

Multiple Feature Checking and Case Marking on Passives

Eun Cho *

Content

- I. Introduction
- II. Multiple Accusative Construction and Passive in Korean
 - II.1 Simple Transitive Construction
 - II.2 Multiple Accusative Construction
- III. Previous Analyses
- IV. Multiple Feature Checking
 - IV.1 Background
 - IV.2 Multiple Feature Checking and Passive
- V. Possible Case Marking
 - V.1 Word Order
 - V.2 Feature Co-occurrence
- VI. Conclusion
- Appendix

I. Introduction

I am concerned with the case marking possibilities on internal NPs in the passive sentence. In particular, I am concerned about accusative case marking in the passive sentence of multiple accusative construction in Korean. Unlike the standard assumption, Korean allows accusative case marking in the passive sentence when the verb is monotransitive.

* Cornell University

The purpose of this paper is to give a unified account for the accusative case marking in the passive sentence in the minimalist framework, and provide contribution to the general theory of multiple feature checking. Under the government and binding framework, many researchers tried to solve the problem that accusative case marking on the NP in the passive sentence is possible. They, however, could not explain all the case marking possibilities and it was necessary to posit extra assumption. In this paper I will show that this problem can be easily solved by positing two assumptions: i) the passive morpheme has a case feature which must be checked off, and ii) functional heads can be specified as [+/-multiple]. These two assumptions are at any rate needed in the grammar, independently of the data we are looking at to explain the passive sentences in general on the hand, and the multiple accusative, nominative constructions and super-raising phenomena on the other hand.

The organization of this paper is followers. Section II provides some background of the passives and the case marking possibilities on NPs in the passive sentence. In section III, I will briefly review previous analyses and show that their analyses, semantic in nature, fail to explain the problem. In section IV, I will then show how case marking facts in the passive sentence can be accounted for under my analysis. Section V deals with word order phenomenon and feature co-occurrence. I will explain there why body part NPs can not precede their possessor NPs and why some possible structures are blocked.

II. Multiple Accusative Construction and Passive in Korean

II.1 Simple Transitive Construction

In the passive sentence, the object NP moves into the spec of AGRS and the subject NP is demoted, as in (1b).

- (1) a. John caught the criminal.
 b. The criminal was caught by John.
 c. *e was caught the criminal by John.

Baker, Johnson and Robert(1989) explain this NP movement by claiming that the passive morpheme(-en) is an argument. According to them, the passive morpheme, which is an argument, receives an external theta-role and gets a case from the verb. Because the subject theta role is realized on the passive morpheme, the logical subject, which now can not get the subject theta role, is demoted. Analogously, because the accusative case is assigned to the passive morpheme, the logical object NP can not get a case from the verb. Accordingly, that NP('the criminal') can not stay in its D-S position, as in(1c), because this results in the violation of the Case Filter. The only way of making 'the criminal' to pass the case filter is moving it into the case position: the spec of AGRS, as in(1b). This theory of passive predicts that the accusative case marking on the NP in the passive sentence is impossible.

In simple sentences, ¹⁾Korean passive seems to be not different from English passive in that the object NP has to move into the spec of AGRS, as in(2)

- (2) a. Mijin - **i** pomin - **ul** cap - ass - ta.
 Mijin - Nom criminal - ACC catch - Past - SE
 b. Pomin - **i** cap - hi - oss - ta.
 criminal - Nom catch - Passive - Past - SE
 c. *e pomin - **ul** cap - hi - oss - ta

That is to say, the same theory of passive seems to be applicable to Korean passive sentences. Like English, accusative marking on the NP

1) when verb is mono-transitive

is not possible. Big differences, however, come in the multiple accusative construction.

II.2. Multiple Accusative Construction

Unlike English, Korean allows multiple accusative NPs² in mono-transitive verb, as in (3a)³.

- (3) a. Mijin - i YoungSoo - lul sonmok - ul cap - ass - ta.
 Mijin - Nom YoungSoo - Acc wrist - Acc catch - past - SE
 Mijin caught YoungSoo' s wrist.
 b. Mijin - i [YoungSoo - uy sonmok - ul] cap - ass - ta.

I will assume that (3a) is derived from (3b). That is to say, the possessor DP 'YoungSoo' has moved to the higher functional projection (spec of AGRO) and received the accusative case there in (3a). ⁴Look at the passive of (3a) which is a multiple accusative construction.

2) Korean allow Multiple nominative Construction, too, as in (i).

(i) Mijin - i Mori - ka coh - ta.
 Mijin - Nom head - nom smart

3) (3a) is semantically related to (3b).

There is debate whether(3a) is derived from (3b) by possessor raising or is base-generated independently of (3b). My proposal is not affected by the choice between these two analytical possibilities. I, however, choose the former view, based on the theta-theoretic reasons and some restrictions on movement, which I will discuss in the section V.

