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## Japanese Multiple Nominative Constructions: The View of Antisymmetry

### Abstract

This paper focuses on multiple nominative constructions (MNCs) in Japanese, pursuing the question of how nominative *ga*-marked phrases are syntactically licensed. MNCs in Japanese, in which more than one *ga*-marked phrase can occur within a clause, have widely been studied by a number of linguists (e.g. Fukui, 1986; Heycock, 1993; Kuno, 1973; Takezawa, 1987; Tateshi, 1994; Vermeulen, 2005; Whitman, 2001). A previous view with regard to syntactic positions for *ga*-marked phrases in Japanese MNCs is that each *ga*-phrase appears in multiple specifiers (Specs) (or multiple adjunction) of TP (e.g. Hiraiwa, 2001; Ura, 1996; Vermeulen 2005). I argue, however, that each *ga*-marked phrase does not occur in multiple Spec positions, but rather, they occur in different projections. Following Kayne's (1994) Antisymmetry approach, the analysis presented here provides good evidence that multiple Specs are not available at PF, which accordingly shows that (i) the LCA is a PF constraint and that (ii) phrase structure follows Antisymmetry. It naturally follows that each *ga*-marked phrase and its predicate in an MNC are always mediated by a (functional) head.

# Japanese Multiple Nominative Constructions: The View of Antisymmetry

Miho Nagai\*

## 1 Introduction

This paper examines multiple nominative constructions (MNCs) in Japanese from the view of Kayne's (1994) Antisymmetry. The goal is to show how multiple nominative *ga*-marked phrases are syntactically licensed.

The particle *ga* has been considered to be a nominative marker in Japanese. The example (1) shows that, in Japanese, a *ga*-marked phrase functions as the grammatical subject, as observed in other nominative-accusative languages like English:

- (1) a. Mary-*ga* kawaii  
Mary-**GA** cute  
'Mary is cute.'  
b. Mary-*ga* kita  
Mary-**GA** come-PAST  
'Mary came.'  
c. Mary-*ga* sushi-o tabeta  
Mary-**GA** sushi-ACC eat-PAST  
'Mary ate sushi.'

These examples clearly show that a DP accompanied by the particle *ga* is a nominative subject which corresponds to the English translation in each sentence. What is different from English is that Japanese allows MNCs, in which more than one *ga*-marked phrase can occur within a clause, as in (2)<sup>1</sup>:

- (2) a. Taro-*ga* se -*ga* takai  
Taro-**GA** height-**GA** tall  
'Taro is tall. (It is Taro who is tall.)'  
b. Taro-*ga* mabuta-*ga* haretta  
Taro-**GA** eyelid -**GA** swell-PAST  
'Taro's eyelid swelled. (It is Taro whose eyelids swelled.)'  
c. Taro-*ga* musuko-*ga* sensei-o nagutta  
Taro-**GA** son -**GA** teacher-ACC hit-PAST  
'Taro's son hit a teacher. (It is Taro whose son hit a teacher.)'
- (Akiyama, 2004)

In (2), two *ga*-marked phrases appear in each sentence, irrespective of the type of predicate. One of the prominent characteristics of these sentences is that the outermost *ga*-phrase invariably receives the exhaustive reading (i.e. a focused reading) (Kuno, 1973) while the inner *ga*-phrase does not have to<sup>2</sup>. The question here is exactly where each *ga*-marked phrase, as in (1), appears in syntax. Most syntactic accounts regarding Japanese MNCs have revolved around the question of whether each *ga*-phrase occurs in multiple specifiers (Specs) (or multiple adjunction) of TP (e.g. Ura 1996; Vermeulen 2005) or not.

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<sup>1</sup>Multiple nominative sentences are often divided into at least two subtypes in the literature: (i) (in)alienable possession construction and (ii) adjunct construction (see Tateishi, 1994; Ura, 1996). I do not particularly focus on this distinction here (see Nagai (2009) for more on this distinction).

