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CASE AND GOVERNMENT IN JAPANESE*
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<u>1</u>.   The main concern of this paper is the nature of Case assignment
in Japanese. In the following section, I will put forward the hypo-
thesis that in Japanese, objective Case is assigned by the verb to
its object, whereas nominative Case is inherent in that it is not
assigned by any element, e.g., INFL. In the third section, I will
show how this hypothesis can be related to some peculiar facts in
Japanese, namely, "<u>ga</u>/<u>no</u> conversion" and the "Case marker drop" phe-
nomenon. Then, in the fourth and fifth sections, I will discuss some
issues related to the nature of scrambling, and examine further con-
sequences of the hypothesis in question.
    Before I start the discussion, I would like to clarify the sta-
tus of one of the assumptions adopted in this paper. As shown in
(1), in a "regular" Japanese sentence, the subject NP is accompanied
by the nominative Case marker <u>ga</u> and the object NP by the accusative
Case marker <u>o</u>.

    (1)   John-ga   hon-o   yonde iru   (John is reading a book)
              -nom book-acc   reading

However, there are some cases where the relation of grammatical func-
tion and Case marker is not as clear. One such case is shown in (2).

    (2) a.   dare-ni kore-ga   dekiru ka?
             who-dat this-nom can-do Q

        b.   dare-ga kore-ga   dekiru ka?
                -nom

    (Who can do this?)   (Kuno, 1973b; 59)

I argued elsewhere (Saito, 1982a) that <u>dare-ni</u> is a PP and <u>kore-ga</u> is
the subject in (2a), and that (2b) has the structure shown in (3).[1]

    (3)   [$_S$ dare-ga [$_S$ kore-ga dekiru]] ka

According to this hypothesis, verbals such as <u>dekiru</u> are intransitive
and <u>kore-ga</u> is the subject in both (2a) and (2b). For the purpose of
exposition, I will adopt this hypothesis in this paper.
    The hypothesis in question is in direct conflict with the often
accepted view that verbals such as <u>dekiru</u> are "transitive" and mark
the object with the nominative Case marker <u>ga</u>. (Cf. Kuno, 1973a;
Shibatani, 1977.) However, as it should become clear in the follow-
ing sections, the crucial assumption in this paper is not that ver-
bals such as <u>dekiru</u> are not "transitive" but that even if they are
"transitive," the <u>ga</u> attached to the object is not a phonetic variant
of the objective Case marker <u>o</u>. Or, more precisely, what is crucial
for this paper is that verbals such as <u>dekiru</u> are not Case assigners.
In this sense, the discussion in this paper seems to be compatible

with, for example, Kuno's(1973a) system where _ga_ in (1), _o_ in (1), and the _ga_ on _kore_ in (2) are introduced by separate rules. And it is quite consistent with Kuroda's(1965, 1978) system where _ga_ in (1) and the _ga_ on _kore_ in (2) are introduced by the same rule as opposed to _o_ in (1).[2] Thus, the discussion in this paper is to a large extent independent of the issue of whether verbals such as _dekiru_ are "transitive" or not.

2. Given a language with overt Case markers like Japanese, we may ask whether abstract Case assignment takes place in this language. In this section, I will argue that there are some reasons to believe that in Japanese, objective Case is assigned by the verb to its object, whereas nominative Case is inherent in that it is not assigned by any element.

First of all, the latter part of this hypothesis seems quite plausible in the light of sentences such as the following:[3]

(4) yahari, [$_S$ natu-ga [$_S$ biiru-ga umai]]
after all   summer-nom   beer-nom tasty
(After all, it's during the summer that beer tastes good)

Here, _natu-ga_ is not an argument of the predicate _umai_.[4] And it is shown in Kuno(1973a) that there is no upper limit to the number of "nonarguments with nominative Case" in a sentence with a single verbal element. For example,

(5) [$_S$bunmeikoku-ga [$_S$dansei-ga [$_S$heikinzyumyoo-ga mizikai]]]
civilized   male-nom   average-life-   short
country-nom   span-nom
(It is in civilized countries that men are such that their
average life-span is short)   (Kuno, 1973a; 71)

Japanese does not have any agreement phenomenon between the subject and the verb, and it is not even clear whether INFL as a potential Case assigner exists in this language. But even if we have abstract agreement element in Japanese, it seems extremely unlikely that this element, or for that matter, a verb, can assign nominative Case to any number of elements across any number of sentence-boundaries.

