

A SUBJECT/OBJECT ASYMMETRY AND ITS IMPLICATION FOR CLAUSAL ARCHITECTURE IN JAPANESE*

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1. Introduction

It is well known that Japanese has so-called floating quantifiers (FQs henceforth), as exemplified in (1) (Haig 1980, Kuroda 1980, Miyagawa 1989, among others):

- (1) Gakusei-ga sake-o san-bon motte kita.
student-NOM sake-ACC 3-CL came-with

‘Students came with three bottles of sake.’

It has also been observed that when the intended associated NP is the object, the FQ itself does not have to be adjacent to this associated NP. In (2), for instance, since its intended associated NP is scrambled to the sentence-initial position, the FQ *san-bon* is not longer next to this associated NP, and still, this sentence remains grammatical.

- (2) Sake-o gakusei-ga san-bon motte kita.
sake-ACC student-NOM 3-CL came-with

When the intended associated NP is a subject, however, a different picture emerges (Haig 1980; Kuroda 1980). Consider (3a, b):

- (3) a. Gakusei-ga san-nin sake-o nonda.
student-NOM three-CL sake-ACC drank
b. *Gakusei-ga sake-o san-nin nonda.
student-NOM sake-ACC three-CL drank

‘Three students drank sake.’

In contrast to (3a), (3b) is degraded. In this example, the intended associated subject NP has been scrambled to the sentence-initial position, crossing over the scrambled object NP. In other words, when the intended associated NP is a subject, the FQ and this associated NP must be adjacent to each other. In short, there is a subject/object asymmetry with respect to

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the scramblability of the associated NPs. We will dub this asymmetry “Haig-Kuroda’s (H/K’s hereafter) generalization” throughout this paper.

This H/K’s generalization has been challenged, based on the grammaticality of sentences like (4), which looks like (3b) but is still grammatical:¹

- (4) Gakusei-ga₁ sake-o₂ imamadeni t₁ san-nin t₂ nonda.
 student-NOM sake-ACC so far three-CL drank

‘Three students drank sake so far.’ (Gunji and Hashida 1998)

The only difference between (3b) and (4) seems to be that in the latter example, the adverb *imamadeni* ‘so far’ intervenes between the scrambled object NP and the FQ intended to be associated with the subject NP. This is very surprising because if we look only at the “distance” between the FQ and its associated subject NP, it is actually farther away in (4) than in (3b). This appears to show that sentences like (4) constitute a counterexample to H/K’s generalization.

From here, one can proceed to take different routes to explain the grammaticality of (4). One may propose that a proper relationship between the FQ and its intended subject antecedent is somehow maintained in (4), but not in (3b) (e.g., Fukushima 2003, Gunji and Hashida 1998). Under this view, Miyagawa’s (1989) mutual c-command requirement must be rejected or, at least, modified. Another may argue, contra Saito 1985, that the subject, in fact, can be “scrambled” in (4), but not in (3b) (Miyagawa and Arikawa 2004). In this paper, however, another possibility is pursued. We will show that the grammaticality of (4) arises not from the non-scramblability of subjects or the mutual c-command requirement of FQs but from an independent property of Japanese grammar. In essence, we will argue that although (3b) and (4) appear to be almost identical, these examples have completely different structures. To the extent that our analysis is successful, we conclude that sentences of the type (4) do not really constitute a counterexample to H/K’s generalization.

This paper is organized as follows. Section 2 will start with an introduction to Saito 1985, which is a representative proposal on H/K’s generalization. Then, we will turn in Section 3 to Miyagawa and Arikawa’s (2004) proposal on H/K’s generalization and the

¹ Miyagawa and Arikawa (2004) argue that not only (4), but also sentences like (i) which contains other adverbs are also grammatical:

- (i) gakusei-ga₁ sake-o₂ isoide t₁ san-nin t₂ nonda.
 student-NOM sake-ACC quickly three-CL drank

‘Three students drank sake quickly.’