<sup>2</sup>The outermost *ga*-phrase is sometimes referred to as "Major Subject", "Broad Subject", or "Categorical Subject" and the innermost *ga*-phrase can be referred to as "Grammatical Subject" or "Thetic Subject" (e.g. Kuroda, 1972; Heycock & Doron, 2003). To avoid any confusion, I will not use these terms in this paper, which does not affect my analysis.

In this paper, utilizing Kayne's (1994) Antisymmetry approach, I argue that each *ga*-marked phrase does not occur in multiple Spec positions, but rather, they occur in different projections. To put it more precisely, each *ga*-marked phrase and its predicate in an MNC are always mediated by a (functional) head<sup>3</sup>.

This paper is organized as follows: In Section 2, reviewing previous accounts, I will point out that multiple Spec theories (i.e. symmetric structures) cannot provide a good explanation of MNCs. In Section 3, adopting the predicate-proform replacement and *v*P/VP-fronting (Akiyama, 2004, 2005), I will demonstrate that there is an asymmetrical relation between the innermost *ga*-phrase and higher ones. In Section 4, by having a closer look at a transitive MNC, it will be shown that multiple Specs are not available at PF. Finally, Section 5 concludes this paper.

## 2 Previous Accounts

### 2.1 Heycock (1993)

Heycock (1993) argues that *ga*-phrases are *subjects* of predication. This is attributed to the observation that the outermost *ga*-marked phrase necessarily receives a focused reading (in a matrix clause). Heycock points out that the outermost *ga*-marked phrase behaves like a *subject* of a stative predicate (i.e. an Individual-Level Predicate (ILP) in Carlson's (1977) sense), as in (3)<sup>4</sup>:

- (3) a. **Hanako-ga** [<sub>Predicate</sub> *kawaii*] (ILP)  
 Hanako-GA cute  
 'It is **Hanako** who is cute.'  
 b. **Taro-ga** [<sub>Predicate</sub> *ude -ga nagai*]  
 Taro-GA arm -GA long  
 'It is **Taro** whose arms are long.'

In Heycock's view, the outermost *ga*-phrase *Taro-ga* in (3b) is a *subject* of a sentential predicate, as bracketed in (3). Since all *ga*-phrases in an MNC are assumed to be subjects (i.e. arguments) in her proposal, each *ga*-marked subject is supposed to occur in an A-position. The structure proposed by Heycock (1993) is as follows:

- (4) [<sub>XP</sub> NP1-*ga* [<sub>XP</sub> NP2-*ga* [<sub>XP</sub> NP3-*ga* ...x' ...

As can be seen in this illustration, each *ga*-phrase appears in an adjunction position in one particular projection<sup>5</sup>. In structures like this, the outer *ga*-phrase is licensed via an aboutness relation (cf. Saito, 1985).

If, as Heycock argues, those adjoined *ga*-phrases are uniformly in A-positions, then, the question would be how one can explain the different status of each *ga*-phrase<sup>6</sup>. See (5):

- (5) John-*ga* me -*ga* warui  
 John-GA eyes-GA bad  
 'John's eyes are bad.'  
**SUBJECTHOOD:** OK✓[one's] eyes are bad. \*John is bad.

As in (5), not all *ga*-marked phrases have the same status. While the innermost *ga*-phrase *me-ga* 'eye(s)' is a subject of the predicate *warui* 'bad', the outermost *ga*-phrase *John-ga* is not. Then,

<sup>3</sup>I am not specifying here what functional head should mediate each *ga*-phrase and its predicate (it could be any kind of functional head such as T or *v*). Further, it should be noticed that I *do not* claim that each functional head should be the same (e.g. iteration of I or T) (but see Whitman, 2001).

<sup>4</sup>As I mention, notice that this is not something peculiar about MNCs. It is generally the case that *ga*-marking with ILPs gives rise to a focus reading only in root contexts.

<sup>5</sup>More precisely, Heycock (1993) assumes here that the category of X is V.