4) Precisely speaking, (3a) is derived from (3a)' below.

(3a)' Mijin - i [YoungSoo Sonmok] - ul cap - ass - ta.
 <ACC>

In (3a)', the possessor NP 'YoungSoo' has a case feature. To check its case feature, that NP moves in to the Spec of AGRS in (3a).

- (4) a. YoungSoo-ka (Mijin-hante) sonmok-i cap-hi-oss-ta.
 YoungSoo-Nom (Mijin-hante) wrist-**Nom** catch-Pass-Past-SE.
- b. YoungSoo-ka (Mijin-hante) sonmok-ul cap-hi-oss-ta.
 YoungSoo-Nom (Mijin-hante) wrist-**ACC** catch-Pass-Past-SE.

In (4a), every NP, which was in the object position, has moved into the spec of AGRS, like(2b). We can explain (4a) as we explain (2b): the only case which the verb has is assigned to the passive morpheme. Accordingly, every NP has to move into the spec of AGRS. (4b), however, shows the prediction we made is wrong. Surprisingly, accusative case marking on the NP is possible in the passive sentence.⁵⁾

III. Previous Analyses

This problem has been noted in the literature, and some solutions have been proposed. Kang(1987) argued that i)[-stative] verb can assign ACC to its internal argument and [+stative] verb can not,⁶ and that ii) passive verbs are ambiguous between [+stative] and [-stative]. According to him, the passive verbs can and can not assign an accusative case, because it is ambiguous. Like Kang, Maling(1989) claimed that

Note that I have to assume that there is no case assigner or checker in (3a)' inside the object DP, otherwise the movement of the possessor DP will violate the Last Resort Principle. Therefore I will assume that there is no case assigner in the object DP in (3a), but D assigns a genitive case in (3b). This has to be empirically proved.

- 5) I assume that the multiple accusative construction is different from the double accusative construction like (i) in that there is only one AGRO in the multiple accusative construction, whereas there is two different AGROs in the double accusative construction.

(i) I gave Mary a book

'cap-hi-oss-ta (be caught)' is ambiguous between direct passive (ordinary) and indirect passive, which adds benefactive subject argument and assigns accusative case to its complements. This ambiguity hypothesis is one of the analytic possibilities. But it seems to me that we should say more.

Adopting the basic intuition of Kang(1987) and Maling(1989), Hong(1991) argued that an ACC marked complement is sanctioned, only when the predicate selects for a determinant subject. 'Determinant' is the one who determines whether the sententially denoted situation is brought about or not, and therefore, the one who is in control of the situation and is responsible for it. In (5), 'swunkyeng(policeman)' is interpreted as an intentional participant in the situation. That is to say, 'swunkyeng(policeman)' is the determinant in (5).

- (5) swunkyeng - i uitocekulo Minsu - lul cap - ass - ta.
 policeman - nom intentionally Minsu - ACC catch - Past - SE
 The policeman intentionally caught Minsu.

Because (5a) has a determinant subject, accusative case marking is possible. In (6) 'YoungSoo' is interpreted as an intentional participant, as we can see from the fact that 'YoungSoo' is the only possible controller of the adverbial phrase 'intentionally'.

- (6) YoungSoo - ka uitocekulo sonmok - ul cap - hi - oss - ta.
 YoungSoo - Nom intentionally wrist - ACC catch - Pass - Past - SE.
 YoungSoo intentionally let his wrist be caught.

6) According to him, a nominative case is assigned by default.

That is to say, 'YoungSoo' is a determinant in (6). Like(5), accusative case marking is possible in (6), which is a passive sentence, because (6) has a determinant subject.

Though she explained (6) neatly based on the semantic notion 'determinant', there seem to be two non trivial problems. First she can not explain (7).

- (7) YoungSoo-ka (Mijin-hante) sonmok-i cap-hi-oss-ta.
 YoungSoo-Nom (Mijin-by) wrist-**Nom** catch-Pass-Past-SE.

To explain (7), she stipulates that only 'sonmok(wrist)' is a subject. This seems to mean that 'YoungSoo' is an adjunct, and therefore 'sonmok (wrist)' is the only argument of the verb, and that argument must have a nominative case because every sentence must have a subject in Korean, though she was not explicit. It is implausible to assume that 'YoungSoo' is an argument in (6) and an adjunct in (7), if we look at (8).

- (8) a. halmoni-**ka** sonmok-**ul** cap-hi-**si**-oss-ta.
 grandmother-Nom wrist-Acc catch-Pass-Hon-Past-SE
 b. halmoni-**ka** sonmok-**i** cap-hi-**si**-oss-ta
 grandmother-Nom wrist-Nom

The morpheme '-si- (honorific marker)', which agrees with only a subject⁷⁾ can in (8a) and (8b). This means that 'halmoni' in (8b) is not

7) Adjunct NP and other argument NPs except a subject can not control the morpheme 'si'. 'Si' shows a speaker's respect about the subject in the sentence.

