Kansas Working Papers
in
Linguistics

edited by

Hangyoo Khym
Supath Kookiattikoon

Volume 22, Number 1
1997

Kansas Working Papers in Linguistics
Volume 22, Number 1
1997

AGAINST IP-ADJUNCTION SCRAMBLING

Makoto Yamada
Tohoku University

Abstract: As an optional movement, "scrambling" in Japanese has been one of the major obstacles to the Minimalist Program, in which movements occur only when necessary. Miyagawa (1996), in his attempt to accommodate this phenomena to the MP, argues that VP-adjunction scrambling should be analyzed as base-generated constructions and suggests that IP-adjunction scrambling is motivated by some special element like Focus. This paper argues that if we make a natural extension of the categories which can assume strong features, the IP-adjunction scrambling phenomena, too, can be accounted for in the MP without stipulating any special element. This study implies that except that a lexical category V can bear a strong D-feature, nothing is special about Japanese phrase structure.

1. Introduction[1]

In this paper, I will argue that if we make a natural extension of the categories which can assume strong features, the IP-adjunction scrambling phenomena can be accounted for in the Minimalist Program, specifically the Agr-less feature checking theory (Chomsky 1995, Ura 1996). As far as we are successful, we can maintain that there will be no optional movement in Japanese, a welcome result for the Minimalist Program. We will use reciprocal binding and Case marker drop as our main tools of analysis, since they can be used to show if some element is in an A or A-bar position. By these diagnoses, it will be shown clearly that in Japanese there is a base-generated OSV order as well as a derived OSV order by fronting the object to focus position.

2. Analysis

Structural Ambiguity of IP-Adjunction. IP-adjunction scrambling in Japanese is illustrated in (1).

(1) a. John-ga Mary-o home-ta.
      J.- NOM   M.- ACC praise-past
      'John praised Mary.'

   b. Mary-o John-ga home-ta.
      M.-ACC J.-NOM   praise-PAST
      'John praised Mary.' (= (1a))

Japanese is believed to have a basic word order of SOV. So under these common assumptions, (1b) will be derived from (1a) by adjoining the object *Mary-o* to IP.

As is often pointed out, however, this IP-adjoined position is associated with both A and A-bar properties (see Saito 1992, Tada 1993, Miyagawa 1997). For example, see (3a):

(2) 'IP-adjoined' position is either A- or A´-position (Saito 1992, Tada 1993, Miyagawa 1997)

(3) a. [John-to Mary]-o$_i$ otagai-ga$_i$ home-ta.
      [J.-and M.]-ACC   each other-NOM praise-PAST
      'John and Mary, each other praised.'

Although Miyagawa (1997) considers this to be unacceptable, (3a) is completely acceptable to most Japanese.[2] If this is the case, it shows that what we call IP-adjoined position can be an A-position in this case and bind the subject to its right, which is a reciprocal anaphor *otagai-ga*. The scrambled object *John-to Mary-o* is in fact in an A-position. This will be confirmed by reconstructing (3a) to (3b).

(3) b. *Otagai-ga$_i$ [John-to Mary]-o$_i$ home-ta.
      Each other-NOM [J.-and M.]-ACC   praise-PAST
      'Each other praised John and Mary.'

In (3b), the object appears in what we call its 'original' position and nevertheless is completely unacceptable.[3]

On the other hand, the IP-adjoined position is sometimes considered to be an A-bar position. See the pair of (4):

(4) a. [John-to Mary]-ga$_i$ otagai-o$_i$ home-ta.
       [J.-and M.]-NOM   each other-ACC praise-PAST
       'John and Mary praised each other.'

otagai-o in (4a) is bound by the subject *[John-to Mary]-ga*. This relation is maintained even if the object appears in the sentence initial position as in (4b).

(4) b. Otagai-o$_i$ [John-to Mary]-ga$_i$ home-ta.
       Each other-ACC [J.-and M.]-NOM   praise-PAST
       'Each other, John and Mary praised.'

Hence, in (4b) the object *otagai-o* must be in an A-bar position and has to be reconstructed as in (4a) by the time Binding theory will apply. [4]

Now we are in a very peculiar situation: (3a) and (4a) seem to indicate that Japanese has both OSV and SOV as its basic word order. Where does this ambiguity come from in the Minimalist Program? I would like to show in the following discussion that this fact will be accounted for if we make a natural extension of categories to which strong features will be assigned.

