ON THE SCOPE PROPERTIES OF NOMINATIVE PHRASES IN JAPANESE*

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Abstract

The scope properties of nominative objects in Japanese have been discussed extensively since Tada (1992) and Koizumi (1995, 1998). The basic observation is that they take scope at a higher position than accusative objects. The papers just cited argue that this is because nominative objects are raised by overt A-movement to a relatively high position in the structure for the purpose of Case checking. This paper builds on these works and argues that the relevant movement is covert A'-movement. One of the consequences of this analysis is that the EPP-feature of T attracts the closest NP independently of nominative Case licensing, a hypothesis proposed and discussed in Ura (1999). It is shown that this leads to a solution for the long-standing puzzle regarding the strict A-property of short scrambling to the post-subject position.

1. Introduction

The main purpose of this paper is to discuss the licensing mechanism of the nominative particle -ga in Japanese. I will argue in particular that nominative objects move covertly to the outer Spec of TP for the purpose of Case licensing. Then, I will examine the consequences of this proposal for the nature of the EPP requirement of T as well as for the strict A-property of short scrambling to the post-subject position.

The particle -ga is referred to as the nominative Case marker. But it is well known that its distribution is wider than the English nominative. For example, Japanese allows multiple subjects and in this case, all the subjects are accompanied by -ga. This is shown by (1) from Kuno (1973):

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at the EFL University on February 25-28, 2009. The material in this paper was presented also in the 2008 syntax seminar at Nanzan University and in a colloquium at the Chinese University of Hong Kong. I would like to thank the audiences at these places for helpful comments. After the GLOW conference, I read Takahashi (2008), which employs similar arguments but arrives at a different analysis. I refer the reader to this work as I was unable to discuss it in any detail in the present version of this paper. This version was completed while I was a Distinguished Visiting Fellow at the University of York. I am grateful to Hidekazu Tanaka and the York Department of Language and Linguistics for their hospitality and for arranging an ideal research setting.

(1) [TP Bunmeikoku -ga [TP dansee-ga [TP heikinzyumyoo -ga mizika-i]]] civilized-country-NOM male -NOM average-life-span-NOM short 'It is civilized countries where the male population has a short life-span'

In addition, objects of stative predicates are marked by -ga, as pointed out in classical works like Kuroda (1965) and Kuno (1973).

- (2) a. Taroo-ga kantongo -o hanas-u (koto)
 -NOM Cantonese-ACC speak (fact)
 '(the fact that) Taroo speaks Cantonese'
 - b. Taroo-ga /-ni kantongo -ga wakar-u (koto)
 -NOM/-DAT Cantonese-NOM understand fact
 '(the fact that) Taroo understands Cantonese'
 - c. Taroo-ga /-ni kantongo -o /-ga hanas-e-ru (koto)
 -NOM/-DAT Cantonese-ACC/-NOM speak-can (fact)
 '(the fact that) Taroo can speak Cantonese'

As (2a) shows, the accusative -o accompanies the object when the predicate is non-stative. However, -ga is employed for stative predicates as in (2b). The interesting case that has often been discussed in the literature is (2c). The predicate consists of two verbal morphemes, the non-stative hanas 'speak' and the stative -(rar)e 'can'. In this case, the object can be marked by either -ga or -o.

It has been assumed that the stative verbal suffix -(rar)e 'can' plays a role in the nominative marking of the object in examples like (2c). One of the concrete hypotheses for this was proposed in Tada (1992) on the basis of the scope facts in (3), originally observed by Sano (1985).

- (3) a. Kiyomi-wa migime -dake-o tumur-e-ru (can > only)
 -TOP right-eye-only -ACC close -can
 'Kiyomi can wink with her right eye'
 - b. Kiyomi-wa migime -dake-ga tumur-e-ru (only > can)
 -TOP right-eye-only-NOM close -can
 'It is only her right eye that Kiyomi can close'

As shown in (3a), accusative objects take narrow scope with respect to -(rar)e 'can'. On the other hand, nominative objects take wide scope as in (3b). Tada (1992) proposed then that nominative objects move to a position within the projection of the verb -(rar)e for Case licensing, as illustrated in (4).

(4)
$$[_{TP} \text{ Kiyomi } [_{T'}[_{VP} \text{ right eye only-NOM close}] - can]] - Pres.]]$$

The landing site is higher than the verbal suffix -(rar)e and consequently, they take wide scope.² This movement analysis of nominative objects was further developed in

¹ In (2b-c), the subject can be dative only when the object is nominative. The potential verbal suffix assumes the form *-rare* when the final sound of the stem is a vowel and *-e* when it is a consonant.

² More precisely, Tada (1992) proposes that nominative objects move to the Spec of AgrP projected above the VP headed by -(rar)e. As is often noted in the literature, the wide scope construal of accusative objects is marginally possible in examples like (3a). I follow Koizumi

Koizumi (1995, 1998). He pointed out that those objects take wide scope not only over higher predicates, as in (3b), but also over sentential negation. This is shown in (5).

(5) Kiyomi-ga migime -dake-ga tumur-e -na-i (koto) (only > not > can)
-NOM right eye-only-NOM close -can-not fact
'(the fact that) it is only her right eye that Kiyomi cannot close'

Accordingly, he proposed that nominative objects undergo overt A-movement to the inner Spec of TP for Case checking, as in (6).

This analysis achieves a unified treatment of -ga: it is always licensed within a projection of T whether it is on the subject or on the object.