Our informants including us, however, found (i) less grammatical than (4). For this reason, although there may be some difference in acceptability between (3b) and (i), we will not examine sentences of this type in this paper. However, the reader will see that our proposal would predict that if the exhaustive interpretation of the NOM-marked NP *gakusei-ga* is forced, (i) should be acceptable.

grammaticality of sentences like (4). At first glance, since Miyagawa and Arikawa's analysis can accommodate sentences like (4) as well, their proposal appears to be superior to Saito's. However in Section 4 and 5, we will raise a question for Miyagawa and Arikawa concerning their assumption that the sentence-initial *ga*-marked NP, in other words, NOM(inative Case)-marked NP, is a thematic subject in (4). We will show that the NOM-marked NP under consideration is a major subject, but not a thematic subject. Based on this finding, we will show in Section 6 that Saito's (1985) account of (3b), introduced in Section 2, also correctly predicts that (4) is grammatical. This section leads us to the conclusion that on the basis of the grammatical status of sentences like (4) alone, it is too hasty to reject either the mutual c-command requirement on FQs or the prohibition against subject-scrambling. Section 7 concludes this paper. Most importantly, our analysis of the contrast between (3b) and (4) brings up an important implication for the clausal architecture of Japanese.

2. Subject-Scrambling: Saito (1985)

Saito (1985) attempts to derive Haig-Kuroda's generalization from an independently motivated property of Japanese subjects. Specifically, based on the ungrammaticality of (5), Saito argues that a subject cannot be scrambled:

- (5) *[Kono giron]₁-ga [Mary-ga John-ni [t₁ okasii to] itta.
This argument-NOM Mary-NOM John-DAT strange C told

'This argument, Mary told John that__ is strange.' (Saito 1985)

Saito attributes the non-scramblability of a subject to the failure to license its trace. Considering the fact that there is no multiple ACC-construction in Japanese, he proposes that the subject NP does not receive abstract Case, in contrast to the object NP, and instead, it is assigned Case by the particle *ga*. Given this, (5) is ruled out by the principle in (6):

- (6) Variables must have Case. (Chomsky 1981)

Since the variable in the embedded subject position in this example is not assigned Case since the whole *ga*-marked NP has been scrambled to the sentence-initial position, the sentence is excluded by (6).²

² One might worry about the case like (ia) where a variable of the subject left by wh-movement appears to be in violation of (6), the LF representation of which is (ib):

- (i) a. Dare-ga kita-no?
who-NOM came
'Who came?'
b. [_{CP} [_{TP} t₁-ga kita]dare₁]

Saito (1985, 149 n.36) assumes that Case-particles such as *ga* and *o* are stranded by LF-movement. If

Now, we return to (2) and (3b), repeated here as (7a, b) respectively.

- (7) a. Sake-o gakusei-ga san-bon motte kita.
 sake-ACC student-NOM 3-CL came-with
 ‘Students came with three bottles of sake.’
- b. *Gakusei-ga sake-o san-nin nonda.
 student-NOM sake-ACC three-CL drank
 ‘Three students drank sake.’

Informally speaking, these examples have the following structures:

- (8) a. [Obj Subj t_{obj} NQ V]
 ↑ |
 └────────────────┘
- b. *[Subj Obj t_{subj} NQ t_{obj} V]
 ↑ ↑ |
 └────────┘└────────────────┘

In (8a), only the object has scrambled over the subject. On the other hand, in the ill-formed configuration of (8b), the subject, as well as the object, has scrambled. Saito’s explanation on the ungrammaticality of (5) naturally extends to the ungrammaticality of (7b). Because subjects cannot scramble, the configuration in (8b) cannot be generated. The grammaticality of (7a) straightforwardly follows as well since the subject stays in-situ in this example.

The obvious question for Saito is why (4), repeated here as (9), is grammatical, in contrast to (7b):

- (9) Gakusei-ga₁ sake-o₂ imamadeni t_1 san-nin t_2 nonda.
 student-NOM sake-ACC so far three-CL drank
 ‘Three students drank sake so far.’

It appears that this example has the same configuration as the one for (7b), given in (8b), in the relevant respect. If so, the subject must have scrambled to the sentence-initial position in (9) as well. Then, Saito must answer why the subject can scramble in (9), but not in (7b).

Miyagawa and Arikawa (2004) attempt to account not only for the ungrammaticality of (7b) but also for the grammaticality of (9), based on Miyagawa’s (2001, 2004) proposal. We now turn to their proposal.

so, the variable in the subject position in (ib) should remain Case-marked, satisfying (6), and thus (ia) can be generated.

