Kansas Working Papers in Linguistics

edited by

John Kyle
Stacey Stowers

Volume 25
2000

Partial funding for this journal is provided by the
Graduate and Professional Association of the University of Kansas

ISSN 1043-3805

Kansas Working Papers in Linguistics

Volume 25
2000

Part I

Part II: Studies in Native American Languages XI

COMPLEMENTIZER DROP AND IP-COMPLEMENTATION IN JAPANESE

Minoru Fukuda
Tezukayama Gakuin University

Abstract: The main purpose of the present paper is to provide a principled account for a phenomenon called "Complementizer Drop" in the dialects of Japanese and its related phenomena in terms of the head-raising approach without recourse to the ECP or GB-type approach, under the assumption that the complement clause without a complementizer is not CP but a smaller projection such as IP. This head-raising operation is triggered to satisfy the licensing condition on non-canonical structural realizations such as a marked IP complement clause. It is also argued that our new analysis can explain the dialectal differences with regard to Complementizer Drop under a theory of markedness.

1 Introduction

In Standard Japanese, the presence of a complementizer (or Comp) is required in an embedded clause, as illustrated in (1).[1]

(1) Mary-ga John-ni [Kobe-ni iku *(to)] itta (koto)
M.-nom J.-to K.-to go Comp said (fact)
'(the fact that) Mary said to John that she would go to Kobe'

However, Saito (1984) points out that in the western dialects of Japanese, a complement clause can appear without an overt complementizer. This phenomenon is called "Complementizer Drop" (in short, "Comp Drop") in this paper.[2] The following examples are from the Kobe Dialect, where *te* rather than *to* serves as a complementizer (Saito 1984, 412, note 8).[3]

(2) a. Mary-ga John-ni [Kobe-ni iku te] yuu-ta (koto)
M.-Non J.-to K.-to go Comp say-past (fact)
'(the fact that) Mary said to John that she would go to Kobe'
b. Mary-ga John-ni [Kobe-ni iku] yuu-ta (koto)

Saito (1984) also notes that if the CP complement is not adjacent to the matrix verb, Comp Drop is disallowed, and suggests that this adjacency requirement can be accounted for in terms of the Empty Category Principle (ECP).[4]

(3) a. Mary-ga [Kobe-ni iku te] John-ni yuu-ta (koto)
b. *Mary-ga [Kobe-ni iku] John-ni yuu-ta (koto)

Kansas Working Papers in Linguistics v25, pp39-52

(4) *Empty Category Principle*
Empty categories must be properly governed.

In this paper, we argue against the ECP approach and propose a different but more general analysis to explain how the relevant linguistic phenomena are derived.

This paper is organized in the following way. In section 2, we give a critical review of the ECP approach to Comp Drop, originally suggested by Stowell (1981) and later adapted to the western dialects of Japanese by Saito (1984). In section 3, we suggest that the complement clause without Comp is not CP but a smaller category like IP. In section 4, we propose that when the complementizer is missing, the embedded verb moves out of the complement clause (along with Infl) and adjoins to the matrix verb. Consequently, Comp Drop can be explained without recourse to the ECP. In section 5, we summarize the discussion.

2 ECP Approach

Under the government and binding theory of generative grammar, Stowell (1981) argues that when the complementizer of the English complement clause is missing, there is an empty category (EC) in the Comp position. This EC is expected to satisfy the ECP, although it is not a trace left behind by movement. We should note here that (5b) and (6b) share the same structural configuration: i.e., both have the projection of Comp.

(5) a. We believe that she is honest.
b. We [$_{VP}$ believe [$_{CP}$ [$_{Comp}$ that] [$_{IP}$ she is honest]]] .

(6) a. We believe she is honest.
b. We [$_{VP}$ believe [$_{CP}$ [$_{Comp}$ *e*] [$_{IP}$ she is honest]]] .

Saito (1984) argues that Stowell's (1981) proposal can be extended to the western dialects of Japanese. Thus, when the complementizer *te* is missing, an EC occupies the Comp position, as shown in (7b).

(7) a. Mary-ga John-ni [$_{CP}$ *pro* Kobe-ni iku [$_{Comp}$ te]] yuu-ta
b. Mary-ga John-ni [$_{CP}$ *pro* Kobe-ni iku [$_{Comp}$ *e*]] yuu-ta

Since this EC is c-commanded and, therefore, properly governed by the matrix verb *yuu* 'say', the ECP is satisfied, and hence Comp Drop is allowed.