Although the judgment of examples like (5) is fairly clear, a number of linguists, including myself, have not taken these examples as core data because other kinds of examples show different or even contradictory patterns of scope interaction between nominative phrases and negation. More specifically, there are cases where nominative phrases take narrow scope with respect to sentential negation, as observed, for example, in Kuno (1973) and Miyagawa (2003). In this paper, I will first discuss those potentially problematic cases and argue that they are after all consistent with Koizumi's analysis. This, I believe, solidifies the empirical basis of the movement analysis of nominative objects. In Section 3, however, I will raise questions on the specifics of Koizumi's analysis. First, I will argue that the movement in question is not A-movement but is A'-movement. I will discuss some observations in Inoue (1976) and Saito (1982), and show that it is not subject to the locality of A-movement. Secondly, I will argue that the movement is covert as proposed in Ura (1999), building on a discussion in Yatsushiro (1999). If the movement is indeed covert, it must be independent of the EPP requirement of T, as Ura points out. In Section 4, I will consider his analysis of the EPP, which is consistent with this conclusion, and present a supporting argument for it. Section 5 concludes the paper.

2. The Scope of Nominative Subjects

As noted above, various and sometimes conflicting patterns are observed for the scope of nominative phrases. Those that seem particularly problematic for Koizumi's analysis are the scope of the nominative phrase in existential sentences examined in Kuno (1973) and the scope of subject in scrambling sentences discussed in Miyagawa (2003). I will consider them in turn and argue that the problems they pose are only apparent.

Kuno (1973) examines the correlation of word order and scope relation in existential sentences. It is known since Kuroda (1971) that Japanese exhibits scope rigidity but movement of one quantified NP over another yields scope ambiguity. This is illustrated in (7) and (8).

⁽¹⁹⁹⁵⁾ and assume that the object is string-vacuously scrambled to a position higher than -(rar)e in this case. It was also shown by Nomura (2003) that nominative objects can take narrow scope when forced by the context. I assume with him that this is due to reconstruction, which for some reason is a less preferred option in the cases like (3b). See below for some relevant discussion.

- (7) Dareka -ga daremo -o aisitei-ru someone-NOM everyone-ACC love 'Someone loves everyone' (some > every, *every > some)
- (8) a. Daremo -o_i dareka -ga t_i aisitei-ru everyone-ACC someone-NOM love 'Someone loves everyone' ('every > some' is OK.)
 - b. Dareka -o_i daremo -ga t_i aisitei-ru someone-ACC everyone-NOM love 'Everyone loves someone' ('every > some' is OK.)
- (7) is in the basic SOV order and the subject takes wide scope over the object. In (8), the object is scrambled over the subject. In this case, the scrambled object can take scope over the subject as in (8a), and more importantly, the subject can take scope over the object as shown in (8b). Thus, scope ambiguity obtains with movement.

Given this generalization, examples such as (9) provide a clue for the structure of existential sentences.

(9) Itutu-izyoo -no ike -ni san -syurui-izyoo -no sakana-ga i-ru five -more than-GEN pond-in three-kind -more than-GEN fish -NOM be 'There are more than three kinds of fish in every pond' (more than five > more than three, *more than three > more than five)

This example has the Locative-Nominative-V order. The locative can take wide scope over the nominative phrase. But the opposite scope relation is impossible. Suppose that there are 15 ponds altogether. The sentence is false under the situation where four kinds of fish are found in more than five of them but none of the ponds has more than two kinds of fish. This is expected if the sentence is in basic word order. Then, it should be unambiguous like (7). On the other hand, if the sentence is derived from the Nominative-Locative-V order by preposing the locative phrase, it is incorrectly predicted to be ambiguous. Hence, Kuno concludes that the basic word order of existential sentences is Locative-Nominative-V.

Although Kuno does not examine the scope relation of nominative phrases and negation, his discussion suggests that nominative phrases in existential sentences are generated quite low in the structure and take fairly narrow scope, that is, below the locative. And in fact, nominative phrases in existential sentences fall under the scope of negation, as shown in (10).

(10) Kono ike -ni-wa sakana-ga i-na-i this pond-in-TOP fish -NOM be-not 'There is no fish in this pond' (not > some)

This sentence does not mean that there is a fish such that it is not in this pond. It seems then that nominative phrases take scope under negation, contrary to Kozumi's claim.

This problem, however, is only apparent. First, if we substitute *koi-dake* 'carponly' for *sakana* 'fish' in this example as in (11), the nominative phrase does take wide scope over negation.

(11) Kono ike -ni-wa koi -dake-ga i-na-i this pond-in-TOP carp-only-NOM be-not 'It is only carp that this pond does not have' (only > not) The situation is a familiar one. Lasnik (1999) considers the following contrast with quantifier lowering:

- (12) a. Some politician_i is likely [t_i to address John's constituency] (some > likely, likely > some)
 - b. Every coin_i is 3% likely [t_i to land heads] (every > 3% likely, *3% likely > every)

As discussed extensively in May (1977), examples like (12a) allow the narrow scope reading of the raised subject. However, Lasnik points out that this phenomenon is limited to those NPs that can be construed as indefinites, and does not obtain with quantified NPs such as *every coin*, as shown in (12b). He suggests then that there is no quantifier reconstruction with A-movement, and speculates that the narrow scope reading of a raised indefinite is possible for an independent reason.

A precise account for the contrast in (12) is pursued in Lasnik (2008). However, let us simply assume for the purpose here that reconstruction in A-chains (or more generally Case chains) is difficult with quantified NPs but is readily available or even forced with indefinites. Then, the contrast between (10) and (11) is precisely what is expected under Koizumi's approach. In both examples, the nominative phrase originates within VP and is raised to a position in the T-projection so that its Case is licensed. As a result, it c-commands negation. But in the case of (10), the raised nominative phrase takes reconstructed scope below negation because it is an indefinite.

This line of analysis predicts that a contrast similar to the one in (10) and (11) should obtain with nominative objects. Koizumi's important observation was that a nominative quantified NP in object position takes scope over negation. If this is because the NP moves to the T-projection for Case licensing as Koizumi argues, then an indefinite nominative object should be able to take reconstructed scope under negation. The prediction is borne out by the examples in (13) and (14).

