



Reconstruction in Japanese relative constructions

メタデータ	言語: English 出版者: 公開日: 2008-05-21 キーワード (Ja): キーワード (En): 作成者: 大賀, 京子 メールアドレス: 所属:
URL	https://doi.org/10.32150/00005680

Reconstruction in Japanese relative constructions

OGA Kyoko

International Center, Hokkaido University of Education

日本語連体修飾構造における再構築

大賀京子

北海道教育大学 国際交流・協力センター

ABSTRACT

Japanese relative constructions are known to be head-final; further, they lack relative pronouns and overt complementizers. The absence of these elements in Japanese has been discussed with regard to the category of relative clauses, either IP or CP (Murasugi 1991, 2000; Ishii 1991; Kaplan & Whitman 1995). In this paper, we use reconstruction as the diagnostic to determine the availability of movement in relative construction to argue that Japanese relative clauses are CPs that involve operator movement and have an adjunction structure. Seemingly inconsistent reconstruction effects in Japanese relative constructions with respect to binding, idioms and scope are accounted for by the interaction of operator movement and the semantic agreement between the head noun and the operator. The proposed account of relative constructions converges with that of Watanabe (1996), who has reached the conclusion that Nominative/Genitive Conversion in Japanese relative constructions is a manifestation of wh-agreement in the CP.

1 . Introduction

Japanese relative constructions are known to be head-final; further they lack relative pronouns and overt complementizers like *that* in English as below:

- (1) [[Taro-ga e_i yonda] hon_i]
Taro-NOM read book
'the book Taro read'

The absence of relative pronouns and overt complementizers in Japanese has been discussed with regard to the category of relative clauses, either IP or CP (Murasugi 1991, 2000; Ishii 1991; Kaplan &

Whitman 1995). In this paper, we use reconstruction as the diagnostic to determine the availability of movement in relative construction to argue that Japanese relative clauses are CPs that involve operator movement and have an adjunction structure. It will be shown that the proposed analysis can capture seemingly inconsistent reconstruction effects in Japanese relative constructions.

The paper is organized as follows. In section 2, based on Aoun & Li (2003), we examine reconstruction effects in Japanese relative constructions in comparison with Chinese and show that reconstruction effects in Japanese relative constructions are inconsistent. Section 3 provides an analysis of the structure involving operator movement for Japanese relative constructions. Section 4 shows that the proposed account of Japanese relative clauses as CPs will converge with the analysis of Nominative/Genitive Conversion by Watanabe (1996), which suggests that Nominative/Genitive Conversion in Japanese is possible in relative clauses as CPs. Section 5 concludes our discussion.

2 . Reconstruction effects in Japanese relative constructions

In the standard analysis of relative clauses in the Principles and Parameters framework, relative clauses are taken as CPs adjoined to the head noun, NP (Chomsky 1977). Since Kayne (1994) proposed the raising analysis of relative clauses in his Antisymmetry framework, relative constructions have attracted much attention regarding their internal structure and derivation (Alexiadou, et al. 2000). According to Kayne's approach, the relative clause is a CP, which is a complement to the determiner head D of DP. In languages like English, the head noun, which precedes the relative clause (Head-initial relative constructions), is raised from within the relative clause CP to the specifier of CP (Head-raising Analysis).

In English relative constructions, for instance, the head noun is followed by either a complementizer *that* or a relative pronoun such as *which*. Kayne claims that the head noun is base-generated in the object position of the relative clause CP and then raised to the specifier of CP as shown in (2):

- (2) a. [_{DP} the [_{CP} that Mike read [book]]]
 b. [_{DP} the [_{CP} [book]_i that Mike read *t*_i]]

When a relative pronoun is involved, the head noun is base-generated as a complement of the relative pronoun, raised to the specifier of the relative pronoun, and then the whole DP is raised to the specifier of CP as shown in (3):

