Phase and Exceptional Case-marking

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Abstract

In this paper, I claim that the Phase Impenetrability Condition put forth by Chomsky (1998) receives empirical support, by examining certain ECM constructions with infinitival complements in Japanese, which are intractable from the perspective of the Defective Intervention Constraint. Assuming that exceptional case-marking involves the process of raising to edge of a phase, I demonstrate that the data in question can be accounted for within phase theory.

Keywords: ECM Constructions in Japanese, Defective Intervention Constraint, Phase Impenetrability Condition

1. Introduction

As is well known, in Japanese, ECM verbs can take both finite and infinitival complements (see Takezawa 1987 and Kikuchi and Takahashi 1991, among others), as in (1) and (2)[1].

(1) John-ga Mary-o syooziki da to omotte-iru
John-Nom Mary-Acc honest-Pres is C believe-Pres
'John believes Mary to be honest.'

(2) Mary-ga sono zinbutu-o fusin'ni kanzita
Mary-Nom the person-Acc suspicious-Inf feel-Past
'Mary felt the person to be suspicious.'

This paper focuses on the ECM constructions with infinitival complements, especially, the sentence in (3), where a nominative DP is added in the embedded clause of (2)[2]:

(3) Mary-ga sono zinbutu-o koudou-ga fusin'ni kanzita
Mary-Nom the person-Acc behavior-Nom suspicious-Inf feel-Past
'Mary felt the person's behavior to be suspicious.'

I claim that (3) is a counterexample to the Defective Intervention Constraint (DIC), which cannot generate the acceptable sentence. I argue that the grammaticality of (3) should be accounted for within phase theory put forth by Chomsky (1998).

This paper is organized as follows: in section 2, I address some empirical problems with the DIC-based analysis. In section 3, I propose that in ECM

constructions with CP complements, the embedded subject must raise to the edge of the CP phase. In section 4, I claim that a certain ECM construction with finite complements in Japanese should be accounted for by the PIC. In section 5, I demonstrate that my claim will be supported by the analysis of ECM constructions with infinitival complements. Section 6 concludes this paper.

2. Empirical Problems

Let us look at the sentences in (4a) and (4b), which involve the interaction of ECM and multiple nominative constructions (nominative object constructions):[3)]

(4) a. John-ga [$_{CP}$[$_{TP}$ Mary-o eigo-ga yoku dekiru] to]
John-Nom Mary-Acc English-Nom well do-can-Pres C
omoikonde-ita
falsely-believe-Past
'John believed that Mary can speak English well.'
b.*John-ga [$_{CP}$[$_{TP}$ Mary-ga eigo-o yoku dekiru] to]
John-Nom Mary-Nom English-Acc well do-can-Pres C
omoikonde-ita
falsely-believe-Past (Hiraiwa 2001)

In the well-formed sentence (4a), Agree applies to the matrix probe v, *omoikonde-ita* and the closer goal, *Mary-o*. In contrast, in the ill-formed sentence (4b), Agree applies to the matrix probe v, *omoikonde-ita* and the lower goal, *eigo-o*. Hiraiwa (2001) attributes this contrast to the Defective Intervention Constraint stated in (5).[4)]

(5) The Defective Intervention Constraint (DIC)

(i) In a structure (ii), β blocks the effects of matching.

(ii) $\alpha > \beta > \gamma$, where > is c-command, β and γ match the probe α, but β is inactive.

(Chomsky 1998:38)

(6) $[_{vP}\ v<\text{f}>[_{VP}\ \text{V}\ [_{CP}\ \text{C}\ [_{TP}\ \text{DP}_1<\not\text{f}>\ [_{TP}\ \text{DP}_2<\text{f}>\ [_{T'}\ \text{T}<\not\text{f}>\ldots]]]]]]$

Consider the structure in (6). At some point of the derivation, the f-feature of DP_1 becomes inactive after Agree establishes the relation between DP_1 and the embedded T. At some later stage, the matrix probe v searches for a closest matching goal. Since the inactive goal, the f-feature of DP_1, functions as an intervening blocker, Agree between v and DP_2 is prohibited by the DIC.