- (13) a. Kiyomi-wa Taroo-dake-o hihan -deki-na-i -TOP -only-ACC criticize-can -not 'Kiyomi cannot criticize only Taroo' (not > can > only)
 - b. Kiyomi-wa Taroo-dake-ga hihan -deki-na-i
 -TOP -only-NOM criticize-can -not
 'It is only Taroo that Kiyomi cannot criticize' (only > not > can)
- (14) Kiyomi-wa hito -o /-ga hihan -deki-na-i -TOP person-ACC/-NOM criticize-can -not 'Kiyomi cannot criticize a person' (not > can > only) (Not 'there is someone who Kiyomi cannot criticize')
- (13) confirms that *Taroo-dake* 'only Taroo' takes scope over negation when it is a nominative object. (14), on the other hand, shows that an indefinite object takes scope under negation whether it is in nominative or accusative. This example, like (10), is a counter-example to the generalization that nominative phrases take scope over negation. But it is consistent with Koizumi's movement analysis of nominative objects, provided that indefinites take reconstructed scope.

The following contrast, discussed in detail in Miyagawa (2003), seems to pose another problem for Koizumi's analysis:

- (15) a. Zen'in-ga sono tesuto-o uke -na -katta (yo /to omo-u) all -NOM that test -ACC take-not-Past Part that think 'All didn't take that exam' (all > not, *not > all)
 - b. Sono tesuto-o_i zen'in-ga t_i uke -na -katta (yo /to omo-u) that test -ACC all -NOM take-not-Past Part that think 'That exam, all didn't take' (all > not, not > All)
- (15a) has SOV order, and the quantified NP in the subject position takes scope over negation. However, when the object is scrambled over the subject, the latter exhibits scope ambiguity with negation as in (15b). This already indicates that quantified NPs with nominative Case do not necessarily take scope over negation.

Miyagawa's analysis of this contrast is as follows. The subject in (15a) is in TP Spec, satisfying the EPP requirement of T, and hence, takes scope over negation, as illustrated in (16a).

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(16) a. [TP \text{ subject}_i [T' [NegP [Neg', [vP t_i [v', [VP \text{ object } V] v]] Neg]] T]]
b. [TP \text{ object}_i [T', [NegP [Neg', [vP \text{ subject } [v', [VP t_i V] v]] Neg]] T]]
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(15b), on the other hand, can be derived in two ways. First, it can be derived from (16a) by adjoining the object to TP by A'-scrambling. In this case, the subject takes scope over negation. Second, the object can be scrambled to TP Spec and consequently satisfy the EPP requirement of T instead of the subject as in (16b). When this happens, the subject remains in ν P Spec and as a result, takes narrow scope under negation.

I slightly modified this analysis in Saito (2009) on the basis of examples like (17).

- (17) a. Zen'in-ga zibun-zisin-ni toohyoosi-na -katta (to omo-u) all -NOM self -self -DAT vote -not-Past that think 'Everyone did not vote for herself/himself' (all > not, *not > all)
 - b. Zibun-zisin-ni_i zen'in-ga \underline{t}_i toohyoosi-na -katta (to omo-u) self -self -DAT all -NOM vote -not-Past that think 'For herself/himself, everyone did not vote' (all > not, not > all)
- (17) shows the same kind of contrast as (15). In particular, the scrambling in (17b) makes the narrow scope construal of the subject possible. However, the scrambled dative phrase cannot be in TP Spec because that would make the example a Condition (C) violation. It follows that in this example also the subject is in TP Spec and satisfies the EPP requirement of T. I argued then that the element in TP Spec can scopally interact with negation, but the sentence-initial constituent, whether it is a subject or a scrambled object, is in the Spec position of a higher functional head, which I called Pred, and takes scope over negation. According to this analysis, the structures of (15a-b) are as in (18a-b) respectively.
- (18) a. $[PredP \text{ subject}_i [Pred'] [TP t_i'] [T'] [NegP [Neg'] [vP t_i] [v'] [VP object V] v]] [Neg]] [T]] [Pred]]$ b. $[PredP \text{ object}_i [Pred'] [TP \text{ subject}_j [T'] [NegP [Neg'] [vP t_j] [v'] [VP t_i] V]] [Neg]] [T]] [Pred]]$

This analysis assumes crucially that quantified NPs in TP Spec can scopally interact with sentential negation. It seems then to be in contradiction with Koizumi's, which attributes the wide scope property of nominative objects to their movement to TP Spec. But here again, the problem is only apparent. Note first that if we substitute *Taroo-dake* 'Taroo-only' for *zen'in* 'all' in (15), the subject takes scope over negation,

as shown in (19).

- (19) a. Taroo-dake-ga sono tesuto-o uke -na -katta (yo /to omo-u) -only-NOM that test -ACC take-not-Past Part that think 'Only Taroo didn't take that exam' (only > not, *not > only)
 - b. Sono tesuto- o_i Taroo-dake-ga t_i uke -na -katta (yo /to omo-u) that test -ACC -only-NOM take-not-Past Part that think 'That exam, only Taroo didn't take' (only > not, *not > only)

Secondly, when *zen'in* 'all' appears as a nominative object, it scopally interacts with sentential negation.³

- (20) a. Kiyomi-wa zen'in-o hihan -deki-na -katta -TOP all -ACC criticize-can -not-Past 'Kiyomi couldn't criticize everyone' (not > all)
 - b. Kiyomi-wa zen'in-ga hihan -deki-na -katta
 -TOP all -NOM criticize-can -not-Past
 'Kiyomi couldn't criticize anyone/everyone' (not > all, all > not)

Hence, the contrast between Koizumi's examples with NP-dake-ga 'NP-only-NOM' and Miyagawa's (15b) with zen'in-ga 'all-NOM' should be attributed to the lexical properties of the quantified NPs. Both move to TP Spec. The former takes wide scope over negation in this position while the latter can be construed with wide or narrow scope. This receives indirect support from the English examples in (21).