- (3) a. [_{DP} the [_{CP} C⁰ Mike read [_{DP} which [_{NP} book]]]]
 b. [_{DP} the [_{CP} C⁰ Mike read [_{DP} [_{NP} book]_i which *t*_i]]]
 c. [_{DP} the [_{CP} [_{DP} [_{NP} book]_i which *t*_i]_j C⁰ Mike read *t*_j]]

Kayne extends his analysis to the head-final relative constructions in languages like Japanese and suggests that the head-final relative constructions are derived from the same structure as the head-initial relative constructions. As shown in (4a) and (4b), the derivation of the head-final relative constructions proceeds the same as that of the head-initial relative constructions. The difference is that the head-final relative construction requires one more step in (4c), where the IP complement of C^0 is raised to the specifier of DP:

- (4) a. $[_{DP} D [_{CP} C^0 [_{IP} \dots -NP \dots]]]$
 b. $[_{DP} D [_{CP} NP_i C^0 [_{IP} \dots t_i \dots]]]$
 c. $[_{DP} [_{IP} \dots t_i \dots]_j D [_{CP} NP_i C^0 t_j]]$

Aoun & Li (2003) use reconstruction as the diagnostic to determine whether movement is involved in the derivation of the Chinese relative construction, which is head-final as shown below:¹

- (5) $[[wo\ mai\ e_i\ de]\ shu_i]$
 I buy DE book
 ‘the book that I bought’

Given that Japanese and Chinese relative constructions are both head-final, it is interesting to examine reconstruction effects in relative constructions in Japanese in comparison with those in Chinese. Based on Aoun & Li, we investigate reconstruction effects in Japanese relative constructions with respect to binding, idiom chunks, and scope interaction.

First, reconstruction is possible when reflexives are involved in Chinese relative constructions as below:

- (6) $[[wo\ jiao\ Zhangsan\ quan\ mei\text{-}ge\text{-}ren_i\ kai\ e\ lai\ de]\ ziji_i\ de\ chenzi]$
 I ask Zhangsan persuade every-CL-person drive come DE self DE car
 ‘self’s car that I asked Zhangsan to persuade everyone to drive over’

In (6), the reflexive *ziji* ‘self’ contained in the head noun is bound by its antecedent *mei-ge-ren* ‘every-CL-person’ within the relative clause.

Turning to Japanese, Ishii (1991: 29) points out that it is possible for reconstruction to take place in Japanese when reflexives like *kare-zisin* ‘he-self’ and *kanozjo-zisin* ‘she-self’ are involved.² In the following

¹ One difference between Chinese and Japanese is that Chinese relative constructions are associated with the linking element *de* (Kitagawa & Ross 1983). See footnote 3 for discussion.

² Hoji (1985) points out that the reconstruction effect is not observed in Japanese relative constructions in the following case involving a reflexive *zibun* ‘self’, which is known as a subject-oriented reflexive pronoun:

example, a reflexive *kare-zisin* ‘he-self’ in the head noun can be bound by an antecedent *John* in the relative clause:

- (7) [[John_i-ga e taipusita] kare-zisin_i-no ronbun]
 John-NOM typed he-self-GEN paper
 ‘himself’s paper that John_i typed.’

Second, with respect to idioms, there are cases where part of an idiom occurs as the head noun of the Chinese relative construction. In (8), the object part of the idiom *chi cu* ‘eat vinegar’, which means ‘get jealous’, can be the head noun of the Chinese relative construction:

- (8) [[ta *chi* e_i de] *cu*_i] bi shei dou da.
 He eat DE vinegar compare who all big
 ‘Lit. The vinegar he eats is greater than anyone else’s.’
 ‘His jealousy is greater than anyone else’s.’