On the other hand, a piece of possible evidence that objective Case is assigned by the verb to its object can be found in the passive construction. Let us consider the following sentences:[5]

(6) a. John-ga [$_{\bar{S}}$ Yamada-ga Tanaka-o korosita to] omotte iru
-nom   -nom   -acc killed COMP   think
(koto)
fact
((the fact that) John believes that Yamada killed
Tanaka)

    b. [$_{\bar{S}}$ Yamada-ga Tanaka-o korosita to] ippanni omowarete iru
generally think(pass.)

(koto)

((the fact that) it is widely believed that Yamada
killed Tanaka)

(6b) is the passive version of (6a). Here, two possible analyses of (6b) immediately come to mind. We may say that the $\bar{S}$ complement in (6a) is the object, and passivization in Japanese is characterized as object→subject. Or alternatively, we may adopt the analysis of the English counterpart of (6b) in Chomsky(1981; 125). In this case, we will assume that passive morphology absorbs the objective Case and the subject θ-role, and as a result, the Case Filter forces the application of Move α in most cases. But in the D-structure of (6b), there is no NP complement that requires Case at S-structure, despite the fact that the verb _omow_ is a Case assigner. Consequently, the absorption of the objective Case does not force the application of Move α in (6b).[6] To my knowledge, the verbs that can appear in the construction exemplified by (6b) can all take an NP object instead of an $\bar{S}$ complement when they appear in active form. Thus, this alternative analysis of (6b) seems to be equally plausible.

Given these two possible analyses, there are some reasons to believe that the second one is the correct one. One of them has to do with the examples in (7) and (8).

(7) a. John-ga [$_{\bar{S}}$ Mary-ga tensai da to] omotte iru (koto)
-nom   -nom genious cop. COMP   think   fact
((the fact that) John believes that Mary is a genious)

    b. John-ga Mary$_i$-o [$_{\bar{S}}$ pro$_i$ tensai da to] omotte iru (koto)
-acc
((the fact that) John believes Mary to be a genious)

(8) a. Mary$_i$-ga John-ni [$_{\bar{S}}$ pro$_i$ tensai da to] omowarete iru
-nom   -by   think(passive)
(koto)
((the fact that) Mary is believed to be a genious by
John)

    b. *John-ni Mary$_i$-o [$_{\bar{S}}$ pro$_i$ tensai da to] omowarete iru
-by   -acc
(koto)

As shown in (7), the verb _omow_ appears in the so called "raising-to-object" construction.[7] The "raised object" seems to passivize as shown in (8a). Now, if the $\bar{S}$ complement of _omow_ is the object and passivization is characterized as object→subject, we should expect that (8b) is grammatical.[8] On the other hand, if passive morphology absorbs objective Case, we correctly predict the ungrammatical status of (8b) since _Mary_ cannot be assigned Case in this sentence. If this argument is sound, it seems likely that passivization in Japanese involves the absorption of the objective Case, which in turn implies that transitive verbs in Japanese are Case assigners.

3. I have so far motivated the hypothesis that in Japanese, objective Case is assigned by the verb to its object, whereas nominative

Case is inherent in that it is not assigned by any element. The former part of this hypothesis suggests that the accusative Case marker is <u>in some sense</u> the phonetic realization of the abstract objective Case, while the latter part basically states that the distribution of the nominative Case marker is determined solely on contexual grounds as in the case of genitive Case in English. In this section, I will discuss the phenomena of "<u>ga/no</u> conversion" and "Case marker drop," and show how these phenomena can be related to the hypothesis in question.

Let us first consider "<u>ga/no</u> conversion." As shown in (9) and (10), the nominative Case marker, but not the accusative Case marker, can be "converted" to the genitive Case marker <u>no</u> in relative clauses and prenominal sentential modifiers.