3. Miyagawa and Arikawa (2004)

Within his theoretical framework that scrambling is EPP driven (Miyagawa 2001, 2004), Miyagawa and Arikawa (2004) explain the contrast between (7b) and (9), repeated here as (10a) and (10b), respectively:

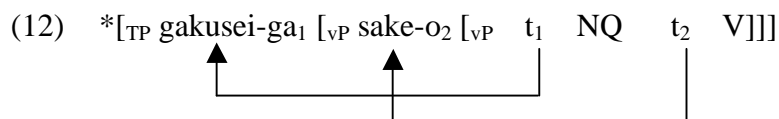
- (10) a. *Gakusei-ga sake-o san-nin nonda.
 student-NOM sake-ACC three-CL drank
 ‘Three students drank sake.’
- b. Gakusei-ga₁ sake-o₂ imamadeni t₁ san-nin t₂ nonda.
 student-NOM sake-ACC so far three-CL drank
 ‘Three students drank sake so far.’

Miyagawa and Arikawa first observe that the nuclear stress is on the object NP in (10a). If so, an element following this object NP is forced to be a part of this object NP, since the nuclear stress rule places the stress on the lowest entity in the structure (Cinque 1993). This means that the FQ cannot be a separate entity, and it has to be a part of the object NP, which is not an intended interpretation of this example. Thus, resulting in its ungrammaticality.

Furthermore, Miyagawa and Arikawa argue that the reason Japanese FQs cannot form a Sportiche (1988)-type structure in this example is due to the strict locality constraint imposed on FQs and the associated NP, stated as follows³:

- (11) The associated NP, or its trace, and the NQ, or its trace, must mutually c-command each other. (Miyagawa 1989)

In (12), which is the structure of (10a), the two elements in point appear to have the appropriate mutual c-command relationship:



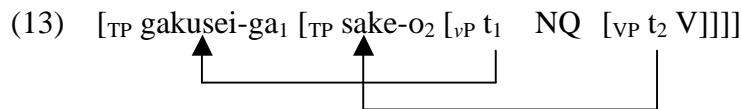
Obviously, the associated NP itself cannot maintain any c-command relationship with the FQ. In contrast, its trace sits right next to the FQ, which appears to satisfy the mutual c-command requirement in (11). Notice, however, that in (12), the movement of the subject, which is induced by EPP, is assumed to be A-movement, so that the lower copy of the subject now becomes invisible (see Lasnik 1999, Nevins and Anand 2003, Saito and Hoshi 2000, for

³ Although we will not discuss this possibility in depth here due to the space limitation, along the lines of Ko (2003) who argues for subject scrambling in Korean/Japanese, Miyagawa and Arikawa (2004) takes up the position that the subject indeed undergoes scrambling contra Saito (1985).

further discussion on this point). Therefore, there is no way that the mutual c-command requirement between the FQ and its associated subject NP can be met. As a result, (10a) is ungrammatical.

Obviously, Miyagawa and Arikawa do not apply the same analysis to (10b), which would incorrectly predict that this example is also ungrammatical. Crucially, for these authors, the trace of the associated subject NP is visible for the c-command requirement in (10b). The question is why.

Miyagawa and Arikawa first argue that in (10b), the object NP is raised to TP SPEC, which, in turn, leads them to conclude that the subject NP is also adjoined to TP. This is illustrated in (13):



In (13) the object NP first undergoes scrambling to TP Spec in order to satisfy the EPP feature on T (Miyagawa 2001, 2004), and then, the subject NP undergoes movement to the TP-adjoined position. According to Miyagawa and Arikawa, the reason why the subject NP is raised to TP is that the adverb *imamadeni* ‘so far’ forces the associated subject NP to be focused, and thus to undergo focus movement to the sentence-initial position, not a typical EPP-induced subject-movement to TP SPEC. Notice that the movement of the subject NP here is focus movement, not an instance of A-movement. If so, it is not unnatural that the lower copy of this subject NP, unlike the one in (10a), is visible for the mutual c-command requirement of FQs, and thus, this requirement is met in (10b).