In Japanese, it is possible for the direct object part of the idiom *hi-ni abura-o sosogu* ‘fire-into oil-ACC pour’, which means ‘to make the situation worse’, to be the head noun of the relative construction as below:

- (9) John-no hatugen-wa [[pro *hi-ni* e_i *sosogu*] *abura*_i] datta.
 John-GEN comment-TOP fire-into pour oil was
 ‘Lit. John’s comment was the oil that someone poured into fire.’
 ‘John’s comment was something that made the situation worse.’

In (9), the head noun *abura* ‘oil’ seems to retain its idiomatic interpretation with the other parts of the idiom, despite its position.

Thus far, Japanese and Chinese have shown the same reconstruction effects with respect to binding and idiom chunks. With respect to scope interaction, however, an interesting contrast emerges between Chinese and Japanese. Aoun & Li (2003: 134) point out that in the Chinese relative construction (10), the reconstruction effect appears and the quantifier subject *mei-ge-ren* ‘every-CL-person’ within the relative clause has scope over the head noun *san-ben shu* ‘three-CL book’:

-
- (i) *[[John_i-ga e_j taipusita][zibun_i-no ronbun]_j]
 John-NOM typed self-GEN paper
 ‘Lit. self_i’s paper that John_i typed’

The lack of the reconstruction effect may suggest that Japanese relative constructions do not involve movement.

Saito (1989) argues that Japanese scrambling exhibits reconstruction effects for binding of *zibun*. That is, reconstruction effects are inconsistent, and the availability of reconstruction of *zibun* seems to be related to whether it is contained in either scrambling or relative constructions. Unlike *zibun*, the other type of reflexives like *kare-zisin* ‘he-self’ is local and not subject-oriented. In this paper, we use the reflexive *kare-zisin* ‘he-self’, since it is the most similar to the English reflexives. See Hoji (1985), Saito (1989), and Ishii (1991) for discussion.

- (10) wo hui zhengli [[mei-ge-ren hui kan *e* de] san-ben shu]
 I will arrange every-CL-person will read DE three-CL book
 ‘I will put the (different) three books that everyone will read in order.’

It is interesting to note that in (11), which is the Japanese counterpart of (10), the reconstruction effect disappears:

- (11) watasi-wa [[daremo-ga *e* yomu] san-satu-no hon]-o naraberu.
 I-TOP everyone-NOM read three-CL-GEN book-ACC arrange
 ‘I will put the (same) three books that everyone will read in order.’

In (11), the head noun *san-satsu-no hon* ‘three-CL-GEN book’ has scope over the quantifier subject *daremo-ga* ‘everyone-NOM’ of the relative clause. This contrasts with the following sentence, where the quantifier subject may take scope over the object *san-satsu-no hon* ‘three-CL-GEN book’:

- (12) Daremo-ga san-satu-no hon-o yomu.
 Everyone-NOM three-CL-GEN book-ACC read
 ‘Everyone will read three books.’
 everyone > three books; three books > everyone

The question is why the reconstruction effect does not appear in (11).

To summarize, reconstruction in Japanese relative constructions is (i) possible for binding relations involving reflexives such as *kare-zisin* ‘he-self’ as part of the head noun and (ii) possible in instances where part of an idiom, which occurs as the head noun, can be related to the preceding relative clause, but (iii) not possible for scope interaction. The result is summarized below:

(13) Reconstruction effects

	Binding	Idiom chunks	Scope interaction
Chinese relative constructions	✓	✓	✓
Japanese relative constructions	✓	✓	No

In the next section, we will propose an adjunction structure for Japanese relative constructions and provide a reasonable account for the seemingly inconsistent reconstruction effects in Japanese.

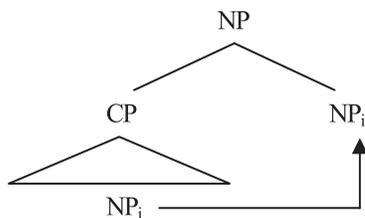
3 . Adjunction Structure of Japanese relative constructions

In the previous section, it was shown that reconstruction is possible in Japanese relative constructions with respect to binding and idiom chunks, but they exhibit no reconstruction effect with respect to scope interaction. The reconstruction facts with respect to binding and idioms seem to argue for an

analysis that involves movement within relative constructions in Japanese. However, the lack of reconstruction with respect to scope in (11) suggests that the analysis of the Japanese relative constructions must be different from that of Chinese relative constructions.