Before we proceed, let us make clear the definitions of A/A-bar positions in the Minimalist framework. I will adopt the definitions of Ura (1993). See (5):

(5) A narrowly L-related position is always an A-position. A broadly L-related position counts as an A-position only if it is actually L-related; otherwise, it is an A-bar position. (Ura 1993: 257)

The notion of 'actually L-related' is defined as in (6):

(6) A position is actually L-related if feature-checking actually takes place between that position and some L-head. (ibid.)

To put it informally, A-positions are complement and specifier positions where some theta-role is assigned and the positions with which some feature-checking takes place.

Overt Object Shift in Japanese. There is an evidence that the object in Japanese overtly moves to its feature-checking position. VP-adverbs such as *kossori*, which means 'secretly', can appear between the object and the verb as in (7):

(7) John-ga Mary-o kossori home-ta.
    J.-NOM M.-ACC secretly praise-PAST
    'John praised Mary secretly.'

This clearly indicates that there is an overt object shift in Japanese, which in turn is the evidence of the existence of strong [D] feature in this language.[5]

Usually this strong feature is considered to be assigned to v. This assumption needs some rethinking, since there are some suggestions in the literature proposing that lexical categories, too, can be assigned strong features. For example, see Kikuchi (1996). Chomsky (1995) suggests that strong features will be restricted to T, v, and C as in (8):

(8) Only T, v, and C can be strong. (cf.. Chomsky 1995: 232)

Since these are all in a sense verbal categories, it will be natural to think of any verbal category can assume a strong feature as in (9):
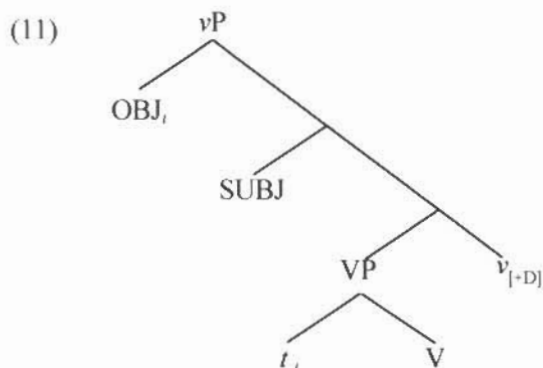
(9) Only verbal categories may assume a strong feature.

Suppose this is a right move and assume (10):

(10) V, as well as T, v, and C, can be strong.

Then the strong D feature for the object checking can be assigned to V, as well as v.[6] Of course, the strong feature can be assigned to both categories at the same time. In that case, however, the derivation will necessarily crash, since there are not enough DPs in the numeration. In addition, if there are two strong Ds in the numeration, it will not be the same one with just one strong D, hence we need not consider these cases.

First, let us consider the derivation when the strong [D] feature is assigned to v. see (11):

(11)

```
                    vP
          ╱─────────────╲
      OBJ,              ╲
          ╲              ╲
          SUBJ            ╲
              ╲            ╲
               VP          v[·D]
              ╱──╲
             t,    V
```

V merges with OBJ and projects to VP. This VP merges with *v* with a strong [D] feature. The next step has two possibilities: either the merger of SUBJ or the raising of OBJ. Since the merge is more economical than the move, the former will be selected as the next operation. After this, OBJ will be raised to the Spec of *v*P and the strong [D] will be checked off. [7] This is the structure for OSV with O in its A-position.

Let us look at what the derivation will be like if the strong feature is assigned to large V. see (12):

(12)

```
                    vP
          ╱─────────────╲
      SUBJ              ╲
          ╲              ╲
           VP             v
          ╱──╲
      OBJ,    ╲
          ╲    ╲
           t,    V[·D]
```
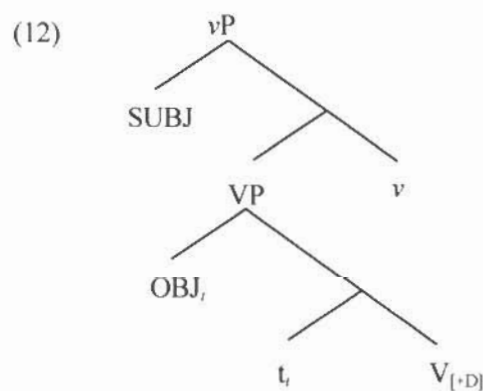
First, the object and V merge and make a VP. Before this VP is merged with *v*, the strong D of large V must be checked off, so OBJ will be raised to the Spec position and checks off the [D] feature. Next, small *v* and VP merge and SUBJ is adjoined to this structure. This is the structure for SOV.

