

# On Null Complementizers in English and Japanese

Shigeki Taguchi

University of Connecticut Graduate School\*

Key phrases: embedded topicalization, Nominative Genitive Conversion, null complementizer, syntax-phonology interface

## 1. INTRODUCTION

The aim of this paper is to argue against the existence of a null complementizers in Japanese relative clauses and prenominal gapless clauses, discussing the distribution of null complementizers in English and Japanese from a minimalist perspective. First, I give an overview of Maki *et al.* (1999), who argue that embedded topicalization in Japanese is licensed by the LF I-to-C adjunction, and its inability to apply inside relative clauses is due to the lack of C. I provide further data showing that the applicability of embedded topicalization crucially hinges on the presence of C, and conclude that whenever prenominal gapless clauses have a complementizer, it must be overt in Japanese. Then, I discuss syntactic-phonological conditions on null complementizers, and conclude that relative clauses in Japanese do not have a null complementizer. Given the conclusion above, I suggest that the analysis of Nominative Genitive Conversion based on null complementizer be reconsidered (cf. Watanabe 1994, 1996, Hiraiwa 2000, 2002). Specifically, I claim that a nominal element D is responsible for NGC (cf. Harada 1971, 1976, Miyagawa 1993, among others), and that NGC is a result of Agree between the embedded subject and D, which is blocked by the CP projection in accordance with the Phase Impenetrability Condition. I also propose an alternative analysis of NGC with recourse to a mechanism where movement is triggered by an uninterpretable feature of the moving element.

## 2. EMBEDDED TOPICALIZATION

It has been noted that embedded topicalization is possible only when the complementizer is overtly realized as *that* in English (cf. Authier 1992, Kayne 1994, Bošković 1997, etc.), as shown in (1):

- (1) John believes \*(that) this book, Mary read.

Maki *et al.* (1999), pointing out some similarities between English and Japanese with respect to embedded topicalization, claim that embedded topicalization in Japanese, which derives (2)b from (2)a, is also

licensed by LF I-to-C adjunction. Based on Murasugi's (1991) claim that relative clauses in Japanese are IPs, they claim that the inapplicability of topicalization in (3)b is due to the absence of the CP projection.

- (2) a. Taroo-wa Hanako-ga yuusyuuuda to omou.  
 Taroo-top Hanako-nom excellent C think  
 'Taroo believes that Hanako is excellent.'
- b. Taroo-wa Hanako-wa yuusyuuuda to omou.  
 Taroo-top Hanako-top excellent C think  
 (lit.) 'Taroo believes that Hanako, is excellent.'
- (3) a. Taroo-wa [ kono hon-o yonda ] hito-ni atta.  
 Taroo-top this book-acc read person-dat met  
 'Taroo met the person who read this book.'
- b. \* Taroo-wa [ kono hon-wa yonda ] hito-ni atta.  
 Taroo-top this book-top read person-dat met  
 (lit.) 'Taroo met the person who this book, read.'

I provide (4) and (5), examples of prenominal gapless clause, to support their claim; namely, (4)b does not allow embedded topicalization because there is no C that licenses the embedded topicalization. (5)b does, however, because *toiu*, the head of an optional CP projection, licenses it.<sup>1</sup>

- (4) a. [ kono hon-ga omosiroi  $\emptyset$  ] kanoosee/syooko  
 this book-nom interesting possibility/evidence  
 (lit.) 'the possibility/evidence this book is interesting'
- b. \* [ kono hon-wa omosiroi  $\emptyset$  ] kanoosee/syooko  
 this book-top interesting possibility/evidence  
 (lit.) 'the possibility/evidence this book, is interesting'
- (5) a. [ kono hon-ga omosiroi toiu ] kanoosee/syooko  
 this book-nom interesting C possibility/evidence  
 'the possibility/evidence that this book is interesting'
- b. [ kono hon-wa omosiroi toiu ] kanoosee/syooko  
 this book-top interesting C possibility/evidence  
 (lit.) 'the possibility/evidence that this book, is interesting'

In sum, relative clauses and prenominal gapless clauses in Japanese are basically IPs, as Murasugi (1991) claims, but prenominal gapless clauses may optionally have the CP projection headed by an overt head.

### 3. SYNTACTIC PHONOLOGICAL CONDITIONS ON NULL COMPLEMENTIZERS

There are at least two more possibilities that account for the observation in Section 2: one is that null complementizers in Japanese simply do not license embedded topicalization, and the other is that relative clauses in Japanese are in fact headed by a null complementizer, and an topic NP and an empty operator compete for the SpecCP position (cf. Kuroda 1987, Tonoike 1989, Rizzi 1997, Taguchi in press, etc.).<sup>2</sup> In this section, I discuss these three possibilities, and argue in favor of the claim that Japanese relative clauses are IPs.

