, Kenji Oda and Naomi Ogasawara provided us with helpful discussions on the Japanese examples included herein. All errors are our own. The first author has been partially supported by the Fulbright Fellowship (2005-2006).

The following abbreviations are used in this paper: Acc = Accusative, Dat = Dative, Excl = Exclamation, Top = Topic, Loc = Locative, Neg = Negation, Nom = Nominative, Perf = Perfective, Pol = Polite, Q = Question.

- (1) A: Asami-wa moo tsuki-masi-ta ka?
 Asami-Top already arrive-Pol-Past Q
 'Has Asami already arrived?'
 - B: Hai, moo tsuki-masi-ta. yes, already arrive-Pol-Past 'Yes, she has already arrived.'
 - A: Naomi-mo moo tsuki-masi-ta ka? Naomi-also already arrive-Pol-Past Q 'Has Naomi also already arrived?'
 - B: e ga mada tsuki-mase-n. Nom yet arrive-Pol-Neg 'She has not arrived yet.'

The second reply of B in this conversation involves an overtly nominative case-marked empty category (indicated here as e) that is intended to refer back to the subject argument Naomi, which is salient from the preceding question posed by A. This ellipsis is not restricted to subject positions but can also target direct and indirect objects, as shown in (2) and (3), respectively. Furthermore, examples such as (4) show that this ellipsis is also possible for adjunct expressions such as locative case-marked phrases.²

- (2) A: Tokyo-de Tom Cruise-o mi-ta no! Tokyo-Loc Tom Cruise-Acc see-Past Excl 'I saw Tom Cruise in Tokyo!'
 - B: e!? Honto? Tom Cruise-o? what!? really? Tom Cruise-Acc? 'What!? Really? Tom Cruise?
 - A: e o mi-ta-no! Bikkuri-shi-cha-tta.

 Acc see-Past-Excl surprise-do-Perf-Past
 'I saw him! I was surprised.'

¹ The first author did an informal survey of 25 Japanese speakers in Sendai, Japan from 18 to 24 in age, all non-linguists, and found that the majority of them (17 out of 25) admitted the ellipsis type in (1-4). All the consultants tend to prefer the ellipsis of indirect or locative elements as in (3) and (4) to that of subject or direct objects as in (1) and (2). As Kenji Oda (personal communication) points out, one factor that facilitates this ellipsis might be the distinction between structural and inherent cases in Japanese; elements that have inherent case may be easier to elide. We are very grateful to all the consultants for their patient grammaticality judgments.

 $^{^2}$ This pattern is also observed with other adjunct phrases marked with de (instrument), kara (source), made (goal) and so on. The productivity of this pattern with these markers indicates that the distinction between structural and inherent case plays a role in licensing this ellipsis, as suggested in footnote 1.

(3) A: Akira-ni ai-masi-ta ka? Akira-Dat meet-Pol-Past Q 'Did you meet Akira?'

> B: Hai, ai-masi-ta. yes, see-Pol-Past 'Yes, I met him.'

A: Yusuke-ni-mo ai-masi-ta ka? Yusuke-Dat-also see-Pol-Past Q 'Did you also meet Yusuke?'

B: e ni-wa mada atte-mase-n.
Dat-Top yet meet-Pol-Neg
'I have not met him yet.'

(4) A: Hiroshima-de Tom Cruse-o mi-ta no! Hiroshima-Loc Tom Cruse-Acc see-Past Excl 'I saw Tom Cruse in Hiroshima!'

B: e!? Honto? Hiroshima-de (mi-ta no)? what really Hiroshima-Loc (see-Past Q) 'What!? Really? (Did you see him) in Hiroshima?'

A: e de mi-ta no! Bikkuri-shi-cha-tta. Loc see-Past Excl surprise-do-Perf-Past '(I saw him) in Hiroshima! I was surprised.'

In the second reply of A in (2), we have the accusative case-marked empty object intended to denote *Tom Cruse*. In the same way, in the second reply of B in (3), we have the dative-marked empty indirect object intended to denote *Yusuke*. Finally, in the second reply of A in (4), we find the locative-marked elliptical object of the preposition *de* 'in' that refers back to the locative expression *Hiroshima* from the preceding question.