Arguing against Kayne's [_{DP} D CP] uniform analysis of relative constructions, Aoun & Li (2003) propose that Chinese relative constructions have an adjunction structure, where the head noun is raised from within the relative clause CP as illustrated below.³

(14) Chinese relative construction



They claim that reconstruction effects with respect to binding, idioms, and scope are obtained by reconstructing the head NP back in the CP-internal position.

Turning to the contrast between Chinese and Japanese relative constructions in reconstruction, we propose that rather than Kayne's [_{DP} D CP] uniform structure, Japanese relative constructions have an adjunction structure [_{NP} CP NP], and involve movement. The difference between Chinese and Japanese relative constructions is what moves: the head noun in Chinese whereas a null operator in Japanese. The structure proposed for Japanese relative constructions is below:

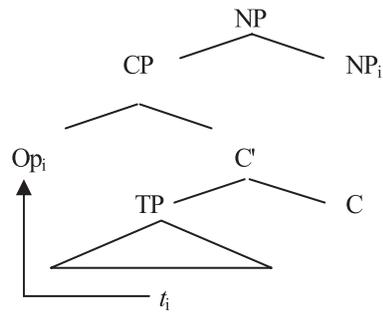
³ In Aoun & Li's analysis, the status of *de* is not clear. *De* occurs in the pattern [XP *de* NP]. Some linguists claim that *de* is the head C of the relative clause (See Wu 2001). Aoun & Li (2003: 146 fn.12), however, point out the fact that *de* can form a constituent with the preceding XP and the sequence of two [XP-*de*] can be coordinated as below (Aoun & Li 2003: 150):

- (i) [zhuyao de] erqie [women yijing taolun-guo de] shiqin
 main DE and we already discuss-ASP DE matter
 'the main matters that we have discussed'
- (ii) [Gongtong de] erqie [meiren keyi dai hui-qu de] dongxi
 common DE and nobody can take back-go DE thing
 'things that are shared and nobody can take back'

From the above observation, Aoun & Li suggest that *de* cannot head a projection.

We will leave the categorical status of *de* for future research. However, at present, it is fair to conclude from the observation of reconstruction effects that Chinese relative clauses are accounted for as CPs.

(15) Japanese relative construction



In (15), the relative is a CP and it is adjoined to the base-generated head noun as an NP.⁴ The operator is base-generated in the argument position within TP and is raised to the specifier of CP.⁵

The proposed analysis can capture the seemingly inconsistent reconstruction effects in Japanese. Recall that Japanese allows reflexives to be part of the head noun, where they can be bound by their antecedent within the relative clause as below:

- (16) [[John_i-ga e taipusita] kare-zisin_i-no ronbun] (= (7))
 John-NOM typed he-self-GEN paper
 ‘himself_i’s paper that John_i typed’

We claim that in the proposed structure, the operator in the specifier of CP and the head noun are in a semantic agreement relationship, and the reconstruction effect with regard to binding emerges by the binding of the trace by the operator.

Next, recall that part of an idiom can be the head of a relative construction as repeated below:

⁴ See Oga (2002) for discussion of the categorical status of NP in Japanese.

⁵ One of the peculiar properties of Japanese relative constructions as observed by Kuno (1973: 239) is that relativization does not exhibit a Subjacency effect as below:

- (i) [_i e_j kiteiru [yohuku_j]ga yogoreteiru] sinsi_i
 wearing suit NOM dirty gentleman
 ‘Lit. The gentleman that the suit that he wears is dirty.’