Finally, as is suggested by Miyagawa (1997), in Japanese an element can receive focus and will be raised to a higher position. Without further discussion, we will assume that the focus feature will be checked off by an element E (E is an abbreviation for emphasis). This E will be merged with vP. Suppose that in (14) the object has received focus. Then the object will be raised to the Spec of EP and the focus feature will be checked off. This is a structure for (6b), in which the sentence initial object is in an A-bar position. [8]

(13)
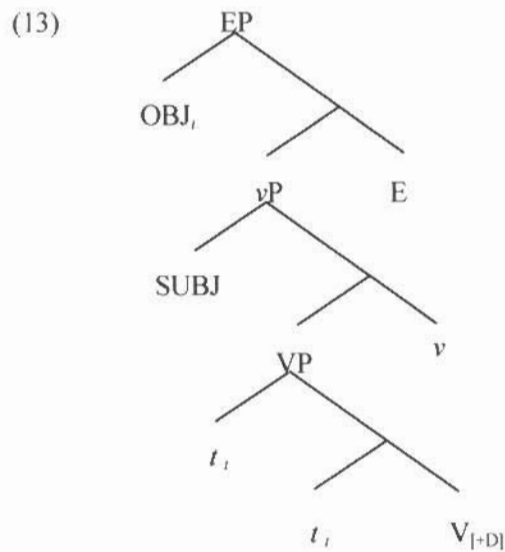
3. Predictions

If we are on the right track, we will be able to give some interesting predictions about reciprocal binding in embedded contexts and Case marker drop.

Reciprocal Binding in Embedded Contexts. First let us see the reciprocal binding. According to our analysis, there is what we call 'base-generated' OSV word order (11), in which the object can bind the subject as in (5a), repeated here as (14):

(14) [John-to Mary]-o$_i$ otagai-ga$_i$ home-ta. (= (5a))
     J.-and M.-ACC   each other-NOM   praise-PAST
     'John and Mary, each other praised.'

In (12), the subject will bind the object and this is the structure for (4a), repeated here as (15):

(15) [John-to Mary]-ga$_i$ otagai-o$_i$ home-ta. (= (6a))
   J.-and M.-NOM   each other-ACC praise-PAST
   'John and Mary praised each other.'

The object may assume emphasis or focus, and can be raised to the Spec of EP to check off [focus] feature. (4b), repeated here as (16), has such a structure.

(16) Otagai-o$_i$ [John-to Mary]-ga$_i$ home-ta. (= (4b))
   Each other-ACC J.-and M.-NOM   praise-PAST
   'Each other, John and Mary praised.'

Now consider reciprocal anaphors in embedded contexts. In (17), the reciprocal *otagai-o* appears as the object of the embedded clause, and takes the subject in the matrix clause as its antecedent. This is almost unacceptable.

(17) ?*[John-to Mary]-ga$_i$ [[Taro-to Hanako]-ga otagai-o$_i$ home-ta]-to   itta.
   [J.-and M.]-NOM   [[T.-and H.]-NOM   each other-ACC praise-PAST-comp] say-PAST
   'John and Mary said that Taro and Hanako praised each other.'

It is not the case that the reciprocal cannot cross the clause boundary and take the antecedent from the matrix. See (18):

(18) ?[John-to Mary]-ga$_i$ [otagai-ga$_i$ [Taro-to Hanako]-o home-ta]-to   itta.
   [J.-and M.]-nom [each other-nom [T.-and H.]-acc   praise-past]-comp say-past
   'John and Mary said that each other praised Taro and Hanako.'

(18), in which the embedded subject is bound by the matrix subject, is more or less acceptable, and far better than (17).

Now consider what will happen if the reciprocal object *otagai-o* in (17) appears before the embedded subject as in (19)?