It is naturally predicted that if the complement clause is outside of a governed position, the construction should be ill-formed because the EC in the Comp position is not properly governed. This prediction is borne out by the ungrammaticality of (3b), where the scrambled complement clause is not c-commanded by the matrix verb.[5]

Although this approach appears to be convincing to the extent that it can account for the examples given above, the following issues arise. First, if we assume that the ECP applies in LF (see Lasnik and Saito 1992), and that the scrambled element is undone in this component (see Saito 1989), the unavailability of Comp Drop in (3b) will be problematic, because the LF representation for (3b) should be something like (2b). That is, when the complement clause moves back to its original position in LF, the EC in the Comp position will be properly governed by the matrix verb, and, hence, the ECP should be satisfied. Therefore, the impossibility of Comp Drop in (3b) will receive no clear account.

Secondly, the ECP approach does not provide us with a fully satisfactory account for the linguistic facts observed in the dialect spoken in the Hiroshima Prefecture of the Chugoku district. Comp Drop is referred to as "*To* Nuke (*To* missing)" by traditional Japanese grammarians, who point out that it is typically observed in the Hiroshima Dialect (see Shibata 1988, 612). According to my investigations, in contrast to (3b), (8b) is acceptable in the Hiroshima Dialect. The adjacency requirement on Comp Drop in the Kobe Dialect does not apply to the Hiroshima Dialect.

(8) a. Omae *sensei-ni* [Taroo-ga manuke ja]
you teacher-to T.-nom stupid be
yuuta rooga?
said don't you
'Did you say "Taroo is stupid?" to the teacher, didn't you?'
(Std. Jpn: Kimi-wa sensei-ni Taroo-ga manuke da to itta-no?)

b. Omae [Taroo-ga manuke ja] *sensei-ni*
you T.-nom stupid be teacher-to
yuuta rooga?
said don't you
'Did you say "Taroo is stupid?" to the teacher, didn't you?'

Since the ECP is expected to exclude constructions like (8b) as well as (3b), the well-formedness of (8b) is not predictable under the ECP approach.

Thirdly, Saito (1984) as well as Stowell (1981) assumes that the ECP takes care of non-trace ECs like an EC in the Comp position as well as traces left behind by movement. In other words, the ECP is supposed to deal with two heterogeneous types of EC. A conceptually more preferable situation is that the ECP deals with one type of EC, and that the distribution of the other is independently determined by other principles of grammar or that it simply does not exist. We will argue that this situation can be obtained under the hypothesis that constructions like (2b) do not involve an empty complementizer.

3 IP Complement Hypothesis

Proposal. For the following reasons, we assume that the complement clause that lacks a complementizer is IP rather than CP.[6] In other words, there is no C projection in the clause, and hence (2b) is assumed to have the structure shown in (9).[7]

(9) Mary-ga John-ni [IP *pro* Kobe-ni iku] yuu-ta (koto)

Let us first examine the distribution of sentence final particles such as *yanke* of the Kobe Dialect and *n'yo* of the Hiroshima Dialect. Since these elements occur at the end of sentences, as demonstrated in (10), it seems plausible to assume that they follow IP. Thus, they occupy the position outside of the IP projection.[8]

(10) a. Kobe Dialect:
Omae koppu menda *yanke*?
you cup broke prt
'You broke the cup, didn't you?'

b. Hiroshima Dialect:
Taroo-ga ano hon nusunda *n'yo*.
T.-nom that book stole prt
'Taro stole that book.'

Interestingly enough, when the sentences in (10) are embedded, the constructions sound odd to the speakers, as the following (a)-sentences show, where the complementizer does not show up.

(11) Kobe Dialect
a. ??Oniichan-ga [omae-ga koppu menda *yanke*]
brother-nom you-nom cup broke prt
yuutotta de
was-saying prt

b. Oniichan-ga [omae-ga koppu menda]
brother-nom you-nom cup broke
yuutotta de.
was-saying prt
'Your brother was saying you broke the cup'

(12) Hiroshima Dialect
a. *Omae [Taroo-ga ano hon nusunda *n'yo*]
you T.-nom that book stole prt
yuuta rooga?
said don't you

b. Omae [Taroo-ga ano hon nusunda]
you T.-nom that book stole
yuuta rooga?
said don't you
'You said Taro stole the book, didn't you?'