In this manner, Miyagawa and Arikawa (2004) succeed providing an analysis of the contrast in (10). Notice that the proposal to raise the object NP to TP SPEC does not necessarily imply that the sentence-initial NOM-marked NP is raised out of vP. In other words, for Miyagawa and Arikawa, NOM-marked subject NPs in (10a) and (10b) are thematic subjects, which are base-generated inside vP. In the following two sections, we will provide evidence against this assumption.

4. Evidence from the Kumamoto Dialect

Japanese has so-called multiple NOM construction (Kuno 1973, Kuroda 1986, among others). In standard Japanese, more than one NOM-marked NP can appear in one sentence, as shown in (14).

- (14) Kumamoto-ga baniku-ga umai.
 Kumamoto-NOM horsemeat-NOM tasty
 ‘It is Kumamoto where horsemeat tastes good.’

In (14), although there are two NOM-marked NPs, the thematic subject is *baniku-ga* ‘horsemeat’, and *Kumamoto-ga* is licensed through predication. NOM-marked NPs licensed by predication have been called ‘major subjects’ in the literature.

Interestingly, in the Kumamoto dialect, spoken in western Kyushu, the major subject is necessarily represented with *ga*, while the thematic subject can be accompanied by either *ga* or *no*, as shown in (15):

(15) a. Kumamoto-ga baniku-**no** umaka.
Kumamoto-NOM horsemeat-**GEN** tasty

b. *Kumamoto-**no** baniku-ga umaka.
Kumamoto-**GEN** horsemeat-NOM tasty

‘It is Kumamoto where the horsemeat is tasty.’

(Yoshimura 1994, cited from Kato 2004)

In (15a) the *ga*-marked subject NP can alternate with *no*-marked NP, and the sentence remains acceptable. In contrast, (15b) is ruled out since the major subject cannot alternate with the *no*-marked NP.

Bearing this in mind, consider (16a, b):

(16) a. Gakusei-ga/no san-nin sake-o nonda.
student-NOM/GEN three-CL sake-ACC drink

‘Three students drank sake.’

b. Gakusei-ga/*no sake-o imamadeni san-nin nonda.
student-NOM/GEN sake-ACC so far three-CL drink

‘Three students drank sake so far.’

The fact that (16a), but not (16b), is grammatical indicates that *gakusei-ga* in (10a) is a thematic subject whereas the one in (10b) is a major subject. This means that in (10b), we should be able to have an overt thematic subject, in addition to the *ga*-marked NP *gakusei-ga*. This prediction is borne out. When the *ga*-marked NP *yonkaisei* ‘senior’ has been added to (10b), the sentence remains grammatical, as shown in (17):

(17) Gakusei-ga sake-o imamadeni yonkaisei-ga san-nin nonda.
student-NOM sake-ACC so far senior-NOM three-CL drink

‘Three seniors drank sake so far.’

Importantly, in the Kumamoto dialect, this overt thematic subject can be marked with *no*, as shown in (18):

(18) *Gakusei-ga sake-o imamadeni yonkaisei-no san-nin nonda.*

The fact that *ga/no*-alternation is possible with *yonkaisei* indicates that this NP is a thematic subject.

Then, the evidence from the *ga/no*-alternation in the Kumamoto dialect shows that (10a, b) have the structure provided in (19a, b), under the predicate-internal subject hypothesis according which the thematic subject is base-generated within the *vP*:⁴

- (19) a. [_{TP/vP} *gakusei-ga*₁ [_{vP} *sake-o*₂ [_{vP} *t*₁ *san-nin t*₂ *nonda*]]]
 b. [_{TP} *gakusei-ga* [_{vP} *imamadeni* [_{vP} *sake-o*₁ [_{vP} *pro san-nin t*₁ *nonda*]]]]]

5. Additional Evidence for the Status of the *ga*-marked NPs

This section provides additional evidence for the proposal that in (10b), the NOM-marked NP *gakusei-ga* is not a thematic subject, and there is a covert thematic NP residing within the *vP* in this example.