<sup>6</sup>In fact, according to Chomsky (1986), adjunction can only be to non-arguments. If so, all multiple adjoined phrases as being arguments in A-positions within Heycock's proposal need more clarification.

one should ask the question of why an inner *ga*-phrase shows a tight connection to the lexical predicate whereas an outer *ga*-phrase does not. Although an aboutness relation seems to capture the relationship between the (outermost) *ga*-phrase and the clause to its right (semantically perhaps), it is not quite clear what exactly licenses a full-fledged sentence as a predicate within the syntactic configuration shown in (4) above. Since multiple adjunction (or Specs) does not disambiguate each status of *ga*-phrase (cf. Kayne, 1994), there is still some space for reconsidering the proposed syntactic structure in (4).

## 2.2 Multiple Specifiers and MNCs

In the exploration of MNCs, multiple Specs have been utilized by many researchers (e.g. Hiraiwa, 2001, 2005; Ura, 1996; Vermeulen, 2005).

A fundamental question with regard to the theory of multiple Specs provided in the Minimalist Program (Chomsky, 1995) would be how such a theory can guarantee that all Specs are not equally generated. Though proposals using multiple Specs are slightly different from each other, the common assumption within those proposals is that multiple *ga*-phrases occur in multiple Specs under a single syntactic operation in the *symmetric* structure. However, as we have seen in (5) above, it is clear that only the innermost *ga*-phrase has a very close relation to the predicate denoting the property since it is a true subject of its predicate. In contrast, outer *ga*-phrases show a significantly looser relation with the predicate.

If multiple Specs are to be postulated in an MNC, then, we must ensure that only one of the multiple Specs can exhibit subjecthood properties vis-à-vis the lexical properties (cf. Schütze, 2001). Since multiple Specs are symmetric, it is not possible to discern the different status of each *ga*-marked phrase of an MNC under multiple Specs theories. Singling out the outermost *ga*-phrase for the exhaustive reading may also be difficult on a Multiple Spec approach — the outermost Spec of T is just another Spec of T, which is not configurationally distinct from the lower Specs. For this reason, I conclude that the theory of multiple Specs provides no obvious benefit for accounting for Japanese MNCs.

## 3 Analysis

I have pointed out, in Section 2, that the Multiple Spec (or adjunction) approach does not account well for Japanese MNCs. We will, instead, employ the alternative approach, following Kayne (1994), in which each *ga*-marked phrase in an MNC does not occur in the symmetric structure, but phrase structure follows Antisymmetry.

### 3.1 Against Symmetry

As mentioned previously, not all *ga*-phrases have the same status. This can be confirmed by testing the replacement by proform *soo* ‘so’ and VP/vP-fronting (Akiyama, 2004, 2005)<sup>7</sup>. The results show that MNCs in Japanese are not symmetric, as we will see in 3.1.1 and 3.1.2.

#### 3.1.1 The Proform *soo* ‘so’ Replacement: MNCs with AP/NP Predicates

Let us first consider the proform *soo* ‘so’ replacement. It is observed that the Japanese predicate-proform *soo* ‘so’ can replace a lexical predicate headed by an A or a predicative N (Tateishi, 1994):

- (6) zitu-wa Mary-*ga* [AP kurasu-de itiban kawaii]  
 in fact Mary-GA class -in most cute,  
 ‘In fact, Mary is cutest in the class.’

<sup>7</sup>Akiyama adopts *soo* ‘so’ replacement and VP/vP-fronting (cf. Tateishi, 1994) tests specifically for analyzing Japanese MNCs (See Akiyama, 2004, 2005).

daremo Mary-*ga soo*-da to omot-tei-nai kredo  
 anybody Mary-GA so -COP COMP think-ASP-NEG but  
 ‘(In fact, Mary is cutest in the class.) No one thinks that she is, though.’  
 (modified from Akiyama, 2005)

In (6), the phrase replaced by the proform *soo* contains an AP<sup>8</sup>, but not *Mary-ga*. We can see from (6) that *Mary-ga* is, at least, external to the lexical predicate. Since *Mary-ga* in (6) is outside of the lexical projection AP, it probably stays in SpecTP or somewhere higher than the AP-projection.