It is true that the DIC can correctly capture the contrast in (4a-b), since (4b) involves the configuration in (6), whereas (4a) does not. However, a closer look at ECM constructions with infinitival complements in Japanese suggests that the DIC-based analysis is not descriptively adequate in accounting for a certain ECM construction in Japanese.

Before going into details, let us see how the nominative Case-feature of a DP in an infinitival clause is checked. The sentence in (7b) below shows that, in an infinitival clause, Nominative Case cannot be licensed, and only Accusative Case is possible, whereas (7a) shows that both nominative and accusative Case are possible in finite clauses.

(7) a. John-wa [Mary-no kodomo-nitaisuru aizyo-o/ga
John-Top Mary-Gen child-toward affection-Acc/Nom

kandooteki da to] omotta
moving Cop C think-Past
'John thought that Mary's affection toward (her) child was moving.'

b. John-wa [Mary-no yokogao-o/*-ga totemo utukusiku]
John-Top Mary-Gen profile-Acc/Nom very beautiful
omotta
think-Past
'John thought Mary's profile (to be) very beautiful.'

(Takezawa 1987)

Based on these facts, Takezawa (1987) makes the assumptions summarized in (8a) and (8b) (see Takezawa 1987, Hiraiwa 2001, among others).

(8) a. The presence of tense is responsible for nominative Case-marking of the embedded subject position in Japanese.

b. In a sentence where nominative Case assignment is possible in the infinitival embedded clause (e.g. the complement of the potential verb *omoeru* (*omow* 'think'+potential suffix) and the complement of the adjective *hosi* ('want'), the nominative Case is licensed by the matrix finite T. [5)]

Now return to the main issue of this section. Given the assumptions in (8a-b), the sentence in (9) poses a problem for the DIC-based analysis.

(9) Mary-ga [sono zinbutu-o koudou-ga fusin'ni] kanzita
Mary-Nom the person-Acc behaviour-Nom suspicious-Inf feel-Past

'Mary felt the person's behavior to be suspicious.'

In (9), since the complement clause of the ECM verb *kanzita* is infinitival, the assumptions in (8a-b) predict that checking of the nominative Case of *koudou-ga* should be postponed until the matrix T is merged. Thus, consider the structure in (10), where the matrix T has not merged yet:

(10) [$_{vP}$ [sono zinbutu-o koudou-ga fusin'ni] kanzita]
<~~Acc~~> <Nom>

In (10), *sono zinbutsu-o* enters into an Agree relation with the verb *kanzita* (ECM), with another DP *koudou-ga* remaining to be checked. At some later stage, T is introduced, yielding the structure in (11):

(11) [$_{TP}$[sono zinbutu-o koudou-ga fusin'ni] kanzita T]
<~~Acc~~> <Nom>

It should be noted that in (11), since the goal *sono zinbutsu-o* has already become inactive by ECM, it should function as a blocker, according to the DIC in (5). Thus, the Agree operation between T and *koudou-ga* is in principle impossible. In other words, the grammatical sentence in (10) is predicted to be underivable, which means that the DIC-based system is undergenerating.

In what follows, I claim that under the assumption that ECM verbs require the accusative DP to raise to Spec,CP (i.e. edge), the contrast between (4a) and (4b) and the acceptability of (9) both follow from the Phase Impenetrability Condition.

3. Raising to Edge

Kaneko (1988) proposes that the ECM sentence in (1) is derived as follows: kanozyo-o in (1) moves to Spec,CP, where it is assigned accusative Case by the matrix verb, omotte-iru, as illustrated in (12):[6)]

(12) John-ga [$_{VP}$ [$_{CP}$ kanozyo-o$_i$ [$_{IP}$ t_i syooziki da] to] omotte-iru]

Acc

In (12), since the CP is θ-marked by the matrix verb, the CP itself and its specifier are governed by the verb. Thus, *kanozyo-o* can be successfully assigned accusative Case by *omotte-iru*.