- (i) Halmoni-ka caek-ul sa-**si**-oss-ta
 grandmother-nom book-acc buy-HON-past-SE
 (ii) YoungSoo-ka halmoni-lul coahanta/*coaha-**si**-nta.

different from that in (8a). That is, it is a subject, in (8a), (8b), (6), and (7). Accordingly (8b) shows that her stipulation is wrong. Even if she is right, this stipulation can not work, because of the case theoretic reason. According to her, Korean passive verbs have an ability to assign a case. To put it in a different way, Korean passive verbs have a case feature which must be checked to converge. In (7), that case feature of the verb is not checked. Therefore it should be bad. But it is not.

Second, English passive also has (or can have) a determinant subject, as in (10).⁸⁾

(10) John was intentionally caught by the police.

Therefore, her theory predicts that English passive verb also has an ability to assign a case, like Korean passive verbs.

- nom grandma - Acc like/*like - HON

(iii) YoungSoo - ka halmoni - lul uihaeso caek - ul sa - ass - ta, /*sa - si - oss - ta
 Nom grandma - for book - Acc bought/*bought - HON

In (i) 'si' is possible, because the subject is someone which people should respect. On the other hand, in (ii) and (iii) 'si' is not possible, even though 'halmoni (grandmother)' is in the sentence as an object in (ii) and an adjunct in (iii), because the subject is not someone we should respect. Accordingly, 'si' control can be used as a test to know whether some NP is a subject or not.

This is also true in the Psyche verbs, as in (iv).

(iv) YoungSoo - ka halmoni - lul nolaeki - oss - ta, /*nolaeki - si - oss - ta.

8) (10) is natural in the context as follows: John, a member of Mafia, betrayed his boss. So his boss decided to kill him. John thought that the best way to protect himself is to go to the jail. So, he was intentionally caught by the policeman. This kind of context is presupposed in Korean counterpart of (10), too.

(11) *e was caught John by the police.

(12) *It was caught John by the police.

This story can explain (11) as follows: The passive verb 'was caught' can assign the accusative case to 'John', because it has the determinant. Therefore, 'John' does not cause a problem in (11). It passes a Case Filter. (11) is, however, bad because either the nominative case is not assigned or it violates EPP.

However this story can not explain (12). The nominative case is assigned to the expletive in (12) and the N feature of T is also checked. That is, there is no case floating and EPP violation. Accordingly, (12) should be fine, which is not. This clearly shows that the trouble maker is 'John' in (12).

Former analyses, basically semantic in nature, seem to fail to explain the case marking facts in the passive of MOC, and need an extra assumption that the passive verb can assign a case even though it can not assign a theta-role in Korean, which is quite undesirable from the perspective of Universal Grammar and the language acquisition. In the next section, I will provide a solution in the minimalist framework.

VI. Multiple Feature Checking

VI.1 Background

In the minimalist framework, all morphological features including the case feature must be checked for the convergence. That is to say, an unchecked feature causes a sentence to crash. The subject NP and the object NP have their case feature checked off in the spec of AGRS and in

the spec of AGRO by the spec-head relationship⁹⁾.

In this framework, Ura (1994a,b) explained a 'multiple subject construction' and 'superraising phenomenon' by parameterizing whether a functional head can enter multiple feature checking relation or not. That is, only languages which allow the spec feature of T and AGRS to be [+multiple] can have multiple subject construction and super-raise DP, because the unique T and AGRS can check each subject's case feature infinitely in principle, and multiple specs provide an escape hatch for the super-raised NP.

Extending the theory of the multiple feature checking, Collins(1995)¹⁰⁾ provides a following general theory and the distribution of features, as in (13) and (14).

- (13) a. Both head and specifier feature of a functional head H can be set [+/- multiple]
 b. The settings of [+/-multiple] for two features F₁ and F₂ are independent
 c. If a feature F is [+multiple], then F must enter one checking relation, and F can enter more than one checking relation.
 d. There are no languages, where a feature F must enter exactly 2 (or any number N) checking relations.

(14) [+multiple]

- a. Spec feature of T multiple nominative
 b. head feature of T serial verb construction

9) actually, t and v have a case feature and this feature is matched with dps by the mediation of agr.

10) he analyzed a 'serial verb construction' as resulting from the v feature of t being [+multiple].

c. Spec feature of D	multiple genitive
d. head feature of D	not attested so far
e. Spec feature of C	multiple wh-question
f. head feature of C	not attested so far

Following Ura(1994) and Collins(1995), I assume that functional heads can be specified as [+/-multiple].