(9) a. $[_S$ John-ga hon-o kaita] (John wrote a book)
          -nom book-acc wrote

   b. John-ga/-no kaita hon (the book that John wrote)
         -gen

   c. hon-o/*-no kaita hito (the person that wrote a book)
         -gen   person

(10) a. $[_S$ John-ga $[_S$ eigo-ga yoku yomeru]] koto
          -nom   English-nom well can-read fact
     (the fact that John can read English well)

   b. John-no eigo-ga yoku yomeru koto
        -gen   -nom

   c. John-no eigo-no yoku yomeru koto
        -gen   -gen

Noting this fact, Harada(1971) proposed a rule called "<u>ga/no</u> conversion," which substitutes <u>no</u> for <u>ga</u> in appropriate contexts.[9]

Now, aside from the <u>no</u>'s introduced by "<u>ga/no</u> conversion," the genitive Case marker <u>no</u> appears only in the context shown in (11).[10]

(11) $[+N, -V]^a$

       $[-V]^{max}$ $[+N, -V]^b$

(12) a. John-no hon (John's book)
          -gen book

   b. nihon-kara-no tegami (a letter from Japan)
      Japan-from-gen letter

   c. yuubokumin-no tosi-no hakai
      nomad-gen   city-gen destruction
      (nomad's destruction of the city)

Considering this fact, Bedell(1972) argues that there is no rule of "<u>ga/no</u> conversion," and that this phenomenon is a result of a re-

structuring rule. The effect of Bedell's restructuring rule is illustrated below.

(13) a. $[_{NP}[_S$ John-ga $\underline{pro}_i$ kaita] $hon_i]$ $\implies$

   b. $[_{NP}[_{NP}$ John-no] $[_{NP}[_S$ $\underline{pro}_i$ kaita] $hon_i]]$ (Cf. (9).)

Bedell's analysis not only succeeds in unifying the contexts for the genitive Case marker, but also explains why the nominative Case marker is "converted" to the genitive Case marker and not to, say, the accusative Case marker. Thus, Bedell's analysis seems to be a definite improvement on the original "<u>ga/no</u> conversion" analysis.

However, even if we accept Bedell's analysis, there still remains a question that we must ask ourselves. That is, why do we find "<u>ga/no</u> conversion" and no "<u>o/no</u> conversion"? As shown in (10c), two NP's can restructure out of a complex NP. Thus, there does not seem to be any principled reason that (14b) should be out.

(14) a. $[_S$ John-ga hon-o kaita] koto
          -nom book-acc wrote   fact
     (the fact that John wrote a book)

   b. *John-no hon-no kaita koto
        -gen   -gen

Here, if we assume that Case assignment by a Case assigner is obligatory, then the nonexistence of "<u>o/no</u> conversion" seems to follow from our hypothesis that objective Case, but not nominative Case, is assigned to its bearer by a Case assigner.

First, suppose the restructuring rule applies to the object NP, and as a result, the object NP appears in genitive Case. Then, it is clear that the verb cannot assign its Case to the restructured object, because this Case assignment leads to a Case conflict. But, since the rule in question is a restructuring rule, the object NP does not leave a trace in its original position. Thus, the verb fails to assign its Case, and the structure is ruled out. On the other hand, suppose the restructuring rule applies to an NP in a nominative position. Now, the restructured NP appears in a context for genitive Case. Also, since there is no element that assigns nominative Case, the fact that there is no trace in the original position of the restructured NP does not cause any problem. Thus, the resulting structure should be well-formed. If this account is correct, then the fact that there is "<u>ga/no</u> conversion" but no "<u>o/no</u> conversion" provides us with another piece of evidence that objective Case, but not nominative Case, is assigned to its bearer by a Case assigner.

Another asymmetry between objective Case and nominative Case can be found in the "Case marker drop" phenomenon.[11] It is known that sentences such as the following are perfectly grammatical in the colloquial style:

(15) John kita no? (Did John come?)
          came Q

At first sight, it seems that what is missing in this sentence is the nominative Case marker ga on the subject NP, John. However, Kuno(1973b; 223-24) argues that the bare NP in sentences such as (15) is not the subject but the topic. In other words, his conclusion is that nominative Case marker is obligatory for the subject, but John in (15) can appear as a bare NP because the topic marker wa is optional. Although this hypothesis may seem somewhat speculative, it is strongly supported by the following data:

(16) a. dare-ga kita no?   (Who came?)
         who-nom came Q

     b. *dare-wa kita no?
              -top

     c. *dare   kita no?

As shown in (16a-b), a wh-phrase can appear as the subject but not as the topic. (Cf. Kuno, 1973b; 27.) Thus, the ungrammatical status of (16c) is correctly predicted by Kuno's hypothesis.

However, this argument cannot be extended to the cases where the object NP appears without any marker. Consider the following sentences:

(17) a. nani-o   yonderu no?   (What are you reading?)
         what-acc reading Q

     b. *nani-wa yonderu no?
              -top

     c. nani   yonderu no?