I adopt his analysis, and recast it in terms of the PIC in (13):

(13) Phase Impenetrability Condition (PIC)

a. At the phase ZP containing phase HP, the domain of H is not accessible to operations, but only the edge of HP.

(Chomsky 2001: 5)

b. [$_{ZP}$ Z...[$_{HP}$ a [H YP]]]

(HP, ZP: strong phases; a: edge of HP; YP: domain of H)

Specifically, the derivation for (11) proceeds as follows. Consider the structure in (14) at some stage:

(14) [$_{v}$P [$_{VP}$ [$_{CP}$ [$_{TP}$ kanozyo-o syooziki da] to] omotte-iru]]

According to Chomsky (1998, 1999), a phase consists of vP and CP. If so, in (14), the phase CP intervenes between the verb *omotte-iru* and the embedded subject *kanozyo-o*. Thus, if kanozyo-o is within TP as in (14), it cannot be assigned accusative Case by *omotte-iru*, since *omotte-iru* can no longer "see" inside the complement of the phase head C, according to the PIC in (13). On the other hand, if kanozyo-o is in Spec,CP, as in (15), it is visible for the probe omotte-iru, since it is in the edge of the CP phase.

(15) John-ga $[_{vP}\ [_{VP}\ [_{CP}$ kanozyo-o_i $[_{TP}\ t_i$ syooziki da] to] omotte-iru]]

Thus, the relevant ECM construction can be derived without violating the PIC. In sum, I propose that ECM constructions with CP complements are subject to the constraint in (16) (Incidentally, English ECM constructions are not subject to (16) since their complement clauses are TPs, not CPs.):

(16) The Constraint on ECM Constructions with CP Complements:
The embedded subject must undergo raising to the edge of the CP phase.

I assume that the driving force of the raising in (16) is the EPP-feature of C, which can be satisfied by accusative DPs. That is, the relevant raising has nothing to do with feature-checking or Agree. Notice, incidentally, that this view is consistent with Chomsky's (1998) idea of the split between Agree and EPP movement.[7] (16) plays a crucial role in the arguments to be presented below.

Let us present two sets of arguments which support the condition in (16). First, the example in (17a) shows that the embedded subject in an ECM construction is not a matrix object, and that it is in a position higher than TP.

(17) a. John-wa Mary-o osoraku Jane-yori utukusii to kanzita.
John-Top Mary-Acc probably Jane-than beautiful C feel-Past
'John felt that Mary is probably more beautiful than Jane.'
b. John-wa [Mary-o_i [$_{TP}$ osoraku [$_{TP}$ t_i Jane-yori utukusii] to] kanzita.

Since the sentence *John-wa Mary-o kanzita* is anomalous, *Mary-o* in (17a) is assigned a θ-role within the embedded clause, not the matrix clause. Therefore the base position of *Mary-o* has to be Spec,TP of the embedded clause, i.e. the trace position in (17b). Note also that the surface position of *Mary-o* in (17a) is higher than the sentential adverb *osoraku*, which shows that *Mary-o* in (17a) is in a position higher than TP, as illustrated in (17b).[8)]

Second, that the landing site of the embedded subject in an ECM construction is within the CP projection (i.e., not higher than CP) is confirmed by the acceptable sentence in (18a):

(18) a. [$_{CP}$ Mary-o utukusii to] John-wa kanzita.
Mary-Acc beautiful C John-Top feel-Past
'John felt Mary beautiful.'
b. John-wa [$_{CP}$ Mary-o utukusii to] kanzita.
John-Top Mary-Acc beautiful C feel-Past

(18a) is derived by scrambling a constituent, i.e. CP, from the underlying structure in (18b). If *Mary-o* in (18b) raises out of CP, for instance, to the spec of the *v*P whose head is *omotta*, (18a) would never be derived. Thus, *Mary-o* in (18b) is within the CP projection.[9)]

Thus, (17a) and (18a) show that embedded subjects in ECM constructions (in Japanese) originate in Spec,TP and move to a position within the CP projection, lending independent support to the condition in (16).