VI. 2 Multiple Feature Checking and the Passive

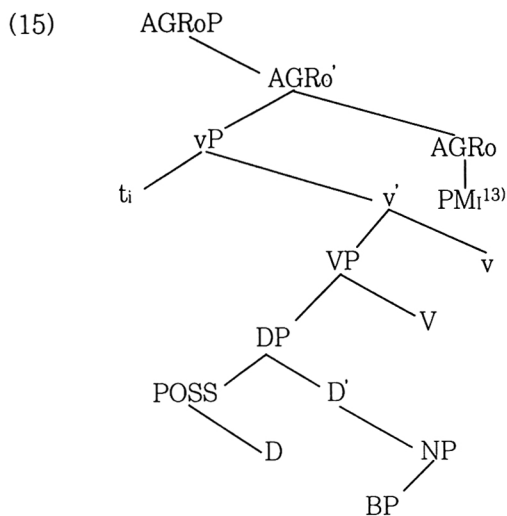
Case marking facts in the passive of MAC can be naturally explained by two assumptions: i) The spec feature of AGRS, T, AGRO, and V¹¹⁾ can be specified as [+multiple] in Korean whereas that of English is always [-multiple], and ii) the passive morpheme has a case feature which must be checked off. Notice that these two assumptions are needed independently of the data we are looking at, to explain the multiple nominative and accusative construction and super-raising on the one hand, and the NP movement in the passive in general on the other hand, in the minimalist framework.

For the structure of the passive, I will assume that the passive

11) Because the case feature of the object is checked by the verb, it appears that we should say that the spec feature of the verb is specified as [+multiple] to explain the multiple accusative construction. This is, however, highly undesirable given that the verb is a lexical category.

To avoid this problem, I propose that it is the light verb which can vary from [+multiple] to [-multiple], following Collins's suggestion(p.c.). It is pointed out by Chomsky(1994) and Collins(1994) that the higher VP in Larsonian VP shell must be headed by the light verb.

morpheme is a kind of clitic which is base generated in the spec of vP, and undergoes a clitic movement to AGRo. Once the passive morpheme adjoins to AGRo, it proceeds normal head movement afterwards¹²⁾. (15) is the structure of the Passive.



By these assumptions, we can explain the case marking facts in the passive sentences. Because, the spec feature of AGRo (agreement feature) and v (case feature) is [-multiple] in English, a multiple feature (case and agreement)¹⁴⁾ checking is not possible. Therefore once the passive morpheme has its case feature checked off,¹⁵⁾ v can not check

12) As Collins(p.c.) pointed out, we can say that the passive morpheme is generated under AGRo and an expletive pro which is coindexed with the passive morpheme is in the spec of vP.

13) Passive Morpheme

14) Because we focus on the case feature, I will not mention the agreement feature hereafter.

15) The case feature of the passive is checked by the light verb which adjoined to AGRo, as in (i).

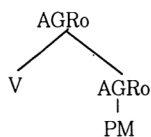
NP's case feature any more. NP can not check its case feature even if it can move into the spec of AGRo which is the checking domain of verbal complex v-AGRo, because v does not have any remaining case features which can be matched with NP's case feature. Or this movement basically can not occur because no checking takes place, given the definition of Greedier (Collins 1994).¹⁶⁾ Accordingly, ACC case marking on NPs in the passive sentence is not possible and that NP should move to the spec of AGRS to check its case feature, as in (16).

- (16) a. John was caught
 b. *e was caught john
 c. *it was caught John.

When [-multiple] v is selected in the numeration in Korean, the situation is parallel to English. Because v has already checked the case feature of the passive morphology, it does not have any remaining case feature to match with NP's.¹⁷⁾ Therefore every NP should move into the spec of AGRS, to avoid the case filter violation, as in (17a).

- (17) a. YoungSoo - **ka** sonmok - i cap - hi - oss - ta
 YoungSoo - Nom wrist - Nom catch - Passive - Past - SE¹⁸⁾

(1)



16) Greedier:

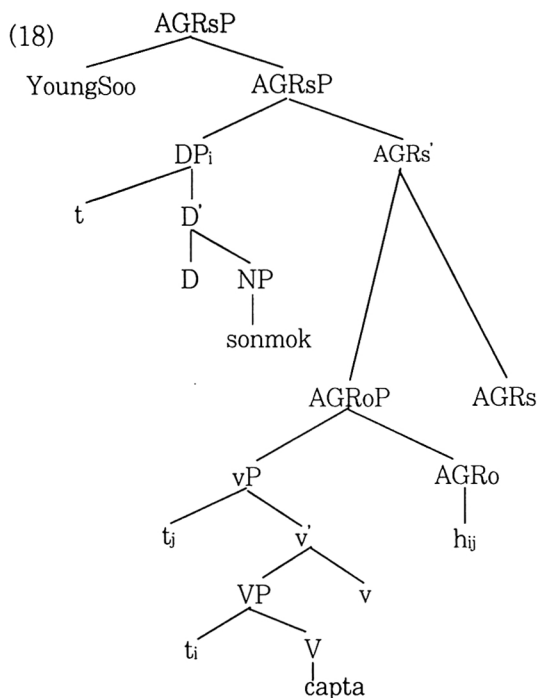
17) That is to say, once v checks NP's case feature, it's feature is deleted. (chomsky.1994). To speak in old terms, v loses the ability to assign a case, because that case is already assigned.