(17b) shows again that a wh-phrase cannot be the topic. Nevertheless, (17c) is perfectly grammatical, and thus, it seems that the object, in some cases, can appear without the objective Case marker, as it is already assumed in Kuno(1973b).[12]

Here, given our hypothesis on Case assignment in Japanese, this asymmetry between nominative Case and objective Case immediately follows from the Case Filter, which is shown below.

(18) Case Filter (Chomsky, 1981; 49)
        *NP if NP has phonetic content and has no Case.

Suppose again that objective Case is assigned by the verb to its object, whereas nominative Case is not assigned by any element in Japanese. This means that object of a transitive verb receives abstract Case from the verb, but no abstract Case is assigned to the subject position. Thus, if the subject NP appears without the nominative Case marker, the structure is straightforwardly ruled out by the Case Filter. On the other hand, if a bare NP appears in the object position of a transitive verb, it can be assigned abstract Case by the verb. Indeed, if a transitive verb must obligatorily assign its Case as we assumed in the preceding discussion, then the NP in the object position must receive abstract Case. Hence, the Case Filter should

allow a bare NP in the object position of a transitive verb. Thus, the contrast between (16c) and (17c) is correctly predicted by the Case Filter.

4. So far, I have assumed neither the existence of VP node nor a scrambling rule for Japanese in this paper. However, recently, a number of arguments for the existence of VP node in Japanese and for an analysis of scrambling in terms of movement have been proposed.[13] One of the arguments that scrambling involves movement, which is due to Kuroda(1980) and Haig(1980), is based on the way scrambling interacts with "quantifier floating." Consider the following examples:

(19) a. sannin-no   gakusei-ga sake-o   nonde iru
         3person-gen student-nom sake-acc drinking
         (Three students are drinking sake)

     b. gakusei-ga sannin sake-o nonde iru

     c. *gakusei-ga sake-o sannin nonde iru

(20) a. John-ga sanbon-no   sake-o   motte kita
              -nom 3bottle-gen sake-acc came-with
         (John came with three bottles of sake)

     b. John-ga sake-o sanbon motte kita

     c. sake-o John-ga sanbon motte kita

As shown in (19), a quantifier can "float" out of an NP, but not across another NP argument. Here, (20c) is an apparent counterexample to this generalization, since a "floating" quantifier is related to the sentence-initial object across the subject NP in this sentence. But if we assume that scrambling is an instance of Move α, we correctly predict that (20c) should be grammatical. Under this assumption, the structure of (20c) should be as follows:[14]

(21) $[_S$ sake-o$_i$ $[_S$ John-ga $\underline{t}_i$ sanbon motte kita]]

Thus, although the quantifier sanbon cannot be directly related to sake-o, it can be related to the scrambled object through the trace in the object position, and hence, we should expect (20c) to be grammatical.

However, it seems to me that there still remains one problem that we must take care of if we are to make this argument complete. As shown below, multiple scrambling is possible in Japanese.

(22) $[_S$ sono hon-o$_i$ $[_S$ John-ni$_j$ $[_S$ Mary-ga $\underline{t}_j$ $\underline{t}_i$ watasita]]]
        that book-acc   -to   -nom   handed
     (Mary handed that book to John)

Thus, if scrambling is an instance of Move α, then there does not seem to be any obvious reason that (19c) cannot have the following representation:

(23) $[_S$ gakusei-ga$_i$ $[_S$ sake-o$_j$ $[_S$ $\underline{t}_i$ sanbon $\underline{t}_j$ nonde iru $]]]$

And if this representation is possible, then there does not seem to be any reason that (19c) should be out, since <u>gakusei-ga</u> should be able to be related to the quantifier <u>sannin</u> through its trace, which immediately precedes the quantifier.

Here, our hypothesis that the object, but not the subject, is assigned abstract Case provides one solution to this problem, when it is combined with the following principle suggested in Chomsky(1981):

(24) Variables must have Case.

If we ignore the case of strong crossover, a trace left by a scrambling of an NP is necessarily locally $\bar{A}$-bound, and in this sense, it must be a variable. Given (24), this implies that it must have Case. Since "Case marker stranding" is not allowed in Japanese, this in turn implies that a trace produced by a scrambling of an NP must be assigned abstract Case. Thus, if only object is assigned abstract Case in Japanese, it follows not only that object can be scrambled since the trace will be assigned Case, but also that scrambling of the subject NP is not allowed since the resulting trace will violate (24). In particular, (21) is a well-formed representation since the only trace $\underline{t}_i$ is assigned Case, but (23) is not since the variable $\underline{t}_i$ lacks Case. Thus, we now correctly predict that (19c) is ungrammatical.[15]

<u>5.</u>   In the preceding section, I have shown that given (24) and our hypothesis on Case assignment in Japanese, the data in (19) and (20) are accounted for if we assume that scrambling is an instance of Move α. In this section, I will discuss the "Case marker drop" phenomenon in more detail and propose a condition on $\bar{A}$-binding in Japanese.