4. Finite Complements

Let us consider how the contrast in (4a-b), which contain finite complements, repeated here as (19a-b), is accounted for in terms of the notion of phase. The derivation for (19a) yields the structure in (20a) at some stage.

(19) a. John-ga [Mary-o eigo-ga yoku dekiru to]
John-Nom Mary-AccEnglish-Nom well do-can-Pres C
omoikonde-ita
falsely-believe-Past
'John believed that Mary can speak English well.'
b.*John-ga [Mary-ga eigo-o yoku dekiru to]
John-Nom Mary-Nom English-Acc well do-can-Pres C
omoikonde-ita
falsely-believe-Past (Hiraiwa 2001)

(20) a. [$_{TP}$ Mary-o eigo-ga yoku dekiru T]
<Acc> <Nom>

b. [$_{vP}$ [$_{CP}$ Mary-o$_i$ [$_{TP}$ t_i eigo-ga yoku dekiru] to] omoikonde-ita C]
<Acc> <~~Nom~~> <EPP>

In (20a), the nominative Case-feature of *eigo-ga* is licensed against the embedded T by Agree. On the other hand, Agree has not applied to *Mary-o* yet. At some later stage, when CP (i.e. a phase) is introduced into the structure, the constraint in (16) forces *Mary-o* to raise to the Spec,CP (i.e. the edge of the CP phase) to satisfy the EPP-feature of C, yielding the structure in (20b). Since the matrix verb *omoikonde-ita* can "see" the edge of the CP, because of the PIC in (13), the accusative Case of *Mary-o* can be licensed.

Let us turn to the derivation for (21b). At some stage, the derivation yields the structure in (21a):

(21) a. [$_{TP}$ Mary-ga eigo-o yoku dekiru T]
<Nom> <Acc>

b. [$_{CP}$ [$_{TP}$ Mary-ga eigo-o yoku dekiru] C-to]
<~~Nom~~> <Acc> <EPP>

In (21a), the nominative Case-feature of *Mary-ga* is checked off against the embedded T. On the other hand, the accusative Case-feature of *eigo-o* is not licensed in this structure. The CP is introduced at some later stage, yielding (21b), where the EPP-feature of C must be satisfied by Acc-bearing DPs. However, unlike in (20b), the object *eigo-o* fails to undergo raising to Spec,CP in (21b), which is shown by the surface word order: the Spec,TP, i.e. *Mary-ga*, is followed by *eigo-o*. Thus, the derivation crashes because the EPP-feature of C is not licensed.

In passing, even if the derivation proceeds further, it would be excluded by the PIC, since, according to the PIC, the matrix verb *omoikonde-ita* cannot "see" inside the complement of the phase head C, so it is impossible for the accusative Case of *eigo-o* to be licensed. Thus, the contrast between (19a) and (19b) reduces to whether or not the goal DP for the ECM verb raises to the CP edge position, which is the only position for an ECM verb to search for a goal, according to the PIC.

Notice also that the facts treated in this section can be accounted for by the DIC-based analysis as well. However, as I have already pointed out, ECM constructions with infinitival complements suggest that the DIC-based analysis is dubious. In the following section, I show that it is possible to provide a unified analysis for ECM constructions with finite complements and nonfinite complements if we adopt the Phase Impenetrability Condition, not the Defective Intervention Constraint.

5. Infinitival Complements

This section demonstrates that the proposed analysis will be supported by the analysis of ECM constructions with infinitival complements. Let us see ECM constructions of the type in (3), repeated below as (22), where T in the complement clause is infinitival:

(22) Mary-ga [sono zinbutu-o koudou-ga fusin'ni] kanzita
Mary-Nom the person-Acc behaviour-Nom suspicious-Inf feel-Past
'Mary felt the person's behavior to be suspicious.'