18) Sentence Ending

- b. YoungSoo - **ka** sonmok - **ul** cap - hi - oss - ta
 YoungSoo - Nom wrist - Acc catch - Passive - Past - SE.

In (17a), 'sonmok' moves into the spec of AGRS and checks its case feature against the verbal complex. Even though T' s case or spec feature is already checked, 'YoungSoo' can move into the outer spec of AGRS and checks its case feature because Korean allows [+multiple] T.

The structure of (17a) is follows. ¹⁹⁾



In (18), after the passive morpheme checks its case feature, the whole

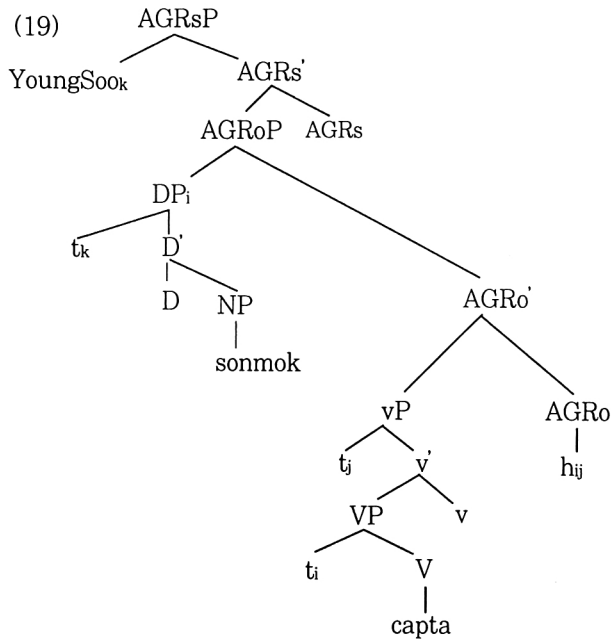
19) There is more phrases, TP and MoodP(or CP), in addition to AGRsP, AGRoP. However, I will ignore them, because they are not crucial to this discussion.

DP moves into the spec of AGRs. 'sonmok(wrist)' has its case feature checked off there, and then 'YoungSoo' moves into the higher spec, leaving the trace in the spec of DP.

When [+multiple] *v* is selected, however, the situation becomes different. Even though *v* checked the case feature of the passive morpheme, other NPs can check its case feature in the spec of AGRO, because multiple case checking is possible in this numeration. This is (17b) and its structure is follows.

- (17b) YoungSoo - ka sonmok - ul cap - hi - oss - ta
 YoungSoo - NOM wrist - ACC catch - Passive - Past - SE.

In (19), after *v* checks the case feature of the passive morpheme, the



whole DP moves into the spec of AGRoP ²⁰, and 'sonmok(wrist)' has the case feature checked off there, even though the passive morpheme already checked its case feature there, and then 'YoungSoo' checks its case feature in the spec of AGRS. That is to say, multiple feature checking allows the accusative case marking on the NP, in the passive.

If multiple case feature checking is possible in the spec of AGRo, why (20) is bad?

(20) *e YoungSoo- sonmok-**ul** cap-hi-oss-ta
 YoungSoo-**Acc** wrist-**Acc** catch-Passive-Past-**SE**.

In (20), after the passive morpheme has its case feature checked off, the whole DP has moved into the spec of AGRo, and 'sonmok(wrist)' and 'YoungSoo' have their case feature checked off there. Multiple feature checking does not have a limit on the number of NPs with which it can enter the relation. Accordingly, (20) should be good, but it is not. The unacceptability of (20) can be easily explained however. T' s case feature is not checked in (20). This unchecked feature causes the derivation to crash.

In this section, I analyzed the case marking facts in Korean and English in minimalist framework. My analysis seems to be superior to previous analyses in that it can explain all the problematic data, without any extra assumptions and stipulations. Based on the proposal in this section, one more provision can be added to the general theory of multiple feature checking as (21).

20) The passive morpheme checks its case feature in terms of head relation, whereas 'sonmok(wrist)' checks its case feature in terms of spec-head relation.

(21) multiple Spec feature of *v* multiple accusative construction.

And this analysis predicts that languages which have *v* whose spec feature is multiple allow ACC case marking in the passive sentence.