Saito (1987) reports that some of Kansai (i.e. western) dialects of Japanese allow the deletion of the complementizer *to* (*te* in Saito's original examples), as shown in (6):

- (6) Taroo-wa [ Hanako-ga aho ya (to) ] omooteru.  
Taroo-top Hanako-nom fool is C is thinking  
'Taroo thinks that Hanako is a fool.'

Maki *et al.* (1999) claim that (6) involves a null complementizer. Specifically, given their proposal that embedded topicalization is licensed by the LF I-to-C adjunction, the fact that *to*-less counterpart in (6) allows embedded topicalization, as shown in (7), follows if it involves a null complementizer.

- (7) Taroo-wa [ Hanako-wa aho ya (to) ] omooteru.  
Taroo-top Hanako-top fool is C is thinking  
(lit.) 'Taroo thinks that Hanako, is a fool.'

I would like to discuss whether relative clauses in Japanese pattern in the same way as the *to*-less complement clauses. Before doing this, let us consider a similar case in English. Bošković and Lasnik (2003), modifying Pesetsky's (1992) proposal, claim that the null complementizer of complement clauses in English is a PF affix which must be hosted by the matrix verb adjacent to it in PF. Thus, (8) is well-formed only when the null complementizer and the matrix verb are adjacent.

- (8) John believed (\*at that time) [<sub>CP</sub> C Mary read this book ].

The same holds for complement clauses headed by a null complementizer in Kansai dialect. The examples in (9) show that null complementizers in Kansai dialects cannot appear unless they are adjacent to the matrix verb which licenses them in PF. For instance, the null complementizer and the verb are not adjacent because of CP-scrambling in (9)a, an intervening adverb in (9)b, CP-topicalization in (9)c, and inversion in (9)d, respectively.

- (9) a. [ Hanako-ga aho ya \*(to) ] Taroo-ga omooteru.  
 Hanako-nom fool is C Taroo-nom is thinking  
 ‘Taroo thinks that Hanako is a fool.’
- b. Taroo-wa [ Hanako-ga aho ya \*(to) ] hakkiri omooteru.  
 Taroo-top Hanako-nom fool is C clearly is thinking  
 ‘Taroo clearly thinks that Hanako is a fool.’
- c. [ Hanako-ga aho ya \*(to) ]-wa Taroo-wa omootehen.  
 Hanako-nom fool is C -top Taroo-top is not thinking  
 ‘That Hanako is a fool, Taroo does not think.’
- d. Taroo-wa omooteru, [ Hanako-ga aho ya \*(to) ].  
 Taroo-top is thinking Hanako-nom fool is C  
 ‘That Hanako is a fool ... Taroo thinks.’

Now, let us turn to relative clauses. Bošković and Lasnik (2003) argue that the null complementizer in English relative clauses must be adjacent to the head noun in PF, as exemplified by (10)a and (10)b.

- (10) a. The child [<sub>CP</sub> C Alexis was waiting for ] was lost.  
 b. \*The child was lost [<sub>CP</sub> C Alexis was waiting for ].

If Japanese relative clauses are indeed headed by a null complementizer just like (6), it is predicted that they also must be licensed by the adjacent head noun. However, (11) shows that relative clauses and the head noun can be separated by an adjunct in Japanese:

- (11) Taroo-wa [ kono hon-o yonda ] erai hito-ni atta.  
 Taroo-top this book-acc read great person-dat met  
 ‘Taroo met the great person who read this book.’

In short, a “null complementizer” in Japanese relative clauses, if any, does not have to be licensed by anything. Assuming that Bošković and Lasnik’s (2003) argument extends to null complementizers in Japanese, as shown in (9), (11) can be taken to support the claim that relative clauses in Japanese are not CPs but IPs.

An (2007a, b) provides a syntactic-phonological account of null complementizers. He claims that (10)b is ruled out due to a violation of the generalization that if a clause occupies a position that constitutes an independent Intonational Phrase, either the Spec or the head of the CP must be overtly filled. Under An’s analysis, restrictive relative clauses do not constitute an Intonational Phrase, and thus (11) is predicted to be

well-formed even if it contains a null complementizer. However, it is also plausible that (11) is well-formed because Japanese relative clauses entirely lack the CP projection, and thus An’s generalization is not violated.