Now, consider the example of an MNC in (7):

- (7) Mary-*ga ashi-ga totemo warui rasi* ga,  
 Mary-GA legs-GA very bad seem though  
 ‘Although it seems that Mary’s legs are in a bad condition ...’  
 a. zissai daremo May-*ga soo* -da to omot-tei-nai  
 actually anybody Mary-GA SOO-COP COMP think-ASP-NEG  
 ‘Actually, no one thinks that Mary is.’  
 b. \*zissai daremo May-*ga ashi-ga soo* -da to omot-tei-nai  
 actually anybody Mary-GA legs-GA SOO-COP COMP think-ASP-NEG  
 ‘Actually, no one thinks that Mary’s legs are.’

Given the fact from (6), we now predict that the proform *soo* can replace the AP headed by the adjective *kawaii* ‘cute’ in (7). Interestingly, in (7a), *soo* can replace the phrase that contains the innermost *ga*-phrase *ashi-ga* ‘leg(s)’. In (2b), in contrast, the sentence is ungrammatical when both *ga*-phrases are not contained in the phrase replaced by *soo*. That is, *soo* replacement cannot strand two *ga*-marked phrases.

Now, consider example (8). There are three *ga*-marked phrases in this structure. Again, just like (7), the same result can be obtained, where the innermost *ga*-phrase is included in the phrase replaced by *soo*:

- (8) John-*ga imooto-ga seikaku -ga ii rasi*ga,  
 John-GA sister-GA personality-GA good seem but,  
 ‘Although it seems that John’s sister’s personality is good...’  
 (Although it seems that John’s sister has a good personality...’)  
 a. <sup>(?)</sup>zissai daremo John-*ga imooto-ga soo* -da to omote-tei-nai  
 actually anyone John-GA sister-GA SOO-COP COMP think-ASP-NEG  
 ‘... no one actually thinks that John’s sister is.’  
 b. \*zissai daremo John-*ga imooto-ga seikaku -ga soo* -da to omot-tei-nai  
 actually anyone John-GA sister -GA personality-GA SOO-COP COMP think-ASP-NEG  
 ‘... no one actually thinks that John’s sister’s personality is.’  
 c. #zissai daremo John-*ga soo* -da to omot-tei-nai  
 actually anyone John-GA SOO-COP COMP think-ASP-NEG  
 ‘... no one actually thinks that John is.’

(modified from Akiyama, 2005)

As in (8a), *soo* replaces the innermost *ga*-phrase *seikaku-ga* ‘personality’ as well as the adjective *ii* ‘good’. In (8b), *soo* only replaces the adjective, and the three *ga*-phrases are outside of *soo*. The sentence is ungrammatical. In (8c), the interpretation appropriate for the discourse context does not obtain though the sentence is syntactically well formed. Therefore, (8c) is considered un-

<sup>8</sup>It should be noted that “*Mary-ga*” can be contained in the phrases replaced by *soo*:

(i) Mary-*ga totemo kawaii*. Demo zissai *soo*-da to omowa-nai  
 Mary GA very cute but actually so-Cop Comp think-Neg  
 ‘Although it seems that Mary is cute, [I] do not think that she is actually so.’

In this case, it is not easy to identify exactly how much “*soo*” contains (TP or AP with a predicate-internal subject) – however, at least, it is clear that AP can be replaced by *soo*. This does not undermine the analysis here.

grammatical in the given context. The example (8c) will, however, be grammatical when it is *John* who has the property of *having a good personality*, instead of (*John's*) *sister* (or someone else).

Given that the innermost *ga*-phrase is internal to *soo* while outer *ga*-phrases are external to *soo*, it seems that the innermost *ga*-phrase stays structurally lower than the outer *ga*-phrases. The fact that the outer *ga*-phrase appears predicate-externally suggests that the innermost *ga*-phrase in an MNC does not occupy SpecTP, which accordingly shows an asymmetric relation between the lowest *ga*-marked phrase and the higher one.