In (i), relativization of *sinsi* ‘gentleman’ out of the complex noun phrase is possible, whereas it is not in English. Perlmutter (1972: 95) suggests that Japanese has a rule of “Pronoun Drop”, which is not constrained by Subjacency. He claims that the relativized noun phrase is pronominalized, and at a later stage, the pronoun is deleted by “Pronoun Drop”, leaving a gap within the relative clause. In his analysis, the gap of an argument in the relative clause is the result of the Pronoun Drop rule, rather than the trace of the moved noun phrase. The lack of the Subjacency effect leads Murasugi (1991) to suggest that the relative constructions in adult Japanese are of the category IP, not CP, and the gap within the relative clause is *pro* base-generated in the argument position.

If (i) were derived by operator movement as we propose in this paper, the operator would cross two boundaries on its way to the specifier of CP and, contrary to the grammaticality of (i), the Subjacency effect would result. We leave this issue for future research.

- (17) John-no hatugen-wa [[pro *hi-ni* e_1 *sosogu*] *abura*]_idatta. (= (9))
 John-GEN comment-TOP fire-into pour oil was
 'Lit. John's comment was the oil that someone poured into fire.'
 'John's comment was something that made the situation worse.'

We suggest that since the operator in the specifier of CP agrees with the head noun semantically and binds the trace, the idiomatic interpretation is retained between the trace in the object position and the other parts of the idiom.

Finally, let us turn to the lack of reconstruction effects with respect to scope. As repeated below, when the numeral quantifier phrase is contained within the head noun, reconstruction effects disappear.

- (18) *watasi-wa* [[*daremo-ga* e *yomu*] *san-satu-no* *hon*]-*o* *naraberu*. (= (11))
 I-TOP everyone-NOM read three-CL-GEN book-ACC arrange
 'I will put the (same) three books that everyone will read in order.'

If Japanese relative constructions involved head noun movement like Chinese as Aoun & Li propose, it would be impossible to account for the fact that the head noun in (18) takes scope over the quantifier subject.

However, the proposed structure for Japanese relative constructions can account for the lack of the reconstruction effect. We claim that the scope interaction occurs between the head noun and the quantifier subject in the proposed adjunction structure. Since the head noun is base-generated in the adjoined position to the CP, it c-commands the quantifier subject in the relative clause CP. Consequently, the head noun takes a wide scope over the quantifier subject. This also suggests that there is no number feature agreement between the head noun and the operator, and thus there is no chance of transferring its number feature to the trace in the object position.

Our analysis that the number feature is excluded from the agreement relationship between the operator and the head noun is supported by English relative constructions. In English, the relative pronoun agrees with the head noun in person feature as below:

- (19) a. the man who/*which you met at the airport
 b. the book which/*who you bought at the bookshop

On the contrary, the number feature of the head noun has nothing to do with the selection of relative pronouns. Whether the head noun is singular or plural, for instance, does not affect the selection of relative pronouns as illustrated below:

- (20) a. the man/men who you met at the airport
 b. the book/books which you bought at the bookshop

This suggests that the agreement between the head noun and the operator within relative constructions is a semantic matching and does not contain the number agreement, regardless of whether the operator is overt (English) or covert (Japanese).

To sum up, we have proposed in this section that Japanese relative constructions have an adjunction structure, wherein the relative clause CP is adjoined to the base-generated head noun as an NP. Chinese and Japanese relative constructions are different in that Chinese relative constructions can be derived by the head noun (NP) raising out of the relative clause CP, whereas Japanese relative constructions involve operator movement to the specifier of CP. We have claimed that the reconstruction effects with respect to binding and idioms are due to operator movement to the specifier of CP. On the other hand, the lack of reconstruction effects with respect to scope is due to the proposed adjunction structure, in which the head noun NP is base-generated in the adjoined position to the CP and takes a wide scope over the quantified subject within the CP.