5.1. Condition A

Bošković and Takahashi (1998) observe the contrast between (20a) and (20b):

- (20) a. *Gakusei-o John-ga futa-ri sikatta.*
 student-ACC –NOM two-CL scolded
 ‘John scolded two students.’
- b. **Gakusei-o otagai-no sensei-ga futa-ri sikatta.*
 student-ACC each other-GEN teacher-NOM two-CL scolded
 ‘Each other’s teachers scolded two students.’
- c. *Gakusei-o otagai-no sensei-ga sikatta.*
 student-ACC each other-GEN teacher-NOM scolded
 ‘Each other’s teachers scolded students.’

The grammaticality of (20a) shows that the FQ can be licensed by the scrambled object NP after this NP is reconstructed into its original position. The grammaticality of (20c) indicates that the ungrammaticality of (20b) is not associated with the licensing of the anaphor inside the subject by the scrambled object. Rather, (20b) is degraded because the reconstruction necessary for the FQ-licensing is not available due to the existence of the anaphor inside the subject.

⁴ The question of where is the landing site of the scrambled NP *gakusei-ga*, *vP* or *TP*, is not directly relevant for our purpose here.

Bearing Bošković and Takahashi's argument based on the paradigm in (20) in mind, consider (21a, b):

- (21) a. ?MIT-no-gakusei₁-ga tyomusukii-no-tanzyoobi-made-ni ronbun-o
 -GEN-student-NOM Chomsky-GEN birthday-by paper-ACC
 e₁ san-nin LI-ni okuranakereba naranai.
 three-CL -to send must
 'Three MIT students must send a paper to LI by Chomsky's birthday.'
- b. ?MIT-no-gakusei₁-ga zibunzisin₁-no-tanzyoobi-made-ni ronbun-o
 -GEN-student-NOM oneself-GEN-birthday -by paper-ACC
 e₁ san-nin LI-ni okuranakereba naranai.
 three-CL -to send must
 'Three MIT students must send a paper to LI by his own birthday.'

Suppose that the NP *MIT-no-gakusei* is a thematic subject and it has been scrambled to the sentence-initial position. We predict then, that (21a) will be grammatical since this NP should be able to reconstruct into its original position, and therefore, the FQ should be licensed, while (21b) is predicted to be degraded due to the existence of the anaphor inside the adverb. The fact that these two examples are grammatical, and furthermore, that there is no significant grammatical difference between these two examples, shows that the sentence-initial NOM-marked NP is base-generated sentence-initially, and there is a covert thematic subject within VP, which licenses the FQ *san-nin*. This provides additional evidence for the structures given in (22) for (10b):

- (22) [_{TP}gakusei-ga [_{VP}imamadeni [_{VP}sake-O₁ [_{VP}pro san-nin t₁ nonda]]]]

5.2. Scope

Another piece of evidence comes from the lack of scope interaction between the NOM-marked quantifier and the potential or negative affixes, as shown in (23) and (24):

- (23) ?MIT-no-gakusei₁-dake-ga zibunzisin₁-no-tanzyoobi-made-ni ronbun-o
 -GEN-student-only-NOM oneself-GEN-birthday-by paper-ACC
 san-nin LI-ni okureru.
 3-CL -to give-can
 'Only three MIT students can give papers to LI by his/her own birthday.'
 only > can
 *can > only
- (24) ?MIT-no-gakusei₁-dake-ga zibunzisin₁-no-tanzyoobi-made-ni ronbun-o
 -GEN-student-only-NOM oneself-GEN-birthday-by paper-ACC

san-nin LI-ni okuranai.
 3-CL -to submit-not

‘Only three MIT students will not submit papers to LI by his/her own birthday.’

only > neg

*neg > only

The interpretation we obtain in (23) is that it is only three MIT students that can submit papers to LI by his/her own birthday. The sentence is not truthful if three non-MIT students also send their papers to LI by his/her own birthday. (24) allows the interpretation describing the situation in which it is only three MIT students that will not submit their papers to LI by his/her own birthday. This sentence does not mean that it is not the case that only three MIT students will submit their papers to LI by his/her own birthday.