In Section 3, I attributed the possibility of the "accusative Case marker drop" to the abstract Case assignment by a transitive verb to its object. However, there are some contexts where the "accusative Case marker drop" is not allowed. Consider the following examples:

(25) a. John-ga dare nagutta no? (Who did John hit?)
          -nom who   hit   Q

     b.?*dare John-ga nagutta no?

(26) a. dare-ga dare nagutta no? (Who hit whom?)
        who-nom who   hit   Q

     b. *dare dare-ga nagutta no?

(27) a. John-ni nani watasita no? (What did you hand to John?)
          -to what handed   Q

     b. ?nani John-ni watasita no?

(28) a. dare-ni nani watasita no? (What did you hand to whom?)
        who-to what handed   Q

     b. *nani dare-ni watasita no?

All of the b sentences are grammatical if the accusative Case marker <u>o</u> is attached to the object. These examples indicate that the subject NP cannot intervene between the bare NP object and the verb, whereas the indirect object can intervene between these two elements as long as it does not have the feature [+wh].

In Saito(1982b), I argued on the basis of these facts that the adjacency condition on Case assignment (cf. Chomsky, 1981; Stowell, 1981) holds in Japanese. Note that if the analysis of the "Case marker drop" phenomenon in Section 3 is correct, then it follows that an NP need not be accompanied by an overt Case marker if and only if it is assigned abstract Case. Thus, if Case assignment requires string adjacency, then the contrast between a and b in (25) and (26) immediately follows. Also, under this hypothesis, the relative well-formedness of (27b) must be due to a reanalysis of the verb and the indirect object into a verb. And once we make this assumption, the contrast between (27b) and (28b) follows from the requirement of lexical integrity. Furthermore, it follows from the adjacency condition that the subject NP is not assigned Case by INFL in Japanese. As noted above, Japanese does not have any kind of agreement phenomenon between the subject and the verb, and it is not even clear whether INFL can have Case assigning ability in this language. But let us assume, for the sake of argument, that INFL in Japanese contains AGR and governs the subject position. Here, since Japanese is head-final at every $\bar{X}$-level, the sentential structure should be as follows:[16]

(29)   S(=INFL^2)
              /   \
          NP   INFL^1
              \   /   \
               VP   INFL
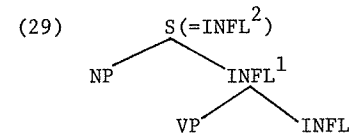
But if this is the case, the verb always intervenes between INFL and the subject, and consequently, these two elements can never be adjacent to each other. Thus, it follows that even if INFL in Japanese contains AGR, it cannot assign Case to the subject.

So far, we have accounted for why the object NP need not accompany an overt Case marker in some contexts. But there still remains a question to be answered. Consider the following sentence:

(30) dare-o John-ga nagutta no? (Who did John hit?)
     who-acc   -nom hit   Q

As we saw in (25b), the accusative Case marker on <u>dare</u> is obligatory in this sentence. According to the analysis proposed in this paper, this implies that in (30), <u>dare</u> does not receive abstract Case from the verb. But one of the assumptions in our analysis of the "<u>ga/no</u> conversion" phenomenon was that the Case assignment by a transitive

verb to its object is obligatory. Then, is not dare the object in (30)? Note that if it is the object of the verb nagutta, then it must be assigned Case by the verb, and consequently, it must be allowed to appear without the accusative Case marker. Then, if dare is not the object in (30), what is the object that receives Case from the verb in this sentence?

Here, the hypothesis that scrambling is an instance of Move α provides us with a solution to this problem. According to this hypothesis, the structure of (30) should be as follows:

(31) $[_S$ dare-o$_i$ $[_S$ John-ga $\underline{t}_i$ nagutta no $]]$

Thus, not dare-o but its trace is the object of the verb nagutta, and the verb assigns its Case to this trace. If this is the correct approach, the obligatoriness of the overt Case marker o in sentences such as (30) can be stipulated as follows:

(32) At S-structure, if an operator p Ā-binds a variable q, then p and q must agree in Case.