### 3.1.2 *vP/VP-fronting*: MNCs with Verbal Predicates

Let us move on to *vP/VP-fronting*. In Japanese, a VP (or *vP*) can be fronted when the focus particle such as *-sae* ‘even’ and the light verb *suru* ‘do’ is inserted to support T (cf. Tateishi, 1994), as in (9):

- (9) Taro-*ga* sensei-o nagutta  
 Taro-GA teacher-ACC hit-PAST  
 ‘Taro hit a teacher.’  
 a. Taro-*ga* [sensei-o naguri] *sae* sita  
 Taro-GA teacher-ACC hit even do-PAST  
 ‘Taro even hit a teacher.’  
 b. [sensei-o naguri] *sae* Taro-*ga* sita (***vP/VP-fronting***)  
 teacher-ACC hit even Taro-GA do-PAST  
 ‘Taro even hit a teacher.’

Notice that example (9) is a transitive sentence. As in (9a), the particle *-sae* ‘even’ is attached to the verb *naguri* ‘hit’. In (9b), the *vP/VP* followed by *sae* ‘even’ is fronted, stranding the subject *Taro-ga*.

Now, with this in mind, we will now take a look at *VP-fronting* in an MNC with an intransitive verb:

- (10) Taro-*ga* mabuta-*ga* hareta (Akiyama, 2004)  
 Taro-GA eyelid-GA swell-PAST  
 ‘Taro’s eyelids swelled.’  
 a. \*[hare] -*sae*<sub>i</sub> Taro-*ga* mabuta-*ga* t<sub>i</sub> sita  
 swell -even Taro-GA eyelids-GA do-PAST  
 ‘Taro’s eyelids even swelled.’  
 b. <sup>?</sup>[VP mabuta-*ga* hare] -*sae*<sub>i</sub> Taro-*ga* t<sub>i</sub> sita  
 eyelids-GA swell even Taro-GA do-PAST  
 ‘Taro’s eyelids even swelled.’

In (10a), the sentence is ill-formed when the fronted VP does not contain any *ga*-phrases. However, in (10b), when the fronted VP contains the innermost *ga*-phrase, the sentence is (marginally) acceptable.<sup>9</sup> This would mean that the innermost *ga*-phrase does not occupy SpecTP. Rather, it stays inside the VP/*vP* whereas the outer *ga*-phrase is external to VP/*vP*. Thus, the two *ga*-phrases in (10) appear in different projections.

## 4 Antisymmetry (Kayne, 1994) and MNCs in Transitive Constructions

In section 3, it has been found that in both adjectival and intransitive constructions, the innermost *ga*-phrase can remain in a lower position than a TP projection. However, we have not examined a transitive construction yet. In fact, little attention has been given to *vP/VP-fronting* in transitive MNCs in Japanese. Let us now focus on MNCs in transitive sentences. Consider example (11):

<sup>9</sup>Certain intransitive verbs like *sinu* ‘die’ could be ?? (i.e. even more degraded) due to Subject Agent Condition (Ohkado, 1991, cited by Akiyama, 2004).

- (11) Taro-*ga* (dooyara) musuko-*ga* sensei -o nagutta (rasii)<sup>10</sup>  
 Taro-GA (apparently) son -GA teacher-ACC hit-PAST (seem)  
 ‘(Apparently) Taro hit a teacher.’
- a. \*[vP musuko-*ga* sensei -o naguri]-sae<sub>i</sub> [TP Taro -*ga* (dooyara) t<sub>i</sub> sita]  
 son -GA teacher-ACC hit even Taro-GA (apparently) do-PAST  
 ‘(Apparently) Taro even hit a teacher.’
- b. <sup>?(9)</sup>[vP sensei -o naguri]-sae<sub>i</sub> [XP Taro-*ga* (dooyara) [TP musuko-*ga* t<sub>i</sub> sita]  
 teacher-ACC hit even Taro-GA (apparently) son -GA do-PAST  
 ‘(Apparently) Taro even hit a teacher.’
- (modified from Mihara, 1994)

As shown in (11), VP-fronting with pied-piping of the innermost *ga*-phrase is impossible in a transitive structure while VP-fronting *per se* is NOT: what *is* impossible is VP-fronting that pied-pipes the innermost *ga*-phrase. The question is what makes the example (11a) ungrammatical.