V. Possible Case Markings

V. 1 Word Order

Though word order is fairly free in Korean, body part NPs can not precede Possessor NPs, as in (22b)

- (22) a. Mijin - i YoungSoo - lul [t sonmok - ul] cap - ass - ta.
 Mijin - nom YoungSoo - ACC wrist - Acc catch - Past - SE.
 b. *Mijin - i [t_i sonmok - ul]_j [YoungSoo - lul]_j t_j cap - ass - ta.

This unexpected fact can be easily explained under the structure I proposed. Unlike (22a), (22b) has an unbound trace. Accordingly, this trace violates Proper Binding Condition which requires that a trace be bound by its antecedent. In (22a) the possessor or 'YoungSoo' can bind its trace, but it can not in (22b), because it can not c-command its trace *t_i*. Analogously, body part NPs can not precede their possessor NPs in the passive and multiple nominative construction, as in (23b), (24b), and (25b).

- (23) a. YoungSoo - ka sonmok - i cap - hi - oss - ta.
 YoungSoo - Nom wrist - **Nom** catch - pass - past - SE.
 b. *[t sonmok - i] YoungSoo - ka cap - hi - oss - ta.

- (24) a. YoungSoo - ka sonmok - ul cap - hi - oss - ta.
 YoungSoo - Nom wrist - ACC catch - pass - past - SE.
 b. *[t sonmok - ul] YoungSoo - ka cap - hi - oss - ta.
- (25) a. Mijin - i mori - ka coh - tha.
 Mijin - i head - Nom good - SE (literal meaning).
 = Mijin is smart.
 b. *[t mori - ka] Mijin - i coh - tha.

All the 'b' examples in (23)-(25) have an unbounded trace which causes Proper Binding Condition violation.²⁰⁾

V. 2 Freature Co-occurrence: *AgrS[+multiple] AgrO [+multiple]²¹⁾

Let's consider more complicated sentence which has three object rather than two, as in (26).

- (26) Mijin - i YoungSoo - lul sonmok - ul oluncchok - ul cap - ass - ta
 Mijin - nom YoungSoo - acc wrist - acc right - acc caught
 Mijin caught YoungSoo by the right wrist.

Like other multiple accusative constructions, the whole DP moves into the spec of AGRO, 'oluncchok(right)' checks its case feature there, YoungSoo and Sonmok(wrist) move into into the second and the third

20) Though we can easily explain the unacceptability of (23b), (24b), and (25b) using proper binding condition, its status is highly suspectable. Collins(1994) argued that Generalized proper binding condition can be derived by economy conditions. In this case, however, it seems to be difficult to derive it from the economy conditions because all movements occur in the same minimal domain.

21) Or *T [+multiple] v [+multiple]

spec of AGRo. When (26) is passivized, two passive sentences are possible, as in (27) and (28).

- (27) a. YoungSoo-ka sonmok-i oluncok-i cap-hi-oss-ta.
 YoungSoo-Nom wrist-Nom right-Nom catch-passive-past-**SE**.
- (28) a. YoungSoo-ka sonmok-ul oluncok-ul cap-hi-oss-ta.
 YoungSoo-Nom wrist-Acc right-Acc catch-passive-past-**SE**.

We will get (27) if [+multiple] AgrS and T, [-multiple] AgrO and v is selected in the numeration. On the other hand, we will get (28) if [-multiple] AgrS and t, [+multiple] AgrO and v is selected. The question is then why (28) is bad.

- (29) *YoungSoo-ka sonmok-i oluncok-ul cap-hi-oss-ta

In (29), after the passive morpheme checked its case feature, 'oluncok(right)' checks its case feature in the spec of AGRo and 'sonmok(wrist)' and 'YoungSoo' check their case feature in the spec of AGRs. This derivation is possible when [+multiple] AGRs, T, AGRo, and v are selected in the numeration. As we can check from (27), [+multiple] AGRs, T, AGRo, and v can be selected respectively in Korean. In addition to this, this derivation does not violate any constraints on the movement. Therefore (29) should be good, which is, however, surprisingly bad.

This can be explained if we assume (30):

- (30) *AGRs, T [+multiple] AGRo, v [+multiple]

(30) says that [+multiple] AGRs, T and [+multiple] AGRo, v can not

be selected in the numeration at the same time. Therefore, (29) is ruled out by (30) because (29) is possible only when [+multiple] AGRs, T, AGRo, and v are selected in the numeration. (30) predicts that multiple nominative and accusative constructions can not appear in the same sentence in any situations, and this is borne out, as in (31).

- (31) *Mijin-i son-i YoungSoo-lul mori-lul ttaeli-oss-ta.
 Mijin-Nom hand-Nom YoungSoo-Acc head-Acc hit-Past--SE

VI. Conclusion

In this paper, I have shown that case marking facts in the passive sentence follows from assumptions that i) the passive morpheme has a case feature and ii) functional heads can be specified as [+multiple]. [+multiple] AGRo and v allows the accusative case marking on the NP in the passive sentence. That is to say, case retention in the passive sentence is possible because [+multiple] AGRo and v can check an internal NP's case feature(object) even though that verbal complex already checked the passive morpheme's case feature.