As shown in (22), in infinitival complements, Acc-Nom order is possible (whereas Nom-Acc order is impossible: the order "*sono zinbutu-ga koudou-o fusin'ni*" is illicit. See note 13 for details). Thus, the descriptive generalization to be drawn here is that infinitival complements behave on a par with finite complements with respect to word order in complement clauses. Before turning to a detailed analysis, let us clarify the categorical status of the complement clause in (31).

A tenseless sentence is in general called a "small-clause." In (22), the DP *sono zinbutu-o* is the subject of the small clause. The subject status is shown clearly by the sentence in (23), in which the anaphor zibun can refer to both *John* and *Bill*. Since *zibun* is subject-oriented, the accusative-marked *Bill-o* can be identified as the subject.

(23) John-ga$_i$ [Bill-o$_j$ zibun$_{i/j}$-no ronbun-nitaisuru hyooka-ga
John-Nom Bill-Acc self-Gen paper-toward judgement-Nom
kibisiku] kanzita
stern-Inf felt
'John felt Bill to have passed a stern judgement on his own paper.'

Now let us turn to the categorial status of small clauses. In the literature, it has been argued that small clauses correspond to TP (IP) (e.g. Hornstein and Lightfoot 1987 and Boškovic 1995, among others) or CP (e.g. Kitagawa 1985, and Ogawa 2001 for ECM and raising complements), or the maximal projection of the predicate (e.g. Stowell 1981, Chomsky 1981, and Kikuchi and Takahashi 1991 for Japanese).

I adopt the hypothesis that a small clause is TP for the following two

reasons: first, assuming that CSR (Canonical Structural Realization) is part of Universal Grammar (e.g. Grimshaw 1981 and Chomsky 1986), propositions are realized as CPs as a default option. But ECM complements in English, for example, have no overt complementizers. Thus, in the standard view, they are realized as TP as a marked option. Turning to the Japanese sentence in (22), it does not have overt complementizers, either. Therefore it is natural to consider the sentence in (22) to contain TP complement, as English ECM constructions do. Second, postulating a CP in (22) would mean that there is a null complementizer in the CP, which lacks independent motivation.[10] On the other hand, the assumption that there is a TP in (22) is supported by the independently-motivated principle of economy of representation: Boškovic (1995) argues that the TP hypothesis follows from the economy principle in (22), which was first proposed by Law (1991) and adopted by some subsequent studies (e.g. Chomsky 1995, Doherty 1993, and Speas 1994, among others):

(24) The Minimal Structure Principle

Provided that lexical requirements of relevant elements are satisfied, if two representations have the same lexical structure, and serve the same function, then the representation that has fewer projections is to be chosen as the syntactic representation serving that function.

(Boškovic 1995:42)

Thus, I assume that (22) has the structure in (25):

(25) [$_{TP}$ Mary-ga [[$_{TP}$ sono zinbutu-o koudou-ga fusin'ni] kanzita]]

Given this structure, consider the structure in (26a), which is (22) at some point of the derivation:

(26) a. [$_{vP}$ [$_{TP}$ sono zinbutu-o koudou-ga fusin'ni] kanzita]
<Acc> <Nom>

b. [$_{TP}$Mary-ga [$_{vP}$ [TPsono zinbutu-o koudou-ga fusin'ni]kanzita] T]
<~~Acc~~> <Nom>

According to the assumptions in (8a-b), repeated here as (27a, b), nominative-features are not licensed in infinitival clauses in Japanese.

(27) a. The presence of tense is responsible for nominative Case-marking of the embedded subject position in Japanese.

b. In a sentence where nominative Case assignment is possible in the infinitival embedded clause (e.g. the complement of the potential verb *omoeru* (*omow* 'think'+potential suffix) and the complement of the adjective hosi ('want')), the nominative Case is licensed by the matrix finite T.