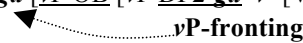
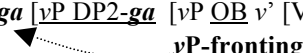
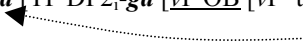
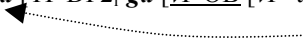
In what follows, I will argue that the ungrammaticality of (11a) is due to a violation of Linear Correspondence Axiom (LCA) (Kayne 1994).

#### 4.1 Antisymmetry and an MNC

In Kayne’s (1994) theory of linearization, asymmetric c-command relations determine surface word order by virtue of the LCA. The core idea of LCA is the rigid correspondence between asymmetric c-command and precedence. We will now expand the perspective of Antisymmetry into a transitive MNC in (12), repeated from (11):

- (12) Taro-*ga* (dooyara) musuko-*ga* sensei -o nagutta (rasii) (= (11))  
 Taro-GA (apparently) son -GA teacher-ACC hit-PAST (seem)  
 ‘(Apparently) Taro hit a teacher.’
- a. \*[vP musuko-*ga* sensei -o naguri]-sae<sub>i</sub> [TP Taro -*ga* (dooyara) t<sub>i</sub> sita]  
 son -GA teacher-ACC hit even Taro-GA (apparently) do-PAST  
 ‘(Apparently) Taro even hit a teacher.’
- b. <sup>?(9)</sup>[vP sensei -o naguri]-sae<sub>i</sub> [XP Taro-*ga* (dooyara) [TP musuko-*ga* t<sub>i</sub> sita]  
 teacher-ACC hit even Taro-GA (apparently) son -GA do-PAST  
 ‘(Apparently) Taro even hit a teacher.’

I suggest that VP-fronting in a transitive sentence is, in fact, vP-fronting. The possible structures for (12a) and (12b) are given in (13) below:

- (13) a. \*[TP DP1-*ga* [vP OB [vP DP2-*ga* v’ [VP ...t<sub>OB</sub>...]]]]  

- b. \*[TP DP1-*ga* [vP DP2-*ga* [vP OB v’ [VP ...t<sub>OB</sub>...]]]] (13a or b) = (12a)  
  
 → Both Specs are filled (Violation of LCA).
- c. [XP DP1-*ga* [TP DP2-*ga* [vP OB [vP t<sub>i</sub> v’ [VP ...t<sub>OB</sub>...]]]]  

- d. [XP DP1-*ga* [TP DP2-*ga* [vP OB [vP t<sub>i</sub> v’ [VP ...t<sub>OB</sub>...]]]] (13c or d) = (12b)  
  
 → (i) A trace does not have to be linearized.  
 (ii) LCA is a PF constraint.

<sup>10</sup>Here, I put adverbials in the parentheses to make the sentence sound more natural, following Mihara (1994), though these adverbials are basically optional. Thus, without the adverbials, the sentence is still considered to be grammatical.



Now, notice that there is Object Shift in (12) and (13). As mentioned above, order reflects structural hierarchy via LCA. Following Kayne's restrictive theory of syntax, I assume here that all branching is binary, all complements are to the right, all Specs (or adjuncts) are to the left, and all movement is to the left. Kayne proposes that a Spec-head-complement (SVO) order is universal, which indicates that there is no head directionality parameter. According to Kayne, word order variations of languages result from movement operations. Thus, under this proposal, in order to get the OV word order seen in Japanese, the object is overtly moved. As illustrated in (13), there is Object Shift in a transitive construction in Japanese, namely, the direct object overtly shifts to one of the Specs of  $vP$  where  $v$  licenses a structural accusative Case feature and Spec $vP$  is a canonical accusative Case checking position (cf. Chomsky, 1995; Ochi, 2005). Chomsky (1995: Chapter 4) claims that Object Shift takes place when the light verb  $v$  heading a transitive verb construction<sup>11</sup> assigns strong morphological features (i.e. strong Case feature in this case). Therefore, the structure represented in (13) exhibits Object Shift since the light verb  $v$  consisting of strong Case features<sup>12</sup> triggers object movement in overt syntax to check (or delete) those features<sup>13</sup>.