#### 4. NOMINATIVE GENITIVE CONVERSION IN JAPANESE

Let us discuss how the proposed analysis affects Nominative Genitive Conversion (NGC), an alternation between nominative and genitive case particles on NPs inside a clausal prenominal modifier, as shown in (12):

- (12) boku-ga/no    yonda    hon  
       I-nom/gen    read     book  
       ‘the book I read’

NGC has been traditionally assumed to be licensed by a noun or D (e.g. Harada 1971, 1976, Saito 1982, Miyagawa 1993, Ochi 2001, and Maki, Kobayashi, and Dunton 2003). Watanabe (1994, 1996) and Hiraiwa (2000, 2002), on the other hand, argue against the traditional analysis, providing counterexamples like (13):

- (13) Taroo-wa    [    ame-ga/no        yamu    (toki)    made    ]    kyoositu-ni    ita.  
       Taroo-top    rain-nom/gen    stop     time     until        classroom-at    was  
       ‘Taroo was at the classroom until the rain stopped.’

They maintain that the embedded clause in (13) does not have to contain any head noun, indicating that NGC is licensed independently of a noun or D. Developing Watanabe’s analysis, Hiraiwa proposes that the embedded clause in (13) has  $C_{\text{affix}}$  (i.e. an empty complementizer) as well as T and V, which form an amalgamation. Moreover, this amalgamation is spelled out as a special form of the predicate that licenses either nominative or genitive without recourse to D, as schematized in (14):

- (14) [CP [TP [VP DP-gen V ] T ]  $C_{\text{affix}}$  ] ... (D) *Agree & Genitive Licensing*
- 

However, this analysis cannot account for the argument-adjunct asymmetry regarding NGC pointed out by Fujita (1988) (cf. Miyagawa 1989, Takahashi 1994, Maki *et al.* 1999, etc.). As shown in (15)a, NGC is possible when *toki* heading a clause is an argument, but is impossible when it is an adjunct, as shown in (15)b.<sup>3</sup>

- (15) a. [    Oogoe-de        Hanako-ga/no        waratta    toki    ]-o    oboeteiru.  
       loudly        Hanako-nom/gen    laughed    TOKI-acc    remember  
       ‘I remember the time when Hanako laughed loudly.’

- b. [ Oogoe-de Hanako-ga/\*no waratta toki ] Taroo-ga naiteita.  
 loudly Hanako-nom/gen laughed TOKI Taroo-nom was crying  
 ‘Taroo was crying when Hanako laughed loudly’

Moreover, it is hard for Hiraiwa’s analysis to explain why the complementizer of a relative clause cannot always be realized as *no*, as shown in (16). Note that Hiraiwa takes *no* in (17) as an instance of  $C_{\text{affix}}$ .<sup>4</sup>

- (16) boku-no yonda (\*no) hon  
 I-gen read NO book  
 ‘the book I read’

- (17) Taroo-wa [ kinoo Hanako-ga/no kita no ]-o siranakatta.  
 Taroo-top yesterday Hanako-nom/gen came NO-acc didn’t know  
 ‘Taroo didn’t know that Hanako came yesterday.’

Given Hiraiwa’s classification of complementizers in Japanese, it is predicted that the spell-out of  $C_{\text{affix}}$  as *no* should be possible whenever NGC is applicable. (16) shows that this prediction is incorrect. Thus, it seems plausible that *no* in (17) is in fact a nominalizer, which licenses NGC but cannot cooccur with the nominal element D of relative clauses (cf. Maki *et al.* 2003, Maki and Uchibori 2005). Also, it seems plausible that *toki* in (15)a is a noun which licenses NGC, while *toki* in (15)b is a complementizer, which blocks it.

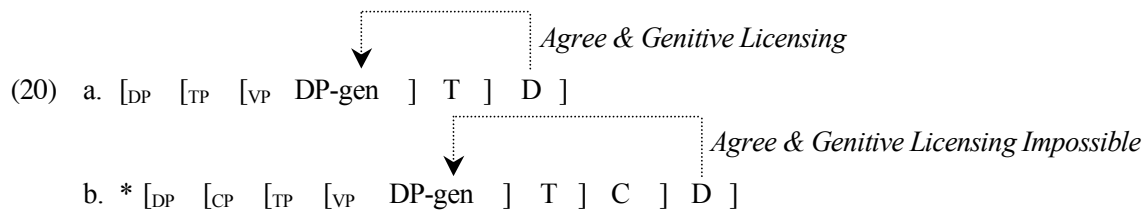
## 5. PROPOSAL

I propose that NGC is licensed by Agree between the subject and a nominal element D, which need not be overtly expressed as a noun, as in (13), repeated below as (18) (cf. Maki *et al.* 2003, Maki and Uchibori 2005):

- (18) Taroo-wa [ ame-ga/no yamu (toki) made ] kyoositu-ni ita.  
 Taroo-top rain-nom/gen stop time until classroom-at was  
 ‘Taroo was at the classroom until the rain stopped.’