This fact can be taken as indicating that the complement or embedded clauses in (11) and (12) do not have a place for the particles that those in (10) have. In other words, the complement clauses without a complementizer do not constitute CP but a smaller projection like IP.

Secondly, we can obtain a conceptually preferable result if the complement clause that has no complementizer is not CP. Under this assumption, such a

complement clause lacks a Comp position. It follows that the ECP, which is irrelevant to such a construction, does not have to take care of non-trace ECs, and that it applies only to traces.

Assuming an IP complement hypothesis, we must provide an alternative account for Comp Drop, that does not resort to the ECP. This line of inquiry is compatible with the general stream of the Minimalist Program proposed by Chomsky (1995), where the notion of government is no longer assumed and principles of economy instead take over a central role.

Economy of Representation. Let us then consider the IP complement hypothesis in light of the Minimalist framework. In line with the program, Bošković (1997, 25), adopting Law's (1991, 332) original proposal, suggests a principle of economy of representation called "the Minimal Structure Principle (MSP)."

(13) *Minimal Structure Principle*
Provided that lexical requirements of relevant elements are satisfied, if two representations have the same lexical structure and serve the same function, then the representation that has fewer projections is to be chosen as the syntactic representation serving that function.

In the present situation, there are two possible structures for the complement clause in (2b): i.e., it is either CP (see [7b]) or IP (see [9]). Since both are functioning as a complement clause and IP has fewer projections than CP, the MSP picks the IP structure shown in (9) for the complement clause of (2b).[9]

Markedness of Comp Drop. We should note here that taking an IP complement is a special or marked property of the verbs in question. According to Chomsky (1986a, 87), if a verb s-selects a theta-role of proposition, it c-selects a clause. That is, the canonical structural realization (CSR) of a theta-role of proposition is expected to be a clausal category like CP. To make sure that the CSR of a theta-role of proposition is always CP rather than a smaller sentential projection like IP, Nakajima (1999, 334) argues for requirement (14). Then, it is not unnatural to suppose that this requirement in turn provides us with the two cases stated in (15).[10]

(14) *Requirement on the CSR of a Theta Role*
The CSR of a theta-role must be the most fully-fledged category among the possible categories for the theta-role.

(15) a. In the unmarked case, the CSR of a theta-role of proposition is CP.
b. In the marked case, the CSR of a theta-role of proposition is not CP but rather a smaller projection like IP.

According to Maeda (1977) and my investigations, the verbs taking an IP complement in the Kobe and Osaka Dialects are limited to *yuu* 'say' and *omow* 'think'. It is therefore naturally expected that the idiosyncratic or marked

property of these verbs is learned by means of "positive evidence" available to learners. This accounts for the fact that Comp Drop is observable in the limited area of Japan where such evidence is to be found.

We should note here that the Kobe and Osaka Dialects allow two options with respect to the categorial status of the complement clauses: i.e., either CP or IP. This is because the verbs in question take either *te*-complement clauses (see [2a]) or Comp Drop complement clauses (see [2b] or [9]). Then, according to (14) and (15), a CP complement is regarded as the unmarked option, while an IP complement the marked option.

(16) Kobe and Osaka Dialects
   a. A CP complement clause is an unmarked or canonical structural realization of a theta-role of proposition.
   b. An IP complement clause is a marked or noncanonical structural realization of a theta-role of proposition.

In the Hiroshima Dialect, on the other hand, no complementizer manifests itself in the complement clauses selected by the verbs like *yuu* and *omow*. Thus, the Hiroshima Dialect allows only one option with respect to the categorial status of the complement clauses: i.e., IP. It is therefore plausible to assume that the complement clause without a complementizer is an unmarked realization of a theta-role of proposition.

(17) Hiroshima Dialect:
An IP complement clause is an unmarked or canonical structural realization of a theta-role of proposition.