Since the trace is assigned abstract objective Case in (31), condition (32) requires that dare must also be in objective Case. Thus, since dare is not assigned abstract objective Case, it must appear with overt accusative Case marker.

Note that condition (32) also reconciles a conflict between our analysis of the "ga/no conversion" phenomenon and the hypothesis that scrambling is an instance of Move α. In Section 3, we attributed the nonexistence of "o/no conversion" as opposed to "ga/no conversion" to a condition that a transitive verb must assign Case to its object. But, consider the following examples:

(33) a. $[_S$ hon-o$_i$ $[_S$ John-ga $\underline{t}_i$ kaita $]]$ koto
         book-acc   -nom   wrote   fact
         (the fact that John wrote a book)

      b. *hon-no John-ga kaita koto
         -gen   -nom

If Bedell's restructuring rule is responsible for "ga/no conversion" as we assumed above and if scrambling is an instance of Move α, then (33b) can have the following structure:[17]

(34) $[_{NP}[_{NP}$ hon-no$_i$] $[_{NP}[_S$ John-ga $\underline{t}_i$ kaita] koto $]]$

Here, since the scrambled object is restructured out of the complex NP, the verb kaita can assign Case to the trace in the object position. Thus, although (33b) is out, the representation in (34) satisfies the condition that a transitive verb must assign Case to its object. But note that (34) violates condition (32) since the trace in object position is Ā-bound by an NP in genitive Case. Thus, condition (32) ensures that not only an NP in object position but also a scrambled object cannot undergo Bedell's restructuring rule.

6. In this paper, I have examined various phenomena relating to Japanese Case marking in the light of the hypothesis that only objective Case is assigned by a Case assigner in this language. It was shown that the nominative/accusative asymmetries in "ga/no conversion" and "Case marker drop" follow from this hypothesis when it is combined with some reasonable assumptions. Also, it was shown that this hypothesis serves to solidify one of the arguments that scrambling is an instance of Move α. The examination of the "Case marker drop" phenomenon led us to the hypothesis that the adjacency condition on Case assignment holds in Japanese. And finally, I suggested that the condition in (32) is responsible for the fact that "accusative Case marker drop" is impossible in some contexts, and also for the fact that "o/no conversion" does not obtain even in a scrambled object NP.

FOOTNOTES

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1. See also Tonoike(1979) for relevant discussion.

2. Kuroda(1965, 1978) explicitly avoids committing himself as to what the grammatical function of kore-ga is in (2a). See also Kuroda (1980), where he assumes that it is the subject but only with some reservations.

3. See Kuno(1973a), Shibatani & Cotton(1976), Hoji(1980), Saito (1982a) for detailed discussions of sentences such as (4).

4. This does not mean, I believe, that "a nonargument with nominative Case" must bind an empty category. What seems to be required is some sort of "aboutness" relation between this element and the sentence following this element.

5. See Kuno(1976), Hasegawa(1981), Saito(1982a) for detailed discussions of these sentences.

6. Thus, there are at least two potentially possible structures for (6b). The S̄ may be in the subject position. Or, it may be in its D-structure position and the subject position may be occupied by an expletive pro.

7. Here, I am not claiming that there is a rule of "raising-to-object" in Japanese. See Kuno(1976), Hasegawa(1981), Marantz(1983), Saito(1983) for discussions on the sentences in (7) and (8).

8. Note that the surface word order in (8b) is irrelevant here because of the "scrambling."

9. As shown in (10), not only the subject ga but also the so called "object ga" (cf. Section 1) can be "converted" to no. In the light of this fact, Shibatani(1978), for example, argues that "ga/no conversion" is sensitive to surface Case and not to grammatical function.

10. See Kitagawa & Ross(1982) for an interesting discussion on the distribution of no.

11. There seem to be some dialectal variations with respect to this phenomenon. Here, I will limit the discussion to my own dialect

(Tokyo). But in the western dialects, for example, "Case marker drop" seems to be allowed more freely.