4 . Nominative/Genitive Conversion in Japanese relative constructions

In the previous section, we proposed that Japanese relative constructions have the adjunction structure $[_{NP} CP NP]$, where operator movement is involved. In this section, we demonstrate that our proposal is supported by an analysis of Nominative/Genitive Conversion in Japanese.

The subject of the Japanese relative construction, which is marked with the nominative Case marker *-ga*, may optionally be marked with the genitive Case marker *-no* as below:

- (21) $[[John\text{-}ga/no \quad e_i \quad yonda] \text{ hon}_i]$
 John-NOM/GEN read book
 ‘the book John read’

This case conversion phenomenon has been called “Nominative/Genitive Conversion” (NGC) and received much attention in Japanese generative literature.

Focusing on the genitive Case assignment, Miyagawa (1993) argues that the relative construction is a noun phrase and its topmost functional head D can check the genitive Case of the subject when it is raised out of the relative clause at LF as illustrated below:⁶

- (22) $[_{DP} John\text{-}no_i \text{ } [_{IP} t_i \quad yonda] \text{ hon } D]$
 John-GEN read book
 ‘the book John read’

However, Watanabe (1996) points out that Miyagawa’s analysis of relative constructions based on the assumption that relative constructions are DPs fails to provide an account for NGC in the following ex-

⁶ Miyagawa (1993: 220, fn. 6) raises the issue of the complementizer. If the relative clause is a CP, which is potentially a barrier to the LF movement, Miyagawa’s analysis of the genitive phrase raising at LF would be blocked. Following Mura-sugi (1991), Miyagawa assumes that the relative clause is an IP, which is not a barrier to extraction of the genitive phrase.

ample of comparative deletion:

- (23) John-wa [Mary-ga/no yonda yori] takusan-no hon-o yonda.
 John-TOP Mary-NOM/GEN read than many-GEN book-ACC read
 'John read more books than Mary did.'

Hiraiwa (2000) notes that the clause-final element *yori* in (23) is not a nominal-like element, because it cannot select the genitive form of the pronoun, which is considered as an example of DP, as below:

- (24) a. *sono yori
 It (GEN) than

 b. sore yori
 it than

This suggests that genitive Case within NGC is not checked by D, the head of a noun phrase.

Watanabe (1996) takes a cross-linguistic perspective on NGC. He points out that various forms of verbal morphology modification and related phenomena take place in the domain of *wh*-extraction, i.e., *wh*-operator movement, cross-linguistically. Given that the relative clause is a typical domain of *wh*-operator movement in various languages, Watanabe argues that null *wh*-operator movement takes place in Japanese relative clauses, wherein the head C and the operator in its specifier are in a *wh*-agreement relationship. He claims that *wh*-agreement affects the functional heads: T, Agr-s, and C, in the relative clause, and cancels the requirement of filling the specifier of Agr-sP. That is, genitive Case is the indication that the subject is not located in the specifier of Agr-sP and has little to do with genitive Case marking within DP.⁷

Ishii (1991) claims that comparative deletion involves an empty operator movement. Thus, comparative deletion is accounted for as the phenomenon that occurs in the domain of *wh*-extraction, and NGC in comparative deletion in (23) results from *wh*-agreement under Watanabe's analysis.

⁷ Hiraiwa (2000) shows some counter examples that are problematic for Watanabe's *wh*-agreement analysis. Consider:

- (i) John-wa [ame-ga/no yamu made] office-ni ita.
 John-TOP rain-NOM/GEN stop until office-at was
 'John was at his office until the rain stopped.'

NGC is allowed in (i), where the bracketed phrase does not seem to involve *wh*-agreement. This leads Hiraiwa to propose that a syntactic C-T-*v*-V head amalgamate corresponds to the special verbal inflection (the P-A form), and this head amalgamate has a φ feature that can check genitive Case as well as nominative Case. He further claims that the P-A form in Japanese involves a null C, which is 'affixal', and it requires C-T-*v*-V head amalgamation. Hiraiwa analyses relative clauses as CPs, but his structure differs from Watanabe's in that operator movement and subsequent *wh*-agreement are not involved. The head amalgamation approach calls for further investigation of operator movement analysis proposed in this paper.