Moreover, I claim that the CP projection in Japanese generally blocks the Agree relation required for the NGC licensing (cf. Inoue 1976, Ochi 2001), in accordance with Chomsky’s (2000) Phase Impenetrability Condition (19), in contrast to Hiraiwa’s and Watanabe’s assumption that the CP projection is necessary for licensing NGC. The mechanism I am proposing is schematically summarized as (20):

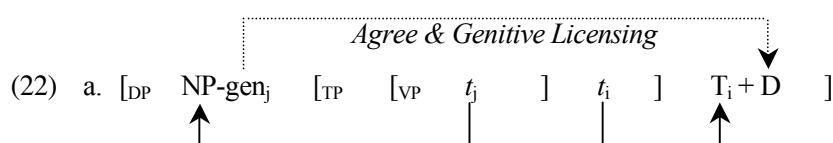
- (19) In phase  $\alpha$  with head H, the domain of H is not accessible to operations outside  $\alpha$ , only H and its edge are accessible to such operations.

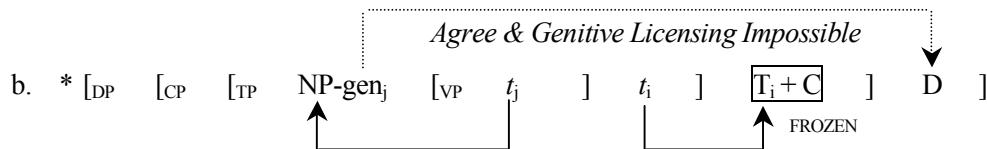


Given this analysis, it is no longer necessary to complicate the classification of complementizers in Japanese, as Hiraiwa does. Thus, the contrast between (21)a and (21)b is straightforwardly accounted for by assuming that the CP projection is absent in (21)a and present in (21)b, thus NGC is applicable only in the former.

- (21) a. [ syoorai daizisin-ga/no okiru  $\emptyset$  ] kanoosee  
           in the future great earthquake-nom/gen occur possibility
- b. [ syoorai daizisin-ga/\*no okiru toiu ] kanoosee  
       in the future great earthquake-nom/gen occur C possibility
- ‘the possibility that a great earthquake will occur in the future’

I would like to pursue an alternative analysis of NGC with recourse to Bošković’s (2007a, b) mechanism of movement and feature checking, where movement is triggered by an uninterpretable feature on the part of the moving element. Under Bošković’s system, the genitive NP must move to SpecDP overtly, in order to check its uninterpretable Case feature. There arise two questions regarding this alternative analysis. One is how to make the movement possible in the configuration (20)a. Given that economy considerations such as Agree Closest require the genitive NP to move to the closest Case checker, namely, T in (20)a, it should not be allowed to move to SpecDP. I assume that the genitive NP is allowed to move to SpecDP only if T has optionally moved to D (and the trace of T cannot check the Case feature), which is consistent with the optionality of NGC (cf. Taguchi 2007). The other question is why the CP projection blocks NGC, even though I am assuming that optional head movement is available. More precisely, given that T is allowed to undergo optional head movement, it should also be allowed to move to C first and then to D. I answer this question by extending Bošković’s system to head movement. Specifically, I assume that head movement is also triggered by an uninterpretable feature of the moving head, in contrast to Pesetsky and Torrego (2001), who propose that head movement is triggered by the EPP feature on the target. In the case of NGC, T optionally bears an uninterpretable feature that triggers head movement, and the relevant checker is either C or D. Thus, once T has moved to C and checks its uninterpretable feature, it need not and thus cannot move further up, as in (22).





