

Some Notes on Multiple Nominative Constructions in Korean

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Park, Dong-woo. 2010. Some Notes on Multiple Nominative Constructions in Korean. *SNU Working Papers in English Linguistics and Language* 9, 36-65. This paper aims to investigate the properties of possessive Multiple Nominative Constructions (MNCs) in Korean. It is also elucidated that all NPs in MNCs occupy the distinct specifier positions of the same head T and each NP is base-generated in the specifier position of its larger NP and the largest NP is located in the specifier position of VP before the displacement. NPs occupying the specifier of their larger NPs undergo cyclic movement and this causes multiple specifiers of TP. This Left Branch Extraction is possible because Korean lacks DP. It is argued that all NPs get nominative Case through T-feature sharing, which means that nominative Case in MNCs is given structurally. This paper also demonstrates that all NPs with nominative Case in MNCs are subjects and they have topic-like interpretation because of "aboutness", which both subjects and topics have semantically.

Keywords: cyclic movement of DP, Feature Sharing and Case, internal NP structure, multiple subjects

1. Introduction