Theoretical details aside, Watanabe's account for NGC within relative constructions accords with the present analysis that relative clauses are CPs and involve operator movement. Further investigation of the internal structure of relative constructions is necessary, but from what has been discussed above, it is reasonable to conclude that the CP analysis of Japanese relative clauses succeed in accounting for both reconstruction effects and NGC.

5 . Conclusion

To conclude, we have argued in this paper that Japanese relative clauses are CPs that involve operator movement. The seemingly inconsistent reconstruction effects with respect to binding, idioms and scope are accounted for by the interaction of operator movement and the semantic agreement between the head noun and the operator in the proposed adjunction structure. The proposed account of Japanese relative constructions converges with that of Watanabe (1996), who has reached the conclusion that Nominative/Genitive Conversion in Japanese is possible in relative clauses as CPs, a typical domain of wh-operator movement.

References

- Alexiadou, A. et al. 2000. *The syntax of relative clauses*. Amsterdam: John Benjamins.
- Aoun, J. and Y.-H. A. Li 2003. *Essays on the representational and derivational nature of grammar*. Cambridge, Mass.: MIT Press.
- Chomsky, N. 1977. On Wh-movement. In *Formal syntax*, ed. by P. Culicover, T. Wasow & A. Akmajian, 71-132. New York: Academic Press.
- Hiraiwa, K. 2000. On Nominative-Genitive conversion. *MIT Working Papers in Linguistics* 39: 66-123.
- Hoji, H. 1985. Logical form constraints and configurational structures in Japanese. Ph.D. diss., University of Washington.
- Ishii, Y. 1991. Operators and empty categories in Japanese. Ph.D. diss., University of Connecticut.
- Kaplan, T. I. & J. B. Whitman 1995. The category of relative clauses in Japanese, with reference to Korean. *Journal of East Asian Linguistics* 4: 29-58.
- Kayne, R. S. 1994. *The antisymmetry of syntax*. Cambridge, Mass: MIT Press.
- Kitagawa, C. and C. Ross. 1983. Prenominal modification in Chinese and Japanese. *Linguistic Analysis* 9: 19-53.
- Kuno, S. 1973. *The structure of the Japanese language*. Cambridge, Mass: MIT Press.
- Miyagawa, S. 1993. Case-checking and Minimal Link Condition. *MIT Working Papers in Linguistics* 19: 213-254.
- Murasugi, K. 1991. Noun phrases in Japanese and English: A study in syntax, learnability and acquisition. Ph.D. diss., University of Connecticut.
- Murasugi, K. S. 2000. Japanese complex noun phrases and the antisymmetry theory. In *Step by Step*, ed. by R. Martin et al., 211-234. Cambridge, Mass: MIT Press.
- Oga, K. 2002. The syntax of Japanese nominal projections and some cross-linguistic implications. Ph.D. diss., University of Durham.
- Perlmutter, D. M. 1972. Evidence for shadow pronouns in French relativization. In *The Chicago which hunt*, ed. by P. Peranteau et al., 73-105. Chicago: Chicago Linguistic Society.
- Saito, M. 1989. Scrambling as semantically vacuous A' movement. In *Alternative conceptions of phrase structure*, ed. by M. Baltin and A. Kroch, 182-200. Chicago: The University of Chicago Press.
- Watanabe, A. 1996. Nominative-Genitive conversion and agreement in Japanese: A cross-linguistic perspective. *Journal of East Asian Linguistics* 5: 373-410.
- Wu, X.-Z. Z. 2001. Grammaticalization and the development of functional categories in Chinese. Ph.D. diss., University of

大 賀 京 子

Southern California.

(国際交流・協力センター准教授)