4 Head-Raising Approach

Licensing Condition on Non-Canonical Structural Realizations. In order to provide an explanation for the mechanism of Comp Drop, we would like to adopt the following assumptions alongside the IP complement hypothesis. Slightly modifying Nakajima's (1999, 335) "checking-complement-selection" approach, we will assume that at some stage of derivation the head of a marked structural realization must be licensed through a head-head relation with a head that selects it. In the present context, this licensing condition requires that the head of an IP complement clause, i.e., Infl, raise and adjoin to the matrix verb.[11]

(18) *Licensing Condition on Non-Canonical Structural Realizations*
The head of a non-canonical (or marked) structural realization must be licensed through a head-head relation with a head that selects it.

In addition, following Koizumi (1995, Chapter 7) and Otani and Whitman (1991), we will assume that a verb overtly moves out of VP, irrespective of whether it is a matrix verb or an embedded verb.[12]

As a corollary of the above hypotheses, we are led to conclude that in a case where Comp Drop takes place, the embedded verb overtly moves out of

VP and adjoins to Infl, and then the V-Infl combination overtly raises and adjoins to the matrix verb.

Let us illustrate the relevant derivation for (2b) by means of the following schematically represented structures.

(19) a. [CP [IP ... [VP ... [IP ... [VP ... V] Infl] V] Infl] C]
b. [CP [IP ... [VP ... [IP ... [VP ... t_1] V_1-Infl] V] Infl] C]
c. [CP [IP ... [VP ... [IP ... [VP ... t_1] t_2] [V_1-Infl]$_2$-V] Infl] C]

The embedded verb, originally located in the V head position (see [19a]), moves out of VP and adjoins to Infl (see [19b]). Relevant features are checked at this point. Then, V-Infl raises and adjoins to the matrix verb (see [19c]). The matrix verb and Infl are now in a head-head relation.[13]

Adjacency Requirement. Let us next consider the impossibility of Comp Drop in (3b) in the Kobe Dialect: i.e., the adjacency requirement on Comp Drop. Given the absence of VP internal scrambling (see Miyagawa 1997), when PP intervenes between the IP complement clause and the matrix verb, the clause is supposed to be in a position higher than the verb. Thus, when V-Infl moves out of an IP complement and adjoins to the matrix verb, the trace created by the movement is not c-commanded, as shown in (20). Thus, this movement results in a lowering operation, which is generally prohibited under any current version of syntactic theory.[14]

(20) a. *Mary-ga [Kobe-ni *t*] John-ni *iku*-yuu-ta
b. Mary-ga [VP [IP Kobe-ni *t*] [V' John-ni [V*iku*-yuu]]] ta

If V-Infl stays in the IP complement clause, as in (3b), it fails to satisfy the licensing condition stated in (18), that requires V-Infl to adjoin to the matrix verb. Therefore, the construction is ill-formed.

Then, why is (8b) of the Hiroshima Dialect acceptable? To put it differently, why does the Hiroshima Dialect not show the adjacency requirement effect? As described in (17), an IP complement is a canonical or unmarked option in this dialect, and hence the head of such a complement does not have to be licensed by the matrix verb. That is, the licensing condition on non-canonical structural realizations, i.e., (18), does not apply here. Therefore, the head of an IP complement does not move but it stays *in situ*, so there is no lowering operation. It follows that no violation of the ECP or the Proper Binding Condition occurs (see note 14). The problematic acceptability of (8b) for the ECP approach is now subsumed under our proposal.

Complex Head. Our next task is to show that when Comp Drop takes place, the embedded verb does not stay in the complement clause, and that the matrix verb and the embedded verb form a constituent or constitute a (head adjunction) structure with Infl (see [19c]). There are two pieces of evidence to support the above.

First, it is not impossible to place a short phonetic break or pause, indicated as "#" in (21), between the complementizer *te* and the matrix verb *yuu* 'say' in the Osaka and Kobe Dialects.[15]

(21) Mary-ga iku te # yuu-ta (koto)
M.-Non go Comp say-past (fact)
'(the fact that) Mary said that she would go'

This fact can be accounted for under the natural assumption that such a break can be put at a clausal (or, more generally, a phrasal) boundary. Thus, (21) suggests that there is such a boundary between the matrix verb and the CP complement clause.