This paper also shows a strong evidence that the higher light verb v is functional and not lexical. I also provided the structure for the passive sentence in the minimalist framework and added a new provision to the feature matrix.

Appendix

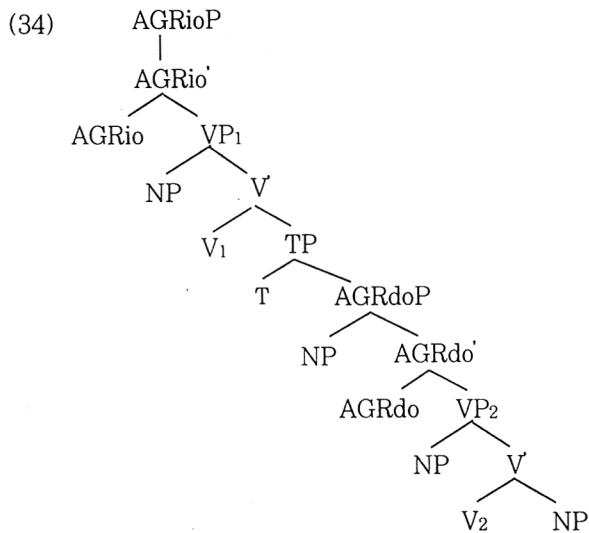
Double Accusative Construction vs. Multiple Accusative Construction

In the section, I will show that the structure of MOC is different from the double accusative construction(DOC). In the minimaslist frame work, every NP must check its case feature in the spec of relevant functional projection. Accordingly, We need two different AGRo projections to explain DOC, because there are two accusative marked NPs whose case feature must be checked off. Unlike DOC, only one AGRo seems to be projected in the MOC and all accusative NPS have their case feature checked off in the spec of AGRo, when the [+multiple] and v is selected. Let's consider the canonical example of MOC and DOC. (32) and (33) are the example of MOC and DOC respectively.

- | | | | | |
|------|-------------|----------------|--------------|-------------------|
| (32) | Mijin - i | YoungSoo - lul | sonmok - lul | cap - ass - ta. |
| | Mijin - Nom | YoungSoo - Acc | wrist - Acc | catch - Past - SE |
| (33) | Mijin - i | YoungSoo - lul | caek - ul | cu - oss - ta. |
| | Mijin - Nom | YoungSoo - Acc | book - Acc | give - Past - SE |

Tough (32) and (33) look identical at the surface (subject - object - object - v), their structure and the source of the accusative case are quite different. A lot of people posited two different AGROs (AGRio and AGRdo) to provide a case checking position for a direct and indirect object in DOC. It will be, however, very unnatural to posit different AGROs for each accusative NPs in MOC. The reason is following. First, 'cap' has only one internal theta role to assign like English 'catch', whereas 'cu' has two internal theta role like 'give'. Second, while only two accusative NPs are allowed in DOC, there is no limit on the number

of the accusative NPs in MOC. Accordingly, if we posit different AGROs for each accusative NPs in MOC, we will end up with infinite number of AGROs. Third, some languages like southern Tiwa shows different agreement morphemes for indirect object and direct object. This shows that a direct object and an indirect object check their case feature in different positions. On the other hand, there is no language which shows different agreement for each accusative NPs in MOC. Finally, we can say that V_1 and V_2 ²²⁾ each has the case checking ability in DOC, following Collins and Trainsson(1993), whereas V_2 does not have a case feature in MOC. (34) is the structure of DOC.



In (34), V_1 checks an indirect object's case feature and V_2 a direct

22) V_1 and V_2 in (34) are decomposed verbs. For example, V_1 is cause and V_2 is have for give in Collins and Trainsson(1993).

object's case feature. That is to say, there are two different sources of case: V_1 and V_2 . This structure predicts that V can check NP's case feature, though the passive morpheme checked V 's case feature, because there are two verbs which have case feature and one of the verb's case is still available. Therefore, accusative marking on the NP is possible and necessary in DOC, and this prediction is born out as in (35).

- (35) a. Mary gave John a book.
 b. John was given a book.

In(35), 'John' has moved into the spec of AGRs, because V_1 's case feature is already matched off with the passive morpheme's case feature. V_2 's case feature, however, is still available. Therefore 'a book' can check its case feature in the spec of AGRdo. This case checking is not only possible but also necessary, because V_2 's case feature can not be deleted otherwise, and this remaining feature will cause the derivation to crash. Therefore we can say that one NP in DOC must be marked ACC.

Let us consider Korean DOC. Unfortunately, 'give' type verb in Korean does not have a passive form. However, 'ppaessta(rob)' which subcategorized for two NPs shows accusative case marking on two NPs as in (36).