There are a few semantic and phonological factors that help license this nominal ellipsis pattern in Japanese. First, the null argument must be a focused NP from the preceding discourse. Second, native speakers accept the ellipsis option in (1-4) only when they place an extremely heavy pitch accent on the case marker in sentence-initial position. This cue can be interpreted as indicating focus/topic in the LF side of grammar (cf. Jackendoff 1972). Finally, they leave a certain stretch of silence before they utter sentences that contain the relevant ellipsis pattern. This suggests that there is some empty category preceding them (see also Carter 1999 for a similar argument regarding language acquisition).³

This sort of case-stranding nominal ellipsis has never to our knowledge been documented in any other language in the literature, showing that it calls for a formal analysis from a quite new perspective. In the next section, we first show that this ellipsis pattern is not predicted under any analysis that refers to

³ Thanks to Mike Hammond (personal communication) for pointing this out.

the fixed classical inventory of empty categories in the Government-and-Binding Theory of Chomsky 1981, 1986, i.e., *pro*, PRO or traces of A or A'-movement.

3. What Type of Empty Category is the Elided NP?

A possible analysis for the ellipsis pattern described in the previous section is one that posits a *pro* in the elliptic NP positions of the examples in (1-4), as is found in Romance languages (Chomsky 1981, Rizzi 1982). However, this analysis does not work for the ellipsis pattern under investigation. It has been a general consensus in the generative literature on so-called *pro*-drop languages, including Japanese, that *pro* is covertly case-marked. To take one example, it has been widely known in Japanese syntax since the seminal work of Kuroda (1965) that a clause cannot tolerate more than one occurrence of the (surface) accusative case marker -o. This is widely known as the Double-o Constraint in (5).

(5) The Double-*o* Constraint

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

This constraint accounts for the difference between (6a) and (6b). Example (6a) is ungrammatical because there are two arguments, *Xander* and *ninzin* 'carrot' that are marked with accusative case. Example (6b) is grammatical because there is only one argument, *ninzin* 'carrot', that occurs with accusative case; the other causee argument *Xander* is marked with the dative case.

- (6) a. *Andy-ga Xander-o ninzin-o tabe-sase-ta.

 Andy-Nom Xander-Acc carrot-Acc eat-Cause-Past
 'Andy made Xander eat carrots.'
 - b. Andy-ga Xander ni ninzin-o tabe-sase-ta.
 Andy-Nom Xander-Dat carrot-Acc eat-Cause-Past 'Andy made/let Xander eat carrots.'

Now, compare these sentences with those in (7a) and (7b). Their adjunct clauses contain *ninzin* 'carrots', which refers to the empty direct object *pro* in the matrix clauses (cf. Harada 1973, Shibatani 1973, and Saito 2004:116).

(7) a. *Janet-ga ninzin-o katte-ki-ta node, Andy-wa Xander-o Janet-Nom carrot-Acc buy-come-Past because Andy-Top Xander-Acc pro tabe-sase-ta.

eat-Cause-Past

'Because Janet bought carrots, Andy made Xander eat them.'

b. Janet-ga ninzin-o katte-ki-ta node, Andy-wa Xander-ni Janet-Nom carrot-Acc buy-come-Past because Andy-Top Xander-Dat *pro* tabe-sase-ta.

eat-Cause-Past

'Because Janet bought carrots, Andy made/let Xander eat them.'

The ungrammaticality of (7a) naturally falls out if we assume that accusative case is realized within *pro*. The grammaticality of (7b) provides further corroboration for the view that *pro* counts as the accusative-case marked empty category. In this example, *pro* corresponds to the accusative case marked *ninzin* 'carrot', which is allowed to occur since *Xander* has dative case, and therefore, there is only one accusative marked argument in the matrix clause. The contrast between (7a) and (7b) thus indicates that *pro* in Japanese is covertly casemarked and provides evidence against a *pro*-based analysis of the ellipsis in question.

It is also unlikely that the argument in question is PRO. An analysis that posits PRO for the ellipsis site in (1-4) does not work because crosslinguistically, this formative is commonly found in control configurations (though see Stenson 1989, as discussed in Harley 2000, for the claim that PRO is present in Irish finite clauses). Yet none of the relevant portions of these examples involve control structures. Finally, there is no c-commanding antecedent for the elided NP. Thus, it is also unlikely that the empty NPs are instances of traces created by A or A'-movement.