Within our head-raising approach and IP complement hypothesis, when the complementizer is missing, there is no clausal boundary between the embedded verb and the matrix verb (see [19c]). Thus, inserting such a short phonetic break between the two verbs should result in unacceptability. The validity of this prediction can be confirmed by (22).

(22) *Mary-ga iku # yuu-ta (koto)

On the other hand, the ECP approach wrongly predicts that it should always be possible to insert such a break between the two verbs, because the structural configuration of (7a) (and [2a]) is not different from that of (7b) (and [2b]).

Another argument that supports our proposal comes from adverb interpretation. Let us first take up the cases of the Osaka and Kobe Dialects. When there is a complementizer *te*, as illustrated in (23), the adverb *mata* 'again' only modifies the embedded verb *iku* 'go'. Thus, (23), which has the interpretation shown in (24a), is unambiguous. This suggests that (23) does not have the interpretation shown in (24b), where the adverb modifies the matrix verb rather than the embedded verb.

(23) Obatyan-ga [Souru-ni *mata* iku te] yuute-ha-ru
aunt-nom Seoul-to again go Comp saying-polite-present

(24) a. My aunt says [that she will *again* go to Seoul].
b. My aunt *again* says [that she will go to Seoul].

A descriptive generalization that accounts for the fact just noted is that a clausal boundary imposed by the presence of a complementizer blocks the interpretive association between the adverb and the verb that is located outside of the complement clause.

However, interestingly when Comp Drop takes place, as illustrated in (25), the adverb *mata* 'again' can be associated with either the embedded verb or the matrix verb. Thus, (25) ambiguously means either (24a) or (24b).

(25) Obatyan-ga Souru-ni *mata* iku yuute-ha-ru

This fact again suggests that there is no clausal boundary between the adverb and the two verbs. To accommodate this fact, we can assume that at some stage of derivation, (25) has the following structure, where the embedded verb moves out of the IP complement clause and adjoins to the matrix verb along with Infl (see also [19c]).[16] Thus, the adverb can modify either of the two verbs.

(26) $[_{CP}\,[_{IP} \ldots [_{VP} \ldots [_{IP} \ldots]$ Adv V-Infl-V$] \ldots]]$

Again, the difference between (23) and (25) with respect to adverb interpretation cannot be captured by the ECP approach, which assigns the same structural configuration to both constructions.

It is interesting to note that the Hiroshima Dialect differs from the Osaka and Kobe Dialects with regard to the ambiguity of adverb interpretation. In the Hiroshima Dialect, the adverb in the complement modifies the embedded verb rather than the matrix verb. Thus, (27b) is unambiguous and the interpretation is straightforward.

(27) a. Kyoo kuru yuuta.
today come said
'Someone else said s/he would come today'

b. Kyoo *mata* kuru yuuta.
today again come said
'Someone else said s/he would come again today'

Within our analysis, the embedded verb is assumed to stay *in situ* in the complement clause. Thus, it is natural that the adverb is associated only with the embedded verb. The difference in adverb interpretation between the two dialects is not surprising at all under our proposal.

5 Summary

To recapitulate our discussion, assuming the IP complement hypothesis, we gave systematic account for Comp Drop in terms of the head-raising analysis without recourse to the ECP. The difference in the possibility of Comp Drop between dialects can be accounted for under a theory of markedness. Specifically, the IP complement is a marked option in the Osaka and Kobe Dialects, and hence the embedded V+Infl moves up to the matrix verb to satisfy the licensing condition on non-canonical structural realizations. On the other hand, in the Hiroshima Dialect, the IP complement is an unmarked option, so that the embedded V+Infl does not have to move up to the matrix verb to satisfy the condition.

Portions of the present paper were presented at the Kansai English Linguistic Circle in June, 1997, and the Fourth Seoul International Conference on Linguistics (SICOL-'97) in August, 1997. I am grateful to the people who provided me with data and suggestions. I would also like to thank an anonymous reviewer for his or her comments and suggestions. All remaining errors are mine. I received special financial supports from the International Foundation and the Cooperative Study Aid Program of Tezukayama Gakuin University, which made my research travels possible.

1 It is generally assumed that *to* is a complementizer, the head of CP, in Japanese. Kaplan (1993) summarizes previous arguments for the existence of a complementizer in Japanese. Shibatani (1978) calls it a "quotation marker." *Te* serves as a complementizer in some of the western dialects of Japanese.