- (21) a. Everyone didn't take that exam (every > not, not > every)
 - b. Most people didn't take that exam (most > not)
 - c. Only John didn't take that exam (only > not)

(21a) is ambiguous. *Everyone* is clearly in TP Spec, and yet, it can take wide or narrow scope with respect to negation. On the other hand, it is known that some quantified NPs take wide scope over negation when they are in TP Spec. *Most people* in (21b) is a typical example. (21c) shows that *only John* exhibits this pattern as well. Then, *zen'in* 'all' in Japanese behaves like *everyone*, and *Taroo-dake* 'only Taroo' is like *only John*, which is hardly surprising.

The generalization that nominative phrases take scope over sentential negation, which Koizumi's analysis seems to imply, cannot be maintained. In particular, indefinites take narrow scope and *zen'in* 'all' can take wide or narrow scope with respect to negation. However, I argued in this section that the relevant examples support Koizumi's movement analysis of nominative objects. All nominative phrases are licensed within the T-projection. But indefinites take reconstructed scope and *zen'in* can scopally interact with negation when they are in TP Spec. Thus, the complex pattern of the scope of nominative phrases follows from Koizumi's analysis.

3. Covert A'-movement for Case Licensing

In the preceding section, I presented a supporting argument for Koizumi's hypothesis that nominative objects move to a position in the T-projection for the purpose of Case

³ The verb 'criticize' consists of two morphemes *hihan* 'criticism' and *su* 'do'. The latter has an irregular potential form *deki* 'can do'.

licensing. Koizumi argues that this movement is overt A-movement to the inner Spec of TP. In this section, I will provide evidence that it is covert A'-movement. I will first show that the movement does not obey the locality conditions on A-movement. Then, I will suggest that the movement is covert.

Recall Koizumi's hypothesis that nominative objects move to the inner Spec of TP. The illustration in (6) is repeated below in (22).

(22)
$$[_{TP} \text{ Kiyomi } [_{T'} \land [_{NegP} [_{VP} [_{VP} \text{ right eye only-NOM}] \text{ close}] -can] -Neg] -Pres.]]]$$

One problem arises immediately with this analysis. Since nominative objects undergo A-movement to TP Spec, we would expect them to exhibit subject properties, but they do not. The subject-oriented anaphor *zibun* 'self' is often used as a diagnosis for subjecthood. As shown in (23), only subjects qualify as antecedents of *zibun*.

- (23) a. Hanako_i-ga Taroo_j-o zibun_{i/*j}-no ie -de sikat-ta (koto)
 -NOM -ACC self -GEN house-in scolded fact
 '(the fact that) Hanako scolds Taroo in her house'
 - b. Taroo_i-ga Hanako_j-niyotte zibun_{i/*j}-no ie -de *t*_i siakar-are-ta (koto)
 -NOM -by self -GEN house-in scolded-was fact
 '(the fact that) Taroo was scolded by Hanako in his house'
- (23a) indicates that *zibun* cannot take an object as its antecedent, and the passive sentence in (23b) shows that the relevant notion of 'subject' is surface subject. And it is well known that nominative objects do not qualify as subjects in this regard. (24) confirms this generalization.
- (24) Hanako_i-ga Taroo_j-ga zibun_{i/*j}-no ie -de sikar -e-ru (koto)
 -NOM -NOM self -GEN house-in scold-can fact
 '(the fact that) Hanako can scold Taroo in her house'

A more direct problem for Koizumi's analysis concerns the locality of the movement in question, as is also pointed out in Takahashi (2008). As noted in Inoue (1976), there is an important difference between passive and nominative object constructions. To illustrate this, let us first consider the example of causative in (25).

- (25) a. Hanako_i-wa Taroo_j-ni (zibun_{i, j}-no heya-de) hon -o kak -ase-ta -TOP -DAT self -GEN room-in book-ACC write-made 'Hanako makes Taroo study linguistics in her/his room'
 - b. Hanako_i-wa [$_{VP}$ Taroo_i-ni [$_{VP}$ (zibun_{i, i}-no heya -de) hon-o kak]]-ase-ta

(25a) looks like a simple sentence with a complex verb *kak-ase* 'write-make', but both the agent *Hanako* and the causee *Taroo* are possible antecedents for *zibun*. It has thus been widely assumed since Kuroda (1965) that causatives involve sentential embedding with the causee as the embedded subject. I assume, following Murasugi and Hashimoto (2004), among others, that the causative verb *-(s)ase* takes a *v*P complement as in (25b).

This analysis straightforwardly accounts for the contrast in (26) with passive.

(26) a. Taroo-ga_i Hanako-niyotte [$_{\nu P}$ t_i [$_{VP}$ hon -o kak]]-ase-rare-ta (koto)
-NOM -by book-ACC write-made-was fact
'(the fact that) Taroo was made by Hanako to write a book'

b. *Hon -ga_i Hanako-niyotte [$_{\nu P}$ Taroo-ni [$_{\nabla P}$ t_i kak]]-ase-rare-ta (koto) book-NOM -by -DAT write-made-was fact '*Lit.* (the fact that) a book was made by Hanako for Taroo to write'

In (26a), the causee is moved to the matrix subject position. In (26b), on the other hand, the object is raised across the embedded vP Spec. The result is ungrammatical as expected since the movement is a minimality violation.⁴ What is interesting is that the object in (25a) cannot be passivized as shown in (26b) but can be turned into a nominative object with the addition of the suffix -(rar)e 'can'. This is shown in (27).

(27) Hanako-ga [_{VP} Taroo-ni [_{VP} hon -ga kak]]-ase -rare-ru (koto)
-TOP -DAT book-NOM write-make-can fact
'(the fact that) Hanako can make Taroo write a book'

The grammaticality of this example is totally unexpected if the nominative object undergoes A-movement to a position in the matrix T-projection. The movement should then take place across the embedded νP Spec and should violate minimality exactly like (26b). Based on evidence of this kind, I concluded in Saito (1982) that nominative objects are not licensed by A-movement to TP Spec.