Therefore, in (26a), the nominative Case-feature of *koudou-ga* is not licensed in this infinitival complement clause. In contrast, the accusative Case-feature of *sono zinbutu-o* can be licensed by the matrix verb in the clause. In this case, although *sono zinbutu-o* does not undergo raising, no violation of the Phase Impenetrability Condition arises, since there is no

intervening phase, such as CP, between the probe *kanzita*, and the goal *sono zinbutu-o*. At some later stage, the derivation yields the structure in (26b), where the nominative Case of *koudou-ga* is licensed by Agree with the matrix finite T, according to the assumption in (27b). Hence the grammaticality of (22) follows.

Recall that (22) is never generated by the system incorporating the DIC: after the accusative Case of *sono zinbutu-o* is licensed in (26a), it would function as an inactive blocker, according to the DIC. Accordingly, in the structure (26b), Agree cannot establish the relation between T and *koudou-ga*. Thus, (22) would be predicted to be underivable within a DIC-based analysis. Therefore it can be concluded that the grammaticality of (22) strongly suggests that the DIC has nothing to do with the derivation of (22).[11)]

Summing up so far, the grammaticality of (22), along with the contrast in (19a, b), can be accounted for by the PIC, so the problem with DIC-based analyses does not arise.

6. Conclusion

In this paper, I have pointed out that some ECM constructions with infinitival complements in Japanese are problematic for the DIC. I have also claimed that the PIC receives support, by arguing that the problems can be solved if we attribute the apparent "DIC effects" to the PIC.

Notes

1) In Japanese, ECM verbs which can take infinitival complements are restricted to *omow* and *kanzir*, as shown in (i)

(i) Boku-wa [John-o kitigai ni] omotta/ kanzita/ *sinzita/
I-Top John-Acc crazy be thought/ felt/ believed
*kantigaisita/ *danteisita/ *kitaisita/ *suiteisita.
mistook/ determined/ expected/ guessed
'I thought/ felt/ believed/ mistook/ determined/ expected/ guessed John to be crazy.'
(Kobayashi and Maki 2002:224)

2) One of my informants pointed out to me that the sentences in (3) may sound odd for some speakers, since they are sometimes used as literary or archaic expressions. However, ECM constructions with infinitival complements in English such as 'John believes Bill to be honest' are often used as literary expressions as well. Literary or not, (3) are well-formed sentences, and the fact that they are acceptable must be accounted for, just as in the case of English ECM constructions.

3) It should be noted that, as one of the reviewers points out, the status of (4b) may be degraded because the predicate *dekiru* cannot take Accusative objects at all. Therefore the best way is to replace *yoku dekiru* by other phrases such as *ryuuchou-ni hanaseru* ('can speak fluently').

4) Hiraiwa's (2001) exact formulation of the DIC is as in (i), which is slightly different from Chomsky's (1998).

(i) The Defective Intervention Constraint (a derivationally revised version)
A syntactic operation AGREE must obey a strict locality condition.
Agree (α, β) is prohibited if there is a closer matching goal that is already inactive at the point of the derivation where the probe is merged; thus the DIC is restricted to a case where a probe for γ and a probe for intervening β are derivationally distinct. (Hiraiwa 2001:5)

Hiraiwa assumes that locality is evaluated step by step (i.e., (i) is a condition on a syntactic operation, not a configuration), while Chomsky assumes that evaluation is done phase by phase. However, since this difference has no bearing on our argument, I adopt the standard formulation in Chomsky (1998).

5) In (i) and (ii), for instance, the embedded subjects, i.e. *Mary-no yokogao-ga* in (i) and *otooto-ga* in (ii), are nominative-marked by the matrix Infl (T), according to Takezawa (1987).

(i) John(-ni)-wa [[Mary-no yokogao]-ga totemo utukusiku] omo-e-ta
John-Dat-Top Mary-Gen profile-Nom very beautiful think-Pot-Past
'John could think [Mary's profile (to be) very beautiful].'