The discussion so far suggests that the empty arguments in the examples in (1-4) do not fit into the classical generative inventory of empty categories and that the source of the ellipsis pattern in question needs to be sought elsewhere in the Japanese grammar. A question also arises as to the identity of this argument. In the next section, we show that this type of apparently atypical ellipsis pattern can be accounted for by the recent theory of Japanese ellipsis known as the *LF Copy Analysis*.

4. The LF Copy Analysis

The existence of the ellipsis pattern that is our focus can naturally be accounted for under the LF Copy Analysis recently proposed by Oku (1998), Kim (1999), Saito (2003, 2004) and Takahashi (2006).⁴ For example, Oku argues that an argument is copied onto an empty slot in an incomplete clause from the full linguistic antecedent to save an otherwise semantically uninterpretable structure at LF. His analysis is illustrated in (9a, b) for the example in (8b), a null object construction in Japanese.

(8) a. John-ga ninzin-o tabe-ta. John-Nom ninzin-Acc eat-Past 'John ate carrots.'

b. Bill-mo *e* tabe-ta.
Bill-also eat-Past
'(Lit.) Bill also ate.'

⁴ See these works for discussion of other elliptic cases in Japanese, such as null arguments and clefts (Oku 1998, Kim 1999, Saito 2003, 2004) and parasitic gap-like constructions in Japanese (Takahashi 2006).

1

In (9a, b), the direct object in (9a) is copied and merged onto the corresponding direct object slot in (9b) at LF in order to satisfy the selectional properties of the verb *taberu* 'eat'.

This analysis is directly applicable to the ellipsis pattern under investigation, as observed in examples (1-4). For instance, the LF Copy Analysis assigns the rough LF representation in (11b) to the relevant elided portion of the example in (1), repeated below as (10).

- (10) A: Asami-wa moo tsuki-masi-ta ka Asami-Top already arrive-Pol-Past Q 'Has Asami already arrived?'
 - B: Hai, moo tsuki-masi-ta. yes, already arrive-Pol-Past 'Yes, she has already arrived.'
 - A: Naomi-mo moo tsuki-masi-ta ka? Naomi-also already arrive-Pol-Past Q 'Has Naomi also already arrived?'
 - B: *e* ga mada tsuki-mase-n. Nom yet arrive-Pol-Neg 'She has not arrived yet.'
- (11) a. [CP [TP Naomi mo moo tsuki-masi-ta] ka]]

 Naomi-also already arrive-Pol-Past Q

 b. [TP [DP Naomi ga mada tsuki-mase-n]]

 Naomi-Nom yet arrive-Pol-Neg

In (11), the subject argument *Naomi* is copied from the LF representation in (11a) onto that in (11b) to supply the theme argument for the unaccusative verb *tsuku* 'arrive.' This copying operation thus correctly derives the semantic interpretation 'Naomi has not arrived yet', as desired. Note that this analysis does not face any of the problems noted above that arose in the previous generative accounts of empty categories. First, the null NP is merged into the subject position in (11b) without surface morphological case, thereby circumventing the problem faced by the *pro*-based account with regards to the Double-o Constraint. Second, the proposed analysis does not require us to postulate PRO or any kind of trace created by movement. ⁵

⁵ There are two residual problems with the proposed analysis. One is how to account for the ungrammaticality of examples such as (7a), which has been taken to suggest that the empty category is the covertly case-marked *pro*. One solution is that the elided NP requires case checking/licensing both at LF and PF. The elided argument in (7a) then needs case licensing at PF and LF. The example

5. Conclusions

This paper has analyzed a new type of nominal ellipsis in Japanese involving case-stranding null arguments that have never been documented in any other language. Accounts that posit an element from the fixed inventory of empty categories are not feasible. This apparently mysterious ellipsis pattern is predicted only by the recent LF Copy Analysis of Japanese ellipsis. This ellipsis pattern therefore indicates the rather unique nature and origin of Japanese ellipsis and hence provides further empirical support for the LF Copy Analysis.

Further research should address why this type of ellipsis only occurs in main clauses, why multiple instances of ellipsis are not allowed, why the antecedent of the elided argument must be overt, and why the elision of the argument must involve semantic notions such as topic and focus.⁶ We leave these and others related issues for careful examination in future work.

References

Carter, Allyson (1999). An Integrated Acoustic and Phonological Investigation of Weak Syllable Omissions. Doctoral Dissertation, University of Arizona.