As we saw in the proceeding section, the scope properties of nominative objects indicate that they move to a position within the T-projection. At the same time, (27) shows that the movement is not to an A-position. Then, we are led to the conclusion that the relevant movement is A'-movement. This conclusion, which is also argued for in Takahashi (2008), solves the puzzle mentioned at the outset of this section as well. Recall that nominative objects are not possible antecedents for *zibun*, and thus, lack subject properties. This is expected if they move to an A'-position in the T-projection. If T can host multiple Specs and TP Specs can be A or A' positions, it seems plausible that the A'-Specs are at the outer edge, as illustrated in (28).

(28)
$$\left[T_P A' \right] \left[T' \text{ subject } \left[T' A \right] \left[T' \right] \left[V_P \dots \right] T \right] \right]$$

I will henceforth assume that nominative objects move to the outer Spec of TP.

The next issue is whether the movement in question is overt or covert. First, Yatsushiro (1999) presents arguments that nominative objects stay within VP in overt syntax. One of her arguments is based on examples of VP-preposing such as (29).

- (29) a. Kai-ga eigo -ga yom-e -sae si-ta (no -ni -wa odoroi-ta)
 -NOM English-NOM read-can-even did that-DAT-TOP surprised
 '(I was surprised that) Kai was even able to read English'
 - b. $[v_P \text{ Eigo-ga yom-e-sae}]_i [T_P \text{ Kai-ga } t_i \text{ si-ta}] (\text{no-ni-wa odori-ta})$
 - c. $*[v_P Yom-e-sae]_i [T_P Kai-ga eigo-ga t_i si-ta] (no-ni-wa odori-ta)$

Japanese has an interesting construction, exemplified by (29a), where VP is followed by a focus particle and is embedded under the main verb su 'do'. In this construction, the embedded VP can be preposed by scrambling. Yatsushiro points out that a nominative object must be preposed with the VP in this case, as shown in (29b-c). This is expected if it is within VP but not if it moves to the Spec of TP in overt syntax.

⁴ There is an issue regarding why the NP-movement cannot proceed through the edge of vP. A proposal that excludes this derivation will be made in Section 4 below.

Although I believe that Yatsushiro's argument is valid, I also noticed that some consider (29b) marginal. This is not surprising as VP-preposing is best with agentive verbs. But once it is assumed that nominative objects move to the outer Spec of TP, another argument can be constructed to show that the movement is not overt. One of the reasons that Koizumi assumed that the landing site is the inner Spec of TP is because SOV seems to be the basic word order even in nominative object sentences. This intuition can be confirmed by the distribution of floating quantifiers (FQs). It is well known that Japanese employs floating quantifiers extensively as in (30).

- (30) a. Gakusee-ga san-nin sake-o non-da student -NOM 3 -person sake-ACC drank 'Three students drank sake'
 - b. Gakusee-ga sake-o san-bon non-da student -NOM sake-ACC 3 -bottle drank 'A student drank three bottles of sake'

As noted in Kuroda (1980) and Haig (1980), an FQ must occur adjacent to the associate NP and hence (31a) is not grammatical.⁶

- (31) a. ??Gakusee-ga sake-o san-nin non-da student -NOM sake-ACC 3 -person drank 'Three students drank sake'
 - b. Sake-o_i gakusee-ga *t*_i san-bon non-da sake -ACC student -NOM 3 -bottle drank 'A student drank three bottles of sake'

(31b) is an apparent counter-example to this generalization as the subject intervenes between the object and an FQ associated with it. Kuroda and Haig take this as evidence that OSV order is derived by scrambling: the object originates in a position adjacent to the FQ and is preposed to the sentence-initial position.

This analysis assumes that the ungrammatical (31a) has the structure in (33a).

(33) a. [TP subject [VP object FQ_{subj} V]]
b. [subject_i [object_i [TP t_i FQ_{subj} [VP t_i V]]]]

In particular, it presupposes that the example cannot have the structure in (33b), where both the object and the subject are scrambled to the sentence-initial position. If (33b) were possible, the example would be incorrectly predicted to be grammatical.⁷

Given this, let us consider the example in (34) with a nominative object, which is perfectly grammatical in SOV order.

⁵ See Hoshi (1995) and Saito (2006) for detailed discussion of VP-preposing in Japanese.

⁶ More precisely, they must be in sister relation as discussed in detail in Miyagawa (1989).

⁷ In order to exclude (33b), I suggested in Saito (1985) that subjects cannot be scrambled. Comrie (1987), on the other hand, appeals to the ban on crossing. More recently, Ko (2007) and Takita (2008) proposed an account based on Fox and Pesetsky's (2005) theory of linearization. The last account seems most principled, but it is unfortunately incompatible with the analysis of short scrambling proposed later in this paper.

- (34) a. Hanako-ga terugugo-ga hanas-e-ru -NOM Telugu -NOM speak-can 'Hanako can speak Telugu'
 - b. $[\text{subject}_i \mid_{\text{TP}} \text{Nom object}_i \mid_{\text{T'}} t_i (\text{FQ}_{\text{subi}}) \mid_{\text{VP}} t_i \text{ V}]]]]$

If the nominative object moves overtly to the outer Spec of TP, the subject must be scrambled to its left as in (34b) so that the SOV order is obtained. Then, it is predicted that an FQ associated with the subject can occur after the nominative object as indicated. But this prediction fails. (35b) has the ungrammatical status equivalent to (31a) while (35a) is perfect.

- (35) a. Gakusee-ga san-nin terugugo-ga hanas-e-ru student -NOM 3 -person Telugu -NOM speak-can 'Three students can speak Telugu'
 - b. ??Gakusee-ga terugugo-ga san-nin hanas-e-ru student -NOM Telugu -NOM 3 -person speak-can 'Three students can speak Telugu'

Thus, the ungrammaticality of (35b) shows that a nominative object does not move to the outer Spec of TP overtly, and that the movement has to be covert.