## 6. SUMMARY

In this paper, I argued that relative clauses and prenominal gapless clauses in Japanese are IPs, contrary to the proposal that they are CPs headed by a null complementizer. I followed the assumption that the lack of CP is responsible for the inapplicability of embedded topicalization in relative clauses (and prenominal gapless clauses) in Japanese, and concluded that whenever prenominal gapless clauses have a complementizer, it must be overt. I also showed that null complementizers must satisfy syntactic-phonological conditions, and showed that relative clauses in Japanese do not have a null complementizer. Hence, I proposed that NGC is a result of Agree between a nominal element D and the embedded subject, which is blocked by the CP projection in accordance with the PIC. I also proposed an alternative analysis of NGC with recourse to a mechanism where movement is triggered by an uninterpretable feature of the moving element. I extended this approach to head movement, and answered two questions: why NGC is possible and is blocked by the CP projection.

Notes:

\* I am indebted to Duk-Ho An, Jonathan Bobaljik, Željko Bošković, Jean Crawford, Hiroshi Funamoto, Takako Iseda, Yasuyuki Kitao, Hideki Maki, Satoru Nakai, Fumikazu Niinuma, Mamoru Saito, Tsuyoshi Sawada, Keun-Won Sohn, Shoko Taguchi, Susi Wurmbrand, and the audience at the Connecticut-Nanzan Joint Workshop on Minimalist Syntax, the 9th Seoul International Conference on Generative Grammar, and the 25th Meeting of the English Linguistic Society of Japan for helpful comments on an earlier version of this paper. All errors are my own responsibility.

<sup>1</sup> Unfortunately, I do not find an example of relative clauses that shows the same effect. See Ochi (2001), however, for an independent argument that relative clauses and prenominal gapless clauses have the same categorial status. See also Hooper and Thompson (1973) for the argument that topicalization inside relative clauses is restricted by semantic factors.

<sup>2</sup> See Mihara (1994) for an ECP-based account against the claim that relative clauses in Japanese involve an empty operator. I assume that Mihara is correct for an independent reason. I have shown by (4) and (5) that prenominal gapless clauses allow embedded topicalization only when they are headed by an overt complementizer. If prenominal gapless clauses and relative clauses have the same categorial status, as claimed by Ochi (2001), and if they are CPs that can be headed by a null complementizer, then it is hard to account for the contrast between (4) and (5); namely, it is expected that embedded topicalization should always be impossible, because an empty operator should occupy SpecCP regardless of whether the complementizer is null or not.

<sup>3</sup> I simply gloss *toki* as TOKI for convenience (see the translation and the discussion just below).

<sup>4</sup> I simply gloss *no* as NO for convenience (see the translation and the discussion just below).

## REFERENCES

- An, Duk-Ho (2007a) "Clauses in Noncanonical Positions at the Syntax-Phonology Interface," *Syntax* 10, 38-79.
- An, Duk-Ho (2007b) *Syntax at the PF Interface: Prosodic Mapping, Linear Order, and Deletion*, Doctoral dissertation, University of Connecticut.



- Authier, Marc (1992) "Iterated CPs and Embedded Topicalization," *Linguistic Inquiry* 23, 329-336.
- Bošković, Željko (1997) *The Syntax of Nonfinite Complementation*, MIT Press, Cambridge, MA.
- Bošković, Željko (2007a) "On Successive Cyclic Movement and the Freezing Effect of Feature Checking," *Sounds of Silence: Empty Elements in Syntax and Phonology*, ed. by Jutta Hartmann, Veronika Hegedüs, and Henk van Riemsdijk, Elsevier North Holland, Amsterdam.
- Bošković, Željko (2007b) "On the Locality and Motivation of Move and Agree: An Even More Minimal Theory," *Linguistic Inquiry* 38, 589-644.
- Bošković, Željko and Howard Lasnik (2003) "On the Distribution of Null Complementizers," *Linguistic Inquiry* 34, 527-546.
- Chomsky, Noam (2000) "Minimalist Inquiries: the Framework," *Step by Step: Essays on Minimalism in Honor of Howard Lasnik*, ed. by Roger Martin, David Michaels, and Juan Uriagereka, 89-15, MIT Press, Cambridge, MA.
- Fujita, Naoya (1988) "Genitive Subject in Japanese and Universal Grammar," ms., Ohio State University.
- Harada, Shin-Ichi (1971) "Ga-No Conversion and Idiolectal Variations in Japanese," *Gengokenkyu* 60, 25-38.
- Harada, Shin-Ichi (1976) "Ga-No Conversion Revisited," *Gengokenkyu* 70, 23-38.
- Hiraiwa, Ken (2000) "On Nominative-Genitive Conversion," *A Few From Building E-39. MIT Working Papers in Linguistics* 39, ed. by Ora Matushansky and Elena Guerzoni, 66-123.
- Hiraiwa, Ken (2002) "Nominative-Genitive Conversion Revisited," *Japanese/Korean Linguistics* 10, 546-559.
- Hooper, Joan and Sandra Thompson (1973) "On the Applicability of Root Transformations," *Linguistic Inquiry* 4, 465-497.
- Inoue, Kazuko (1976) *Henkeibunpou to Nihongo* (Transformational Grammar and Japanese), Taishukan, Tokyo.
- Kayne, Richard (1994) *The Antisymmetry of Syntax*, MIT Press, Cambridge, MA.
- Kuroda, Shige-Yuki (1987) "Movement of Noun Phrases in Japanese," *Issues in Japanese Linguistics*, ed. by Takashi Imai and Mamoru Saito, 229-271, Foris, Dordrecht.
- Maki, Hideki, Lizanne Kaiser, and Masao Ochi (1999) "Embedded Topicalization in English and Japanese," *Lingua*. 107, 1-14.
- Maki, Hideki, Keiichiro Kobayashi, and Jessica Dunton (2003) "A Genitive NP in the Nominative/Genitive Alternation Does Need a Noun," *Bulletin of the Faculty of Regional Studies* 13, 63-68.
- Maki, Hideki and Asako Uchibori (2005) "Ga/No Conversion," ms., Gifu University and Nihon University.
- Mihara, Ken-Ichi (1994) *Nihongo no Tougokouzou* (Syntactic Structures of Japanese), Shohakusha, Tokyo.
- Miyagawa, Shigeru (1989) *Syntax and Semantics 22: Structure and Case-Marking in Japanese*, Academic Press, San Diego.