(19) ?[John-to Mary]-ga$_i$ [otagai-o$_i$ [Taro-to Hanako]-ga home-ta]-to   itta.
   [J.-and M.]-NOM [each other-ACC [T.-and H.]-NOM   praise-PAST]-comp say-PAST
   'John and Mary said that each other, Taro and Hanako praised.'

If our analysis is correct and the object can be in an A-position, then we predict that (19) will have the same status concerning binding as (18), rather than (17). This prediction is borne out.

Case Marker Drop. Next, consider Case marker drop. (20a) is an instance of long distance scrambling.[9]

(20) a. Mary-o$_i$ Bill-ga [John-ga t_i home-ta]-to   itta-yo.[10]
      M.-ACC B.-NOM [J.-NOM   praise-PAST]-comp say-PAST-PARTICLE
      'Mary, Bill said that John praised.'

Whatever the basic word order is, it is clear that the embedded object *Mary-o* is displaced from its Case-feature checking position. Therefore, according to our definition of A/A-bar position, the object is in an A-bar position and in this case, the accusative Case marker -*o* never drops. See (20b):

(20) b. *Mary$_i$-ϕ Bill-ga [John-ga t_i home-ta]-to   itta-yo.
      M.   B.-NOM [J.-NOM   praise-PAST]-comp say-PAST-PARTICLE
      'Mary, Bill said that John praised.' (= (20a))

On the other hand, the accusative Case marker can be dropped from the object in its A-position. Compare the sentences in (21):

(21) a. [John-to Mary]-ga$_i$ otagai-o$_i$ home-ta-yo.
      [J.-and M.]-NOM   each other-ACC praise-PAST-PARTICLE
      'John and Mary praised each other.'

    b. ?[John-to Mary]-ga$_i$ otagai$_i$-ϕ home-ta-yo.
      [J.-and M.]-NOM   each other praise-PAST-PARTICLE
      'John and Mary praised each other.' (= (21a))

Although (21b) is not completely acceptable, it still is far better than (20b).

Now we can draw the following descriptive generalization from the discussion about the sentences in (20) and (21). That is, the accusative Case-marker can drop from the object in its A-position, while it cannot drop from the object in its A-bar position.

With this generalization in mind, consider the sentences in (22):

(22) a. Otagai-o$_i$ [John-to Mary]-ga$_i$ home-ta-yo.
      Each other-ACC [J.-and M.]-NOM   praise-PAST-PARTICLE
      'Each other, John and Mary praised.'

b. [John-to Mary]-o$_i$ otagai-ga$_i$ home-ta-yo.
[J.-and M.]-ACC each other-NOM praise-PAST-PARTICLE
'John and Mary, each other praised.'

If our analysis is correct, the object in (22a) *otagai-o* is in an A-bar position, while that in (22b) *[John-to Mary]-o* is in an A-position. Then we predict that these two sentences will show different behaviors with respect to Case marker drop, and this prediction is borne out, as can be seen in (23):

(23) a. *Otagai-ϕ_i [John-to Mary]-ga$_i$ home-ta-yo.
   Each other [J.-and M.]-NOM praise-PAST-PARTICLE
   'Each other, John and Mary praised.' (= (22a))

  b. ?[John-to Mary]-ϕ_i otagai-ga$_i$ home-ta-yo.
   [J.-and M.]   each other-NOM praise-PAST-PARTICLE
   'John and Mary, each other praised.' (= (22b))

(23a) is never acceptable. On the other hand, although (23b) is not a perfect sentence to the native speaker's ear, it is at least as acceptable as (21b).

4. Conclusion and Implications

We have shown in this paper that if we make a natural extension of the categories which can assume strong features, then we can explain the structural ambiguity of IP adjunction scrambling in the Minimalist framework. Specifically, we proposed that V, as well as *v*, can be assigned a strong [D] feature. We have seen that our analysis has made correct predictions for reciprocal binding in embedded context and case marker drop.

Although we have not dealt with other scrambling phenomena, mainly because of the space limitations, our proposal can easily be extended to them. That is, we can account for the fact that what we call s-scrambling, that is, the free word order phenomenon in ditransitive sentences, shows only A-properties while l-scrambling is associated only with A-bar properties.