4. EPP, Case Licensing, and VP-internal Scrambling

So far, I argued that nominative objects move covertly to the outer Spec of TP to have the nominative Case licensed. This means that nominative Case licensing need not takes place in overt syntax. And this in turn implies that the EPP, which requires TP Spec to be filled overtly, is independent of nominative Case licensing. In a simple example like (36), T attracts the nominative subject to its Spec to satisfy the EPP requirement.

(36) [TP Taroo-ga_i [$_{\nu P}$ t_i [$_{VP}$ kantongo -o hanas-u]]] (koto)
-NOM Cantonese-ACC speak (fact)
'(the fact that) Taroo speaks Cantonese'

As a result, the nominative phrase happens to move overtly to a position where its Case is licensed. But this is accidental, and the movement does not take place for the purpose of nominative licensing.

Ura (1999), who entertains a covert feature movement analysis for the Case licensing of nominative objects, also reaches this conclusion. He argues that T attracts the closest NP to its Spec regardless of the Case. For example, it has been known that 'dative subjects' exhibit subject properties despite the fact that they are not nominative. This is illustrated in (37) with the subject-oriented anaphor *zibun*.

(37) Hanako_i-ga /-ni Taroo_j-ga zibun_{i/*j}-no ie -de sikar -e-ru (koto)
-NOM/-DAT -NOM self -GEN house-in scold-can fact
'(the fact that) Hanako can scold Taroo in her house'

Ura proposes that dative subjects are assigned inherent Case in vP Spec and are

⁸ Takahashi (2008) also argues that nominative objects take wide scope due to covert A'-movement, but proposes that the relevant movement is QR. The discussion in this section is consistent with this alternative.

attracted by the EPP-feature of T to TP Spec.

The hypothesis that the EPP-feature of T attracts the closest NP raises an interesting question in relation with scrambling. As shown in (38b), a direct object can be scrambled to a sentence-medial position following the subject in TP Spec.

- (38) a. Hanako-ga Taroo-ni hon -o okut-ta (koto)
 -NOM -DAT book-ACC sent fact
 '(the fact that) Hanako sent a book to Taroo'
 - b. Hanako-ga hon -o_i Taroo-ni *t*_i okut-ta (koto)
 -NOM book-ACC -DAT sent fact

If this kind of short scrambling can be to the edge, i.e., the outer Spec, of vP, why is it that an object cannot be attracted to TP Spec instead of the subject as in (39)?

(39)
$$[\text{TP object}_i [_{VP} t_i]' [_{V'} \text{ subject} [_{VP} t_i \ V]]]]$$

Once the object is scrambled to the outer Spec of vP, the EPP-feature of T would automatically attract it as it is the closest NP. The nominative Case on the subject can be licensed if the subject raises covertly to the outer Spec of TP exactly like a nominative object.

As noted above, Miyagawa (2003) argues that an object can move to TP Spec as in (39) and check the EPP-feature of T instead of the subject, but we have seen evidence that it is always the subject that moves to TP Spec and satisfies the EPP requirement. Further, a scrambled object does not have subject properties. For example, it can never be the antecedent of *zibun*, as shown in (40).

(40) Taroo-o_j Hanako_i-ga
$$t_j$$
 zibun_{i,*j}-no heya -de sikar-u (koto) -ACC -NOM self -GEN room-in scold fact '(the fact that) Hanako scolds Taroo in her room'

Thus, the derivation in (39) must somehow be excluded.

Here, I would like to propose that the outer Spec of vP in (39) is necessarily an A'-position, and consequently, the movement of the object to TP Spec is ruled out as an instance of improper movement from an A'-position to an A-position. I hypothesized above that the outer Spec of TP is an A'-position, as shown in (41).

(41) a.
$$[_{TP} A' [_{TP} \text{ subject } [_{T'} \dots (=(28))]$$

b. $[_{vP} A' [_{vP} \text{ subject } [_{v'} A [\dots]]$

This can be stated more precisely as follows. Let us assume, following Chomsky (1995), that the uninterpretable EPP-feature of T must be checked as soon as it enters the derivation. In (41a), the subject checks this feature and at this point, all the lexical requirements of T are satisfied. We may then say that any Spec created after this point counts as an A'-position. If we extend this reasoning to ν P Specs, then any Spec external to the subject must be an A'-position. This is so because ν needs to discharge its theta-role to the subject, but once this is done, it has no further lexical requirements to be satisfied. Then, a ν P Spec external to the subject is an A'-position while an internal ν P Spec is an A-position, as illustrated in (41b).

Given this, when an object is scrambled to the outer Spec of vP, the derivation necessarily crashes. The EPP-feature of T attracts it to TP Spec because it is the closest

NP but this results in improper movement. The only possible landing site for scrambling to the edge of vP, then, is the inner Spec. That is, the scrambling takes place, and then, the subject is merged to receive the external theta-role. In this case, the EPP-feature of T attracts the subject as it is the closest NP.

Although this may sound somewhat speculative, it serves to solve one outstanding problem with the analysis of scrambling. While scrambling across the subject exhibits both A and A' properties, scrambling to the edge of ν P shows strict A properties, as discussed in detail by Mahajan (1990), Tada (1993) and Nemoto (1993), among others. The examples in (42) demonstrate that an object preposed to the sentence-initial position can serve as the antecedent for an anaphor.

- (42) a. ?*[Otagai -no sensee]-ga Masao-ni karera-o syookaisi-ta (koto) each other-GEN teacher-NOM -DAT they -ACC introduced fact 'Lit. Each other's teachers introduced them to Masao'
 - b. [Karera-o_i [$_{TP}$ [otagai-no sensee]-ga Masao-ni t_i syookaisi-ta]] (koto)

Scrambling of this kind patterns with A-movement in this respect. On the other hand, scrambling of an anaphor to the sentence-initial position does not induce a Condition (C) violation, as shown in (43).