Coming back to the structures in (13), in (12a) (= (13a, b)), multiple Specs of  $vP$  are now filled by the *ga*-marked phrase (*DP2-ga*) and the shifted object (OB). Here, *DP2-ga* as an external argument in a transitive construction is introduced by  $v$  and licensed in Spec $vP$  (cf. Chomsky, 1995; Kratzer, 1996). If we assume that the phrase structure follows Antisymmetry, no linear order can be established between these two elements, which, in turn, can explain the ungrammaticality of (11a).

Let us now turn to the (marginally) acceptable structures (12b) (= (13c, d)). As can be seen in (13c, d), there is a trace of movement in one of the Specs of  $vP$ , as a result of movement of *DP2-ga* from one of the Specs of  $vP$  to SpecTP. Assuming that the LCA is a constraint that holds only at PF (e.g. Chomsky, 1995; Moro, 2000) and is therefore evaluated at the PF-interface, it follows that the linearization of traces is not relevant to the LCA. That is, since traces have no PF context, they do not need to be linearized. To put it another way, multiple Specs (or adjuncts) are available throughout the syntactic derivation, but this violation of the LCA must be eliminated at PF; phonologically empty categories are ignored by the LCA. Therefore, the sentence (12b) can be (marginally) grammatical.

#### 4.2 Some Facts about German

The phenomenon observed in (13) in 4.1 above is, in fact, reminiscent of  $vP$ -fronting in German. The example (14) is an instance of  $vP$ -fronting in a *transitive* construction:

- (14) a. \*[ $vP$  Ein Idiot [ $vP$  Mamas Auto<sub>i</sub> [ $VP$  zu Schrott gefahren  $t_i$ ]]] [C' hat [ $TP$   $t_{vP}$  damals]]  
an idiot<sub>NOM</sub> mom's car<sub>ACC</sub> to scrap driven has then  
'What an idiot did back then was total Mom's car.'  
b. [ $vP$   $t_i$  [ $vP$  Mamas Auto<sub>j</sub> [ $VP$  zu Schrott gefahren  $t_j$ ]]] [C' hat [ $TP$  [ein Idiot]<sub>i</sub>  $t_{vP}$  damals]]  
mom's car<sub>ACC</sub> to scrap driven has an idiot then  
'What an idiot did back then was total Mom's car.'  
(modified from Hankamer & Lee-Schoenfeld, 2005)

It is commonly held that an indefinite DP can stay *in situ* while a definite DP is moved out of its base position in German (e.g. Wurmbrand, 2004, 2006). Applying this to the transitive construction in (14), we can postulate that the definite accusative DP *Mamas Auto* 'mom's car' is shifted from VP to Spec $vP$  in (14) and that the indefinite nominative subject *ein Idiot* 'an idiot' within a fronted phrase, as in (14a), stays in Spec $vP$ . The ungrammaticality of (14a) precisely shows that an indefinite nominative subject (in a base position: Spec $vP$ ) and a definite accusative object (in a moved position: Spec $vP$ ) cannot occur in multiple Specs of  $vP$  — due to a violation of Antisym-

<sup>11</sup>Transitive  $*v$  in Chomsky's (2001) sense. In fact, Chomsky (2001) argues that the light verb can project even in unaccusative constructions, suggesting that there are different kinds of light verbs. Here in this paper, the light verb  $v$  indicates a transitive verb construction.