- (36) John - i Mary - lul cigap - ul ppaeass - ass - ta
 John - Nom Mary - Acc purse - Acc rob - past - SE

Interestingly, (36) allows only one passive form, unlike MOC, as (37) and (38) show.

- (37)a. Mary - ka cigap - ul ppaeass - ass - ta

- Mary - Nom purse - Acc rob - Passive - Past - SE
- b. *Mary - ka cigap - i ppaeass - ki - oss - ta
- Mary - Nom purse - Nom rob - Passive - Past - SE
- (38) a. YoungSoo - ka sonmok - uil cap - hi - oss - ta
- YoungSoo - Nom wrist - Acc catch - Passive - Past - SE
- b. YoungSoo - ka sonmok - i cap - hi - oss - ta
- Mary - Nom wrist - Nom catch - Passive - Past - SE

As I discussed in earlier sections, MOC allows two different passive form, as in (38). That is to say, accusative case marking (38a) and the nominative case marking (38b) on the internal argument are possible when the [+multiple] and [-multiple] v are selected respectively. On the other hand, only accusative case marking on the internal argument is possible in DOC, as in (37). This contrast seems to result from the different nature of V₂ in DOC and MOC. In DOC (37), v₂' has a case feature which must be checked off. (37b) is, therefore, bad because V₂'s case feature is not checked, and this unchecked case feature case festure causes the derivation to crash.

To put it in another way, an accusative case marking on the NPs in (37a) and (38a) has the different source. In (37a), it is the V₂'s own case feature which must be checked off, whereas it is the [+multiple] feature which is responsible for the accusative case marking. Accordingly, when [-multiple] v is selected, there is no source of the accusative case in the MOC, and therefore all the NPs should move into the spec of AGRs, as in (37b). On the other hand, V₂'s case feature must be checked off in DOC. The fact that (37b) is possible seems to show that V₂ in MOC does not have a case feature.

References

- Baker, M., Johnson, K., and Roberts, I. 1989. Passive Arguments Raised. *LI* 20-2
- Baker, Mark. 1988. *Incorporation : A Theory of Grammatical Function Changing*. Chicago: University of Chicago Press.
- Cho, Dong-In. 1992. Multiple Accusative Construction and Verb Movement. *MIT Working Papers in Linguistics* 16.
- Chomsky, Noam. 1993. A Minimalist Program for Linguistic Theory. In *The View from Building 20*. Mass, MIT press.
- Chomsky, Noam. 1994. Bare Phrase Structure . *MIT Occasional Papers in Linguistics*5 .
- Chomsky, Noam. 1995. Categories and Transformations. Ms., MIT.
- Collins, Chris and Hoskuldur Thrainsson. 1993. Object Shift in Double Object Constructions and the Theory of Case. *MIT Working Papers in Linguistics* 19 .
- Collins, Chris. 1994. Merge and Greed. Ms., Cornell.
- Collins, Chris 1994. Serial Verb Construction and the Theory of Multiple Feature. Checking. Ms., Cornell.
- Jonas, D. and Bobaljik, J. D. 1993. Specs for Subjects: The Role of TP in Icelandic. *MIT Working Papers in Linguistics* 18 .
- Hong, Ki-Sun. 1991. The Passive Constructions in Korean. Harvard Studies in Korean Linguistics.
- Kang, YoungSe. 1987.
- Kim, Young-Joo. 1990. *The Syntax and Semantics of Korean Case : The interpretation Between Lexical and Syntactic Levels of Representation* . PH.D. Dissertation, Havard.
- Kuroda, S.Y. 1988. Whether We Agree or Not: A Comparative Syntax of English and Japanese. *Linguisticae Investigationes* XII .

- Lee, Jeong-Shik. 1992. Partitive Case on the Body-Part NP. MIT working papers in Linguistics.
- Maling, Joan. 1987. Adverbial and structural Case in Korean. *Harvard Studies in Korean Linguistics* .
- Maling, Joan. and Kim, Soo Won. 1992. The Case of the Inalienable Possession Constructions in Korean. *Journal of East Asian Languages 1* .
- Rizzi, Luigi. 1990. *Relativized Minimality*. Cambridge, MIT press.
- Sortiche, Dominique. 1992. Clitic Constructions. Ms., UCLA.
- Ura, Hiroyuki. 1994a. Varieties of Raising and the Feature-Based Bare Phrase Structure Theory. MIT *Occasional Papers in Linguistics, Number 7* .
- Ura, Hiroyuki. 1994b. A parametric Approach to the Topological Variety of the Double Object Construction. Ms., MIT.
- Yoon, James H.S. 1987. Some Queries Concerning the Syntax of Multiple Subject Constructions in Korean. *Harvard Studies in Korean Linguistics* .