12. See Kuno(1973b) and the references cited there. He argues that the so called "object ga" is also optional. Although there are some unclear cases, it seems to me that the facts generally point to the contrary. For example,
   (i) a. nani-ga iru no? (What do you need?)
        what-nom need Q
      b.?*nani   iru no?
   This is what we should expect under our account (next paragraph), since "object ga" is subject to "ga/no conversion" as we saw above.
13. See, for instance, Kuroda(1980), Haig(1980), Saito(1982a; 1983), Whitman(1982), Saito & Hoji(1982).
14. Here, I will assume that scrambling, if it is an instance of Move α, involves S-adjunction and VP-adjunction. See Saito(1983) for some relevant discussion.
15. It is likely that (23) also violates some other principles besides the principle in (24). For example, it seems to violate Pesetsky's(1982) Path Containment Condition. But I will not discuss this issue here.
16. Here, the argument is independent of the issue of whether there is VP node in Japanese. If Japanese lacks VP node, the sentential structure should be as follows:

   (i) $S(=INFL^1)$

   $\bar{V}$ INFL

   NP   V
   (subject)
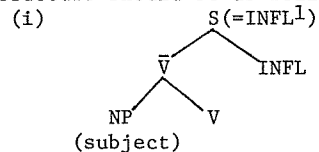
17. In (34), the object is first moved to the sentence-initial position by scrambling and then restructured out of the complex NP. Thus, the trace in the object position is produced by scrambling and not by restructuring.

REFERENCES

Bedell, G.(1972) "On no," in G. Bedell(ed.), UCLA Papers in Syntax 3: Studies in East Asian Syntax.
Chomsky, N.(1981) Lectures on Government and Binding, Foris Publications, Dordrecht.
Haig, J. H.(1980) "Some observations on quantifier floating in Japanese," Linguistics 18.
Harada, S.-I.(1971) "Ga-no conversion and idiolectal variations in Japanese," Gengo Kenkyu 60.
Hasegawa, N.(1981) A Lexical Interpretive Theory with Emphasis on the Role of Subject, PhD Dissertation, Univ. of Washington.
Hinds, J. & I. Howard, eds.(1978) Problems in Japanese Syntax and Semantics, Kaitakusha, Tokyo.
Hoji, H.(1980) Double Nominative Constructions in Japanese, MA Thesis, Univ. of Washington.
Kitagawa, C. & C. Ross(1982) "Prenominal modification in Chinese and Japanese," Linguistic Analysis 9.

Kuno, S.(1973a) The Structure of the Japanese Language, MIT Press, Cambridge.
_____.(1973b) Nihon-Bunpoo Kenkyuu, Taisyukan, Tokyo.
_____.(1976) "Subject raising," in M. Shibatani(ed.), Syntax and Semantics 5: Japanese Generative Grammar, Academic Press, New York.
Kuroda, S.-Y.(1965) Generative Grammatical Studies in the Japanese Language, PhD Dissertation, MIT.
_____.(1978) "Case marking, canonical sentence patterns, and counter equi in Japanese (A preliminary survey)," in J. Hinds & I. Howard(eds.).
_____.(1980) "Bunkoozoo-no hikaku," in T. Kunihiro(ed.), Nitieigo Hikaku-Kooza 2: Bunpoo, Taisyukan, Tokyo.
Marantz, A.(1983) "Raising and category types in Japanese," in Y.Otsu, et al.(eds.).
Otsu, Y., et al., eds.(1983) Studies in Generative Grammar and Language Acquisition, ICU.
Pesetsky, D.(1982) Paths and Categories, PhD Dissertation, MIT.
Saito, M.(1982a) "Case marking in Japanese: A preliminary study," ms. MIT.
_____.(1982b) "Case drop in Japanese and the adjacency condition on Case assignment," ms. MIT.
_____.(1983) "Comments on the papers on generative syntax," in Y. Otsu, et al.(eds.).
Saito, M. & H. Hoji(1982) "Weak crossover and Move α in Japanese," ms. MIT/Univ. of Washington, to appear in Natural Language & Linguistic Theory.
Shibatani, M.(1977) "Grammatical relations and surface cases," Language 53.
_____.(1978) "Mikami Akira and the notion of 'subject' in Japanese grammar," in J. Hinds & I. Howard(eds.).
Shibatani, M. & C. Cotton(1976) "Remarks on double-nominative sentences," Papers in Japanese Linguistics 5.
Stowell, T.(1981) Origins of Phrase Structure, PhD Dissertation, MIT.
Tonoike, S.(1979) Complementation and Case Particles in Japanese, PhD Dissertation, Univ. of Hawaii.
Whitman, J.(1982) "Configurationality parameters," ms. Harvard.