2 It is also called "Complementizer Deletion." However, we avoid the term "deletion" because, as we will show in the course of discussion, we argue this phenomenon to be irrelevant to such an operation.

3 According to Machi (1994, 131) and my investigations, Comp Drop can be observed in other dialects of West Japan. In this paper, we deal with dialects spoken in Hiroshima, Kobe and Osaka. As we will demonstrate below, the former differs from the latter two in linguistically interesting ways. It is interesting to note that even in the colloquial speech of Standard Japanese, *tte*, a phonological variant of *te*, is used as a complementizer, but it cannot be omitted.

(i) Mary-ga John-ni [Kobe-ni iku *(tte)] itta
M.-nom J.-to K.-to go Comp said
'Mary said to John that she would go to Kobe'

My investigations, which are based on interviews with native speakers and data book researches, were conducted in the Osaka and Hiroshima Prefectures in 1997 and 1999. The findings are summarized in Fukuda 1997 and Fukuda 2000. It goes without saying that more comprehensive research is necessary.

4 Saito (1984) defines government in terms of c-command. For expository purposes, we will assume the following definition of proper government:

(i) X properly governs Y if and only if (a) X is a lexical category governing Y (i.e., lexical government), or (b) X c-commands Y and there is no barrier intervening X and Y (i.e., antecedent-government).

Recently, under the Minimalist Program (see Chomsky 1995), lexical government is no longer assumed, and antecedent government is incorporated into the program in a slightly different form (see Chomsky and Lasnik 1993;

Lee 1995).

5 If we define government in terms of m-command, as Chomsky (1986b) does, the EC in Comp is properly governed in (3b). Thus, Saito (1984) argues against the m-command definition of government in favor of the c-command definition.

6 There is another possibility here that the clause in question is Modal Phrase, an intermediate projection between IP and CP. See Ueyama 1994 for a discussion of Modal Phrases. We assume Chomsky's (1986b) *Barriers*-type phrase structure to simplify discussion.

7 Bošković (1997), Doherty (1997) and Nakajima (1999) independently argue that a complement clause without a complementizer lacks a C projection in English.

8 To my knowledge, there is no study on the syntactic position of sentence final particles in these dialects. However, Fukuda (1993) argues that such elements occupy the Comp position in Standard (colloquial) Japanese, and that they allow the nominative Case marker of the subject to be missing. We adopt his hypothesis here and assume that in (10) the sentence final particles are not located in the Infl projection but in the Comp position.

9 The MSP does not apply locally or at every stage of derivation, but deals with two (or more) structures formed through derivation. In other word, it applies globally rather than locally. Thus, this principle can be considered a global economy condition rather than a local economy condition. Although Collins (1997) insists that the economy condition be not global but local, Fox (2000) gives favorable arguments for the global economy condition as well as the local economy condition and economy of representation.

10 We should note that the MSP is irrelevant to the choice between the two cases discussed here.

11 We can assume that this raising operation takes place either in overt syntax or in PF. See note 12.

12 Koizumi (1995) argues that the verb raises up to a Comp position. However, due to the Head Movement Constraint (HMC), which states that a moved head cannot skip an intervening head between its original position and its landing site (see Rizzi 1990, 11), it cannot directly move into Comp skipping Infl, but must first adjoin to Infl when it moves out of VP. Tang (1998) argues in favor of the assumption that verb raising takes place in PF rather than in overt syntax. If we adopt Tang's (1998) proposal, we may argue that the head of an IP complement raises and adjoins to the matrix verb in PF, as stated in note 11.

13 A slightly different analysis can be suggested. First, although the embedded verb needs to move into the embedded Comp position, as claimed by

Koizumi (1995), the complement clause has no such position. Thus, it must raise up to the matrix Comp position instead. The most economical way to
50 reach this position is that the verb first moves out of the embedded clause and adjoins to the matrix verb, which in turn raises up to the matrix Comp position along with the embedded verb. In a sense, the embedded verb moves from the matrix V head position to the matrix Comp position as a "free-rider." What is common to our proposal and the analysis just noted is that the embedded verb no longer stays *in situ*.

14 It can be argued that the movement results in failure to satisfy the antecedent government of the ECP (see note 4) or the Proper Binding Condition, which requires all traces to be bound (see Lasnik and Saito 1992, 90).