Chomsky, Noam (1981). Lectures on Government and Binding. Dordrecht: Foris.

Chomsky, Noam (1986). Knowledge of Language: Its Nature, Origin and Use. New York: Praeger.

Harada, Shin'ichi (1973). Counter Equi NP Deletion. *Annual Bulletin* 7: 113-147. Research Institute of Logopedics and Phoniatrics. University of Tokyo.

Harley, Heidi (2000). Irish, PRO and the EPP. Ms., University of Arizona.

Hiraiwa, Ken (2001). Multiple Agree and the Defective Intervention Constraint. In Ora Matushansky, Albert Costa, Javier-Martin Gonzalez, Lance Nathan and Adam Szcezegielniak (eds.), MIT Working Papers in Linguistics 40: The Proceedings of HUMIT 2000. Cambridge, MA: MITWPL, pp. 67-80.

Hiraiwa, Ken (2002). Facets of Case: On the Nature of the Double-o Constraint. In Yukio Otsu (ed.), *Proceedings of the Third Tokyo Conference on Psycholinguistics*. Tokyo: Hituzi Publishers, pp. 139-163.

Kamp, Hans and Uwe Reyle (1993). From Discourse to Logic: Introduction to Modeltheoretic Semantics of Natural Language, Formal Logic, and Discourse Representation Theory. Dordrecht: Kluwer.

Kim, Soowon (1999). Sloppy/Strict Identity, Empty Objects, and NP Ellipsis. Journal

in (7a) is ungrammatical due to the Double-O Constraint, stated in (5), given that this constraint is a surface filter that applies at PF (Kuroda 1988; Hiraiwa 2001, 2002). The other problem is how the present analysis is sufficiently constrained. For example, what prevents the subject Asami in (10A) from being copied onto the empty subject position of the second reply of B in (10) to yield the reading 'Asami has not arrived yet.' We maintain that only the topically salient or focused NP can serve as antecedent for the elliptic NP. This pragmatic effect on the licensing of the deleted NP might be better accommodated within the Discourse Representation Theory (Kamp and Reyle 1990) that employs box indexing sensitive to topicality and focus. See Sato (2006) for further discussion on this possibility. We are grateful to Heidi Harley and Myung-Kwan Park (personal communication) for useful discussion on these issues.

⁶ We thank an anonymous reviewer for bringing up these issues.

- of East Asian Linguistics 8: 255-284.
- Kuroda, Sigeyuki (1965). Generative Grammatical Studies in the Japanese Language. Doctoral dissertation, MIT.
- Kuroda, Sigeuyuki (1988). Whether We Agree or Not: A Comparative Syntax of English and Japanese. *Linguisticae Investigationes* 12: 1-47.
- Oku, Satoshi (1998). A theory of Selection and Reconstruction in the Minimalist Perspective. Doctoral dissertation, University of Connecticut.
- Rizzi, Luigi. (1982). Issues in Italian Syntax. Dordrecht: Foris.
- Saito, Mamoru (2003). On the Role of Selection in the Application of Merge. In Kadowaki Makoto and Shigeto Kawahara (eds.), *Proceedings of the 33rd Conference of the North Eastern Linguistic Society*. University of Massachusetts, Amherst: GLSA, pp. 323-345.
- Saito, Mamoru (2004). Genitive Subjects in Japanese: Implications for the Theory of Null Objects. In Peri Bhaskarao and Karumuri Venkata Subbarao (eds.), *Non-Nominative Subjects: Volume 2*. Amsterdam: Benjamins Publishing Company, pp. 103-118.
- Sato, Yosuke (2006). Case-stranding Radical Ellipsis in Japanese and LF Recycling. Ms., University of Arizona.
- Shibatani, Masayoshi (1973). Semantics of Japanese Causativization. *Foundations of Language* 9: 327-373.
- Stenson, Nancy (1989). Irish autonomous impersonals. *Natural Language and Linguistic Theory* 7: 373-406.
- Takahashi, Daiko (2006). Apparent Parasitic Gaps and Null Arguments in Japanese. *Journal of East Asian Linguistics* 15: 1-35.

Department of Linguistics, Douglass 200E, University of Arizona, Tucson, Arizona 85721 USA

yosukes@email.arizona.edu jginsbur@email.arizona.edu