<sup>12</sup>The feature triggering obligatory movement could be an EPP feature on  $v$  (e.g. Chomsky, 2000, 2001).

<sup>13</sup>Independently, Ochi (2005) argues that Japanese has obligatory overt Object Shift (see Ochi, 2005).

metry, as illustrated in (15) — which is comparable to the Japanese data in (12a), repeated as (16) below:

- (15) \*[vP Ein Idiot [vP Mamas Auto<sub>i</sub> [VP zu Schrott gefahren t<sub>i</sub>]]] [C' hat [TP t<sub>vP</sub> damals]]  
 an idiot<sub>-NOM</sub> mom's car<sub>-ACC</sub> to scrap driven has then  
 'What an idiot did back then was total Mom's car.' (= (14a)) **vP-fronting**
- (16) \*[vP musuko-ga sensei -o naguri]-sae<sub>i</sub> [TP Taro -ga t<sub>vP</sub> sita]  
 son -GA teacher-ACC hit even Taro-GA do-PAST  
 'Taro even hit a teacher.' (= (12a)) **vP-fronting**

This crucially suggests that the *ga*-marked subject as an external argument originated in SpecvP can stay *in situ*, assuming that feature checking is met via Agree (Chomsky, 2000), when (i) there is some other *ga*-marked constituent outside of SpecvP in an MNC and (ii) there is no nominal object (an accusative-marked DP) in the structure, because of Antisymmetry.

On this view, example (17)<sup>14</sup> is grammatical since no symmetry is created on the edge of vP:

- (17) [vP t<sub>i</sub> [vP Mamas Auto<sub>j</sub> [VP zu Schrott gefahren t<sub>j</sub>]]] [C' hat [TP [ein Idiot]<sub>i</sub> t<sub>vP</sub> damals]]  
 mom's car<sub>-ACC</sub> to scrap driven has an idiot then  
 'What an idiot did back then was total Mom's car.' (= (14b)) **vP-fronting**
- (18) <sup>(?)</sup>[vP sensei -o naguri]-sae<sub>i</sub> [XP Taro-ga (dooyara) [TP musuko-ga t<sub>i</sub> sita]  
 teacher-ACC hit even Taro-GA (apparently) son -GA do-PAST  
 '(Apparently) Taro even hit a teacher.' (= (12b)) **vP-fronting**

The prediction made by the current proposal is borne out. Contrary to the result obtained in (15), in the German example (17), the indefinite *ein Idiot* 'an idiot' is now outside of the fronted vP. Thus, the sentence is grammatical, which patterns with the Japanese example shown in (18), repeated from (12b).

## 5 Conclusion

I have argued that the Antisymmetry approach better explains the phenomenon of MNCs. The predicate proform *soo* 'so' replacement and vP/VP-fronting reveal that each *ga*-marked phrase in adjectival and intransitive MNCs does not reside in multiple Specs in one particular projection. Furthermore, taking a closer look at vP-fronting in a transitive MNC provides evidence that multiple Specs are not possible at PF. The observation naturally leads to the conclusion that Japanese MNCs are not instances of multiple adjunction, nor are they multiple Specs (cf. Whitman, 2001<sup>15</sup>). The crucial point to the structures of MNCs would be that the innermost *ga*-phrase can stay in a predicate internal position.

To recapitulate, each DP-*ga* occurs in different projections, as schematized in (19):

- (19) [XP DP1-*ga* X' X [YP DP2-*ga* Y' Y [ZP DP3-*ga* Z' Z ...

Since, as shown, phrase structure abides by Antisymmetry, each *ga*-phrase and its predicate in an MNC are always mediated by a (functional) head.

<sup>14</sup>Two informants acknowledged that the sentence (20) is grammatical (though it sounds somewhat awkward).

<sup>15</sup>Whitman (2001) also reached the same conclusion, by taking advantage of Kayne's (1994) approach, but on different grounds. He proposes that MNCs in Japanese are an instance of IP recursion.

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