It is important to notice that in these examples, the FQ *san-nin* ‘3-CL’ is also licensed. This means that its intended antecedent maintains the c-command relationship with this FQ. One may propose that the Japanese counterpart of ‘only MIT students’ is base-generated within ν P, establishing a proper relationship with the FQ, and then it is raised to the sentence-initial position in these examples. Under this proposal, the structure of (23) and (24) would be as in (25):

(25) [MIT-no-gakusei₁-dake-ga [zibunzisin₁-no-tanzyoobi-made-ni [ronbun-o₂ [t₁ san-nin LI-ni t₂ okureru/okuranai]]]]

Suppose that the movement of the NOM-marked NP in point is EPP-driven movement to TP SPEC, which is generally assumed to be A-movement. Then, on the assumption that the intended FQ-licensing takes place in LF, since A-movement does not leave a trace in its original position (Lasnik 1999, Nevins and Anand 2003, Saito and Hoshi 2000, among others), the FQ cannot create a proper relationship with its antecedent, contrary to fact. Thus, the movement in point cannot be EPP-driven.

Alternatively, since the NOM-marked NP is a quantifier, one may propose that it has undergone overt QR. This cannot be the case, either. First, (23) and (24) are not ambiguous, and the quantifier necessarily takes scope over the modal or negation. Second, given the assumption that QR generally exhibits A’-properties, it is incorrectly predicted that in (23) and (24), the NOM-marked NP should not be able to serve as the antecedent for the reflexive *zibunzisin* ‘oneself’ inside the adverbial phrase. Notice also that the movement in point cannot be focus movement, either, for the same reason. In short, the discussion so far leads us away from an account based on the movement of NOM-marked NP.

We, therefore, conclude that no movement of the NOM-marked NP is involved in (23) and (24). Since the NOM-marked NP is base-generated in the position where it necessarily c-commands the modal, which is assumed to be INFL, or the negation, this straightforwardly accounts for the lack of scope ambiguity in these examples. Importantly, since the FQ is successfully licensed within the ν P, there is an element in this domain that has served as its

antecedent in these examples. This leads us to the structure, given in (26):

- (26) [TP MIT-no-gakusei₁-dake-ga [_{vP} zibunzisin₁-no-tanzyoobi-made-ni [_{vP} ronbun-o₂
[_{vP} pro₁ san-nin LI-ni t₂ okureru/okuranai]]]]

This is basically the structure given in (22).

6. Saito's Analysis Revisited

We are now ready to return to the contrast between (10a) and (10b), repeated here as (27a, b), based on the structures given in (19), repeated here as (28a, b).

- (27) a. *Gakusei-ga sake-o san-nin nonda.
student-NOM sake-ACC three-CL drank
'Three students drank sake.'
- b. Gakusei-ga₁ sake-o₂ imamadeni t₁ san-nin t₂ nonda.
student-NOM sake-ACC so far three-CL drank
'Three students drank sake so far.'
- (28) a. [TP/_{vP} gakusei-ga₁ [_{vP} sake-o₂ [_{vP} t₁ san-nin t₂ nonda]]]
b. [TP gakusei-ga [_{vP} imamadeni [_{vP} sake-o₁ [_{vP} pro san-nin t₁ nonda]]]]

Given the structure in (28b), we are led to conclude that *gakusei-ga* in (27b) has not undergone any focus-movement. This, in turn, suggests that Miyagawa and Arikawa's analysis cannot be maintained, as described in Section 3. The significant fact here is that any account of the ungrammaticality of (27a), based on the prohibition against subject-scrambling can accommodate its contrast with (27b) as well. Notice that, given the structures in (28a, b), two movement chains are created in (27a), while only one movement chain is present in (27b). Crucially, only in (27a) has the thematic subject NP been scrambled. If this is correct, Saito's proposal, introduced in Section 2, for example, can provide a principled reason for the grammaticality of (27b) as well, which appears to be problematic for his original proposal at first sight. Simply put, in (27b), no subject scrambling is involved.

Now the question is why (27a) cannot have the structure given in (29), parallel to (28b):

- (29) [TP gakusei-ga [_{vP} sake-o₁ [_{vP} pro san-nin t₁ nonda]]]

If this were available for (27a), this example would be incorrectly predicted to be grammatical.