- Miyagawa, Shigeru (1993) "Case-Checking and Minimal Link Condition," *MIT Working Papers in Linguistics 19: Papers on Case and Agreement II*, ed. by Collin Phillips, 213-254.
- Murasugi, Keiko (1991) *Noun Phrases in Japanese and English: A Study in Syntax, Learnability and Acquisition*, Doctoral dissertation, University of Connecticut.
- Ochi, Masao (2001) "Move F and *Ga/No* Conversion in Japanese," *Journal of East Asian Linguistics* 10, 247-286.
- Pesetsky, David (1992) "Zero Syntax II: An Essay on Infinitives," ms., MIT.
- Pesetsky, David and Esther Torrego (2001) "T-to-C Movement: Causes and Consequences," *Ken Hale: A Life in Language*, ed. by Michael Kenstowicz, 355-426, MIT Press, Cambridge, Mass.
- Rizzi, Luigi (1997) "The Fine Structure of the Left Periphery," *Elements of Grammar*, ed. by Liliane Haegeman, 281-337, Kluwer, Dordrecht.
- Saito, Mamoru (1982) "Case Marking in Japanese," ms., MIT.
- Saito, Mamoru (1987) "Three Notes on Syntactic Movement in Japanese," *Issues in Japanese Linguistics*, ed. by Takashi Imai and Mamoru Saito, 301-350, Foris, Dordrecht.
- Taguchi, Shigeki (2007) "On the Role of Complementizers in Japanese," *Proceedings of the 9th Seoul International Conference on Generative Grammar*, 181-193.
- Taguchi, Shigeki (in press) "On the Nature of Japanese Complementizers," *Proceedings of 2007 International Conference on Linguistics in Korea*.
- Takahashi, Daiko (1994) *Minimality of Movement*, Doctoral dissertation, University of Connecticut.
- Tonoike, Shigeo (1989) "*Wa, Mo, Ga*-no Ronrikeishiki: Bunbunpou to Danwabunpou-no Intafeisu (The LF Representation of *Wa, Mo, and Ga*: The Interface between Sentential Grammar and Discourse Grammar)," *Meiji Gakuin Ronso Eigo Eibeibungaku* 446, 51-75.
- Watanabe, Akira (1994) "A Cross-Linguistic Perspective on Japanese Nominative-Genitive Conversion and Its Implications for Japanese Syntax," *Current topics in English and Japanese*, ed. by Masaru Nakamura, 341-369, Hitsuji Shobo, Tokyo.
- Watanabe, Akira (1996) "Nominative-Genitive Conversion and Agreement in Japanese: A Cross-Linguistic Perspective," *Journal of East Asian Linguistics* 5, 373-410.

Department of Linguistics, U-1145

University of Connecticut

337 Mansfield Road

Storrs, CT 06269-1145

USA

[shigeki.taguchi@uconn.edu](mailto:shigeki.taguchi@uconn.edu)