- (43) a. [Taroo-to Hanako]-ga Masao-ni otagai -o suisensi-ta (koto)
 -and -NOM -DAT each other-ACC recommended fact
 '(the fact that) Taroo and Hanako recommended each other to Masao'
 - b. [Otagai-o_i [$_{TP}$ [Taroo-to Hanako]-ga Masao-ni t_i suisensi-ta]] (koto)

Here, scrambling exhibits an A'-property. The use of A and A' is quite confusing in the literature on scrambling, but let us assume for concreteness, following Webelhuth (1992), that scrambling across the subject is non-operator A'-movement. The scrambled object in (42b) is a possible antecedent for the anaphor because it is in a non-operator position, and (43b) is grammatical because the object is in an A'-position.

Scrambling to the post-subject position shows a different pattern. First, it shares the non-operator property with scrambling across the subject. (44) illustrates this.

- (44) a. ?*Masao-ga [otagai -no sensee]-ni karera-o syookaisi-ta (koto)
 -NOM each other-GEN teacher-DAT they -ACC introduced fact
 'Masao introduced them to each other's teachers'
 - b. Masao-ga [karera-o_i [[otagai-no sensee]-ni t_i syookaisi-ta]] (koto)
 - c. [Karera-o_i [$_{TP}$ Masao-ga [$_{\nu P}$ t_i ' [[otagai-no sensee]-ni t_i syookaisi-ta]]]] (koto)
- (44b) shows that scrambling of *karera* 'they' to the post-subject position enables the NP to serve as the antecedent for an anaphor contained in the indirect object. But scrambling to the post-subject position exhibits a paradigm different from (43) when the scrambled NP is an anaphor. The scrambling of *otagai* 'each other' over its antecedent results in ungrammaticality as in (45).
- (45) a. Masao-ga [Taroo-to Hanako]-ni otagai -o suisensi-ta (koto)
 -NOM -and -DAT each other-ACC recommended fact
 '(the fact that) Masao recommended each other to Taroo and Hanako'
 - b. *Masao-ga [otagai-o_i [[Taroo-to Hanako]-ni t_i suisensi-ta]] (koto)

c. *[Otagai-o_i [$_{TP}$ Masao-ga [$_{\nu P}$ t_i ' [[Taroo-to Hanako]-ni t_i suisensi-ta]]]] (koto)

(45c) is particularly interesting. There is only one necessary intermediate landing site: the movement must proceed through the edge of the vP phase. The final landing site should not cause a Condition (C) violation because it is a (non-operator) A'-position as we saw in (43b). Then, the intermediate landing site must be an A-position.

It has been a mystery why the vP Spec position of the intermediate trace in (45c) counts as an A-position. But this is precisely what we expect given the discussion in this paper. Recall the structure of vP edge in (41b), repeated below in (46).

(46)
$$[_{\nu P} A']_{\nu P}$$
 subject $[_{\nu'} A]_{\dots}$

If the scrambled object moves to the outer Spec, it is in A'-position. But then, the derivation crashes because the EPP-feature of T attracts this NP, forcing an improper movement. Hence, the derivation converges only when the landing site of scrambling is the inner Spec, which is an A-position. The subject, then, moves to TP Spec to satisfy the EPP requirement of T, and the object undergoes further scrambling to the sentence-initial position in the case of (45c). Thus, the paradigm in (45) receives an account based on Ura's (1999) hypothesis that the EPP attracts the closest NP, independently of nominative Case licensing.

5. Concluding Remarks

In this paper, I argued that nominative objects move covertly to the outer Spec of TP in order to have the nominative Case licensed. In the course of the discussion, I provided evidence for Koizumi's (1995, 1998) movement analysis, comparing the scope properties of quantifiers and indefinites. At the same time, I argued that the movement is covert and its landing site is an A'-position. Finally, I discussed a consequence of the analysis, i.e., that the EPP-feature attracts the closest NP to its Spec independently of nominative Case licensing. I argued that this hypothesis, proposed by Ura (1999), enables us to account for the strict A-property of scrambling to the post-subject position.

There are other consequences that need to be examined. It should be noted first that an issue remains with the precise identity of the covert A'-movement of nominative objects. I argued in this paper that it takes place for nominative Case licensing, extending Tada's (1992) and Koizumi's (1995, 1998) analyses. On the other hand, as noted in Fn.8, it is argued by Takahashi (2008) that it is QR. In either case, the movement applies to satisfy a requirement of the moved item. But if the Case licensing analysis is correct, it provides stronger support for Bošković (2007), which argues for the last resort nature of movement in general. According to this analysis, the movement does not take place to eliminate any deficiency of T, but only to license the nominative Case on the object. Hence, it implies that there are movements for Case licensing that are motivated solely by the moved item.

Another consequence concerns the analysis of scope rigidity of quantifiers. As noted above, Japanese exhibits scope rigidity as in (7), repeated below in (47).

(47) Dareka -ga daremo -o aisitei-ru someone-NOM everyone-ACC love 'Someone loves everyone' (some > every, *every > some)

This generalization holds even with nominative objects, as (48) shows.

(48) Dareka -ga daremo -ga nagur-e-ru someone-NOM everyone-NOM hit -can 'Someone can hit everyone' (some > every, *every > some)

Given the analysis proposed in this paper, the object in (48) moves covertly to the outer Spec of TP, creating the configuration in (49).

(49) $[TP daremo-ga_i [T' dareka-ga_j [[vP t_i [VP t_i V]] v] T]]]$

This seems problematic as *daremo* 'everyone' occupies a position higher than *dareka* 'someone'. Takahashi (2008) takes this as evidence that the scope relation between two quantified NPs is determined by their surface order. He argues in particular that examples like (48) constitute evidence for Bobaljik and Wurmbrand's (2008) ScoT, a soft constraint whose effects are most visible in scrambling languages such as German and Japanese.