15 According to my investigations, in contrast to the speakers of the Osaka and Kobe Dialects, the speakers of the Hiroshima Dialect do not allow such a break between the complement clause and the matrix verb.

16 We assume that adverbs constitute a phrasal category. Therefore, the HMC effect is voided even when the embedded verb skips it.

REFERENCES

Bošković, Željko. 1997. *The syntax of nonfinite complementation*. Cambridge, MA.: MIT Press.

Chomsky, Noam. 1986a. *Knowledge of language*. New York: Praeger.

Chomsky, Noam. 1986b. *Barriers*. Cambridge, MA.: MIT Press.

Chomsky, Noam. 1995. *The minimalist program*. Cambridge, MA: MIT Press.

Chomsky, Noam and Howard Lasnik. 1993. The theory of principles and parameters, in *Syntax*. ed. by Joachim Jacobs et al., Berlin and New York: Walter de Gruyter (Reprinted in Chomsky 1995).

Doherty, Cathal. 1997. Clauses without complementizers: finite IP-complementation in English, *The Linguistic Review* 14, 197-220.

Fox, Danny. 2000. *Economy and semantic interpretation*. Cambridge, MA.: MITWPL and MIT Press.

Fukuda, Minoru. 1993. Head government and case marker drop in Japanese, *Linguistic Inquiry* 24, 168-172

Fukuda, Minoru. 1997. Complementizer drop in Japanese, *Proceedings of the Fourth Seoul International Conference on Linguistics*, 194-203

Fukuda, Minoru. 2000. Chiiki hogen niokeru hobun-hyoshiki-shoryaku (Complementizer drop in the dialects of Japanese), *Annual Report* 2, 194-203, Faculty of Human-Culture Studies, Tezukayama Gakuin University.

Kaplan, Tamar I. 1993. *The second language acquisition of functional categories: complementizer phrases in English and Japanese*. Doctoral dissertation, Cornell University .

Koizumi, Masatoshi. 1995. *Phrase structure in minimalist syntax*. Doctoral dissertation, MIT.

Lasnik, Howard and Mamoru Saito. 1992. *Move a*. Cambridge, MA: MIT Press.

Law, Paul S. 1991. *Effects of head movement on theories of subjacency and proper government*. Doctoral dissertation, MIT.

Lee, Rhanghyeyun K. 1995. *Economy of representation*. Doctoral dissertation, UConn.

Machi, Hiromitsu. 1994. *Imajake, Hiroshima-ben* (Now, Hiroshima Dialect). Tokyo: Dai-ichi Hoki Shuppan.

Maeda, Isamu. 1977. *Osaka-ben* (Osaka dialect). Tokyo: Asahi Newspaper Company.

Miyagawa, Shigeru. 1997. Against optional scrambling, *Linguistic Inquiry* 28, 1-25.

Nakajima, Heizo. 1999. *Locality and syntactic structures*. Tokyo: Kaitakusha.

Otani, Kazuyo and John Whitman. 1991. V-raising and VP-ellipsis, *Linguistic Inquiry* 22, 345-358.

Rizzi, Luigi. 1990. *Relativized minimality*. Cambridge, MA: MIT Press.

Saito, Mamoru. 1984. On the definition of c-command and government, *NELS* 14, 402-417.

Saito, Mamoru. 1989. Scrambling as semantically vacuous A'-movement, in *Alternative conceptions of phrase structure*, ed. by Mark R. Baltin and Anthony S. Kroch, Chicago: University of Chicago Press.

Shibata, Takeshi. 1988. *Hogen-ron* (Theory of dialects). Tokyo: Heibonsha.

Shibatani, Masayoshi. 1978. *Nihongo no bunseki* (Analysis of Japanese). Tokyo: Taishukan Shoten.

Stowell, Timothy A. 1981. *Origins of phrase structure*. Doctoral dissertation, MIT.

Tang, Sze-Wing. 1998. *Parametrization and features in syntax*. Doctoral dissertation, University of California, Irvine.

Ueyama, Ayumi. 1994. Against the A/A'-movement dichotomy, in *Studies on scrambling*, ed. by Norbert Corver and Henk van Riemsdijk, New York: Mouton de Gruyter.