Notice that though our main contention is almost the same as Miyagawa (1997), his analysis has a few problems. First, his judgment of (3a) is not consistent with that of

most Japanese. Second, he uses the Agr-based theory for his analysis. [11] As Chomsky says, Agr is conceptually undesirable in that it has no theory-external reasons for its presence. Moreover, at least in Japanese, its existence is dubious since it has no morphological reflection in this language.

NOTES

[1] This is a slightly revised version of my paper read at the 1997 LSA annual meeting at Chicago, January 2, 1997. I would like to thank the audience there for their comments, especially Shigeru Miyagawa. For comments and discussions on earlier versions of this article and/or native-speaker judgments, I owe a special debt of gratitude to the following people: Maki Asano, Samuel D. Epstein, Minoru Fukuda, Erich Groat, Youngjun Jang, Toshitaka Kodoh, Akira Kikuchi, Susumu Kuno, Ken Nakatani, Masao Ochi, John O'Neil, Noriaki Yusa. Last but not least, I would like to express my deepest acknowledgment to Hidekazu Suzuki for his comments and encouragement.

[2] There may be a dialectal difference about this judgement. I have only one native speaker who agrees with Miyagawa 1997, and she is from the Osaka district.

[3] Remember that only those elements in an A-position can be a binder for the Binding Theory, while those in an A-bar position can never be. Therefore, we will be able to check if some element is in an A or A-bar position by using sentences containing anaphors. As for no full reconstruction, see Lasnik 1993.

[4] There is a controversy as to the level at which Binding Theory will apply. It is

clear, however, that the sentences must have almost the same structure at LF. Hence without further discussion, we will assume Binding Theory will apply to the LF structure.

[5] VP-adverbs merge with any projection of v or V. See Kikuchi 1996.

[6] V almost corresponds to a regular verb, while v is AGRoP in the former framework. As for the assumption (10), Miyagawa (pc) suggested one problem about it.: True, with this assumption, there will be no optional movement in Japanese, but it has still optional assignment of strong features. Then we have to work out where this optionality comes from. I would like to leave this problem for future research.

[7] Notice that the strong feature is checked off within its projection, hence there will be no violation of economy principles. Cf. Chomsky (1995: 234):"... the strong feature merged at the root must be eliminated before it becomes part of a larger structure by further operation."

[8] My suspicion is that E will be associated with T, which will explain why there is no subject emphasis or nominative Case marker drop. Cf. Kuno (1973).

[9] This is the L-scrambling of Tada (1993).

[10] We have added the sentence-final particle -yo to this sentence, because it makes sentences with Case marker drop more natural. See Masunaga (1988).

[11] This is in a sense inevitable, since at that time there was no Agr-less feature checking theory.

REFERENCES

Chomsky, Noam. 1993. A minimalist program for linguistic theory. The view from Building 20. ed. by K. Hale and S. J. Keyser. Cambridge, MA.: MIT Press. 1-52.

———. 1995. Categories and transformations. The Minimalist Program. Cambridge, MA.: MIT Press. 219-394.

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

Kikuchi, Akira. 1996. Case adjacency, local economy, and Move-F theory. ms. Sendai, Japan: Tohoku University.

Kim, Soo-Yeon. 1995. Optionality in scrambling. Harvard Working Papers in Linguistics 5. ed. Samuel D. Epstein, et al. 42-63.

Kuno, Susumu. 1973. The structure of the Japanese language. Cambridge, MA.: MIT Press.

Lasnik, Howard. 1993. Lectures on Minimalist Syntax. UConn Occasional Papers in Linguistics #1. Cambridge, MA.: MITWPL.

Masunaga, K. 1988. Case deletion and discourse context. Japanese syntax. ed. W. Poser. Stanford, CA.: CSLI. 145-156.

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

Saito, Mamoru. 1983. Case and government in Japanese. West Coast Conference on Formal Linguistics 2. 247-259.

———. 1992. Long distance scrambling in Japanese. Journal of East Asian Linguistics 1. 69-118.

Tada, H. 1993. A/A-bar partition in derivation. Cambridge, MA.: MIT dissertation.

Ura, Hiroyuki. 1993. On feature-checking for wh-traces. Papers on Case & Agreement I: MIT Working Papers in Linguistics 18. Cambridge, MA.: MITWPL. 243-280.

———. 1996. Multiple feature-checking: a theory of grammatical function splitting. Cambridge, MA.: MIT dissertation.