(50) Scope Tranparency (ScoT)

If the order of two elements at LF are A > B, the order at PF is A > B.

An alternative would be to appeal to the Pred projection alluded to in Section 2. Recall the hypothesis that the sentence-initial constituent is in PredP Spec in Japanese. Given this, the subject, *dareka-ga* 'someone-NOM', in (48) occupies this position in overt syntax. Thus, after the covert movement of the object, *daremo-ga* 'everyone-NOM', to the outer Spec of TP, the configuration in (51) obtains.

(51) $[PredP dareka-ga_i [[TP daremo-ga_i [T', t_i'] [[VP t_i [[VP t_i V]] v] T]]] Pred]]$

This is consistent with the rigidity effect in (48), but it remains to be seen whether this account extends to all instances of scope rigidity observed in Japanese.

References

Bošković, Željko. 2007. On the locality and motivation of move and agree: An even more minimal theory. *Linguistic Inquiry* 38: 589-644.

Bobaljik, Jonathan, and Susi Wurmbrand. 2008. Word order and scope: Transparent interfaces and the 3/4 signature. Ms., University of Connecticut.

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

Comrie, Akiko K. 1987. On so-called quantifier floating in Japanese. Ph.D. dissertation, USC.

Fox, Danny, and David Pesetsky. 2005. Cyclic linearization of syntactic structure. *Theoretical Linguistics* 31: 1-45.

Haig, John. 1980. Some observations on quantifier floating in Japanese. *Linguistics* 18: 1065-1083.

Hoshi, Hiroto. 1994. Passive verbs and light verbs: A study on theta-role assignment. Ph.D. dissertation, University of Connecticut.

Inoue, Kazuko. 1976. Henkeebunpoo-to nihongo [Transformational grammar and the Japanese language]. Tokyo: Taishukan.

Ko, Heejeong. 2007. Asymmetries in scrambling and cyclic linearization. *Linguistic Inquiry* 38: 49-83.

Koizumi, Masatoshi. 1995. Phrase Structure in Minimalist Syntax. Ph.D. dissertation, MIT.

Koizumi, Masatoshi. 1998. Remarks on Nominative Objects. *Journal of Japanese Linguistics* 16: 39-66.

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

Kuroda, S.-Y. 1965. Causative forms in Japanese. Foundations of Language 1: 30-50.

Kuroda, S.-Y. 1971. Remarks on the notion of subject with reference to words like *also*, *even*, and *only*, Part II. *Annual Bulletin* 4: 127-152, Research Institute of Logopedics and Phoniatrics, University of Tokyo.

- Kuroda, S.-Y. 1980. Bonkoozoo-no hikaku [Comparison of sentence structures]. In *Nichieigo hikaku kooza 2: Bunpoo [Lectures on comparative studies of English and Japanese 2: Grammar*], ed. Tetsuya Kunihiro, 23-61. Tokyo: Taishukan.
- Lasnik, Howard. 1999. Chains of arguments. In *Working minimalism*, eds. Samuel D. Epstein and Norbert Hornstein, 189-215. Cambridge, Mass.: MIT Press.
- Lasnik, Howard. 2008. Lecture notes for Advanced Syntax, Nanzan University.
- Mahajan, Anoop K. 1990. The A/A-bar distinction and movement theory. Ph.D. disseration, MIT.
- May, Robert. 1977. The grammar of quantification. Ph.D. dissertation, MIT.
- Miyagawa, Shigeru. 1989. Structure and Case marking in Japanese. San Diego: Academic Press.
- Miyagawa, Shigeru. 2003. A-movement scrambling and options without optionality. In *Word order and scrambling*, ed. Simin Karimi, 177-200. Oxford: Blackwell.
- Murasugi, Keiko, and Tomoko Hashimoto. 2004. Three pieces of acquisition evidence for the *v*-VP frame. *Nanzan Linguistics* 1: 1-19.
- Nemoto, Naoko. 1993. Chains and Case positions: A study from scrambling in Japanese. Ph.D. dissertation, University of Connecticut.
- Nomura, Masashi. 2005. Nominative Case and agree(ment). Ph.D. dissertation, University of Connecticut.
- Saito, Mamoru. 1982. Case marking in Japanese: A preliminary study. Ms., MIT.
- Saito, Mamoru. 1985. Some asymmetries in Japanese and their theoretical implications. Ph.D. dissertation, MIT.
- Saito, Mamoru. 2006. Expletive replacement reconsidered: Evidence from expletive verbs in Japanese. In *Form, Structure, and Grammar*, eds. Patrick Brandt and Eric Fuss, 255-273. Berlin: Akademie Verlag.
- Saito, Mamoru. 2009. Optional A-scrambling. Japanese/Korean Linguistics 16: 44-63.
- Sano, Masaki. 1985. LF movement in Japanese. *Descriptive and Applied Linguistics* 18: 245-259.
- Tada, Hiroaki. 1992. Nominative objects in Japanese. *Journal of Japanese Linguistics* 14: 91-108.
- Tada, Hiroaki. 1993. A/A-bar partition in derivation. Ph.D. dissertation, MIT.
- Takahashi, Masahiko. 2008. Case-valuation, phasehood, and nominative/accusative conversion in Japanese. Presented at NELS 39, Cornell University.
- Takita, Kensuke. 2008. Remarks on the proper binding condition effects on overt and covert merge. Ms., Nanzan University.
- Webelhuth, Gert. 1992. *Principles and Parameters of Syntactic Saturation*. Oxford: Oxford University Press.
- Ura, Hiroyuki. 1999. Checking theory and dative subject constructions in Japanese and Korean. *Journal of East Asian Linguistics* 8: 223-254.
- Yatsushiro, Kazuko. 1999. Case licensing and VP structure. Ph.D. dissertation, University of Connecticut.

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