However, there is good reason why (29) is not available to (27a). Kuno (1973) proposes that major subjects must have exhaustive interpretations. Observing the similarity in

interpretation between major subjects and the NOM-marked NP in sentences like (30a), Mihara (1994) also argues that (30a, b) have the structures given in (31a) and (31b, c) respectively:

- (30) a. Taroo-ga tensai-da.
 Taroo-NOM genius
 ‘It is Taro who is genius.’
- b. Taroo-ga kuruma-o kat-ta.
 Taroo-NOM car-ACC bought
 ‘Taro bought a car.’
- (31) a. [_{TP} Tar_O₁-ga [_{TP} pro_I tensai-da]]
 b. [_{TP} Taro-ga kuruma-o kat-ta]
 c. [_{TP} Tar_O₁-ga [_{TP} pro_I kuruma-o kat-ta]]

Importantly, he suggests that when the exhaustive interpretation is forced, (30b) also allows the structure given in (31c), parallel to (31a) for (30a).

Assuming with these authors that the exhaustive interpretation requirement holds in multiple NOM-constructions, we can now account for why (29) is not available for (27a). In this example, the most natural interpretation is a descriptive one, and thus, the major subject option is not readily available. We suggest that adverbs like *imamadeni* ‘so far’ make the exhaustive interpretation more likely to obtain. Thus, the multiple NOM-construction is available in (27b).

It is worth noting before proceeding that the analysis presented in this section captures Miyagawa and Arikawa’s intuition that the sentence-initial NOM-marked NP is focused. Major subjects have been argued to require exhaustive interpretation, and focused NPs also force the same interpretation. Importantly, we no longer have to claim that adverbs like *imamadeni* ‘so far’ force the subject NP to be focused, independent evidence of which, we believe, is very difficult, if not impossible, to find.

7. Concluding Remarks

This paper showed that apparent counterexamples to Haig and Kuroda’s generalization are best analyzed as instances of the multiple NOM construction. This, in turn, indicates that any analysis hinged on crossing, such as Saito 1985, cannot be dismissed due to the existence of such sentences. Notice also that our proposal is independent of Miyagawa’s (2001, 2004) analysis of EPP-based scrambling to TP SPEC. We showed that apparent counterexamples to Haig and Kuroda’s generalization are not best treated in the way Miyagawa and Arikawa have proposed.

Most importantly, this paper provides independent evidence for the clausal architecture of Japanese, proposed in Mihara 1994. When the exhaustive interpretation is forced, the structure in (32a) is available in Japanese:

- (32) a. [_{TP} NP₁-ga [_{vP} pro₁ predicate]]
b. [_{vP} NP-ga predicate]

The structures in (32) are reminiscent of Kuroda's (1972) distinction between thetic and categorial judgment, and also of Kratzer's (1989) and Diesing's (1992) distinction between stage-level and individual-level predicates.⁵ It is important to notice, however, that the structure in (32a) is not forced unless the exhaustive interpretation is required. Burton and Grimshaw (1992) and Merchant (2001), among others, provide evidence from English that the subject of an individual-level predicate, as well as the one for a stage-level predicate, is base-generated within vP. To the extent that their proposals are on the right track, we are then led to conjecture that in principle, the structure in (33) is also available under the exhaustive interpretation:

- (33) [_{TP} NP₁(-ga) [_{vP} t₁ predicate]]

This may be what is happening in English since the EPP requires the subject NP to move overtly to TP SPEC in this language. However, in Japanese, no element is required in TP SPEC at least in overt syntax, and the subject cannot scramble (Saito 1985). Then, the movement shown in (33) cannot be motivated in this language, and therefore, the structure in (33) is not available, either. Accordingly, when the exhaustive interpretation is forced, the structure in (32a) must be chosen in Japanese. We would like to explore further consequences of this proposal in the future research.⁶

Finally, Miyagawa and Arikawa also presented another type of counterexample to H/K's generalization, which is exemplified in (34):

- (34) Gakusei-ga sake-o san-nin-dake nonda.
student-NOM sake-ACC three-CL-only drank

'Only three students drank sake.'

Miyagawa and Arikawa attempt to analyze sentences like (34) along the line introduced in Section 3. Informally speaking, the NOM-marked NP must be focused when the Japanese counterpart of *only* is attached to the FQ. We will discuss this issue also on a separate occasion.⁷

⁵ We should note, however, that Kuroda (1972) relates this distinction to the contrast between *wa* and *ga*.

^{6,7} See Miyamoto and Sugimura (in prep.).

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