(ii) Watasi-wa [otooto-ga/ni uti-e kaettekite]-hosi-i
I-Top brother-Nom/-Dat home-to return-want-Pres
'I want [(my) brother to come back home].'

(Takezawa 1987)

6) Kaneko (1988) assumes that the relevant movement is triggered as a last resort to avoid a violation of the Case filter, for the following reason. Saito (1983, 1985) argues that objects are assigned accusative Case by verbs, while subjects are not assigned abstract Case by any element. Thus, a bare NP can appear in the object position and can be assigned abstract Case by the verb. On the other hand, if a bare NP appears in the subject position, the structure violates the Case filter. Therefore NPs must appear in the subject position with a nominative Case-marker. Based on Saito's (1983, 1985) analysis, Kaneko (1988) assumes that (12) has the structure in (i) at some point of the derivation:

(i) John-ga [kanozyo syooziki da to] omotte iru

In (i), since the embedded subject *kanozyo* is bare, it has the potential to violate the Case filter. Thus, as a last resort, *kanozyo* must move to Spec,CP, where abstract Case is assigned by *omotte-iru*.

7) It is an open question whether there is any particular reason why C bears an EPP-feature. But anyway, it should be noted that (16) is necessary to account for ECM

constructions with CP complements within the phase theory put forth by Chomsky (1998, 1999, 2001).

Note also that, although in Chomsky (1995) it is assumed that movement is driven by the morphological requirement of feature-checking, in Chomsky (1998, 1999, 2001) it is assumed that Agree (or feature-checking) is an operation independent from movement. Wurmbrand (2001) provides empirical evidence for the split between Agree and Move from German. For instance, consider the sentences in (ia,b), in which the universal quantifier takes narrow scope (in passing, one of the reviewers points out that in German, a phrase at the beginning of the sentence basically has a semantic focus):

(i) a. [$_{VP}$ Jeder Film gefallen] sollte mindestens einem Kritiker
[Every film-Nom please] should at-least one critic-Dat
'At least one critic should like every movie.' (∃>∀ ; *∀>∃)

b. [$_{VP}$ Jede Übung gelungen] ist minderstens einem Kind
[Every exercise-Nom managed] Aux at-least one child-Dat
'At least one child (has) managed to do every exercise' (∃>∀ ; *∀>∃)
(Wurmbrand 2001)

She argues that, since the fronted VP is frozen, the nominative DP remains in the VP, i.e. below Spec,TP (Case/agreement position), both at PF and LF. Thus, in (ia,b), the nominative Case-feature of the DP is licensed by Agree, not Move (spec-head relation).

8) I thank Yoshiaki Kaneko for suggesting this line of argumentation.

9) I thank Nobuhiro Miyoshi for suggesting this line of argumentation.

10) Of course, if there is evidence for postulating null complementizers, there is no reason to exclude a CP structure with a null complementizer. But since a discussion of such things is beyond the scope of this thesis, I adopt the TP hypothesis, which is the standard one. If the arguments to be presented later in this paper are correct, the TP hypothesis has to be the correct one.

11) In passing, the sentence in (i) is ungrammatical.

(i) *John-ga [sono ronbun-ga keturon-o tumaranaku] kanzita
John-Nom the paper-Nom conclusion-Acc uninteresting-Inf feel-Past
'John felt the conclusion of the paper to be uninteresting.'

It should be noted that the degree of acceptability of (i) improves if *sono ronbun-ga* (Nom) is replaced by *sono ronbun-o* (Acc), as shown in (ii):

(ii) ??John-ga [sono ronbun-o keturon-o tumaranaku] kanzita
John-Nom the paper-Acc conclusion-Acc uninteresting-Inf feel-Past

The contrast between (i) and (ii) suggests that if a probe "sees" as far as the lower goal, multiple Agree between kanzita and the two DPs, sono ronbun-o and keturon-o, is preferred to single Agree between kanzita and keturon-o for some reason. I leave the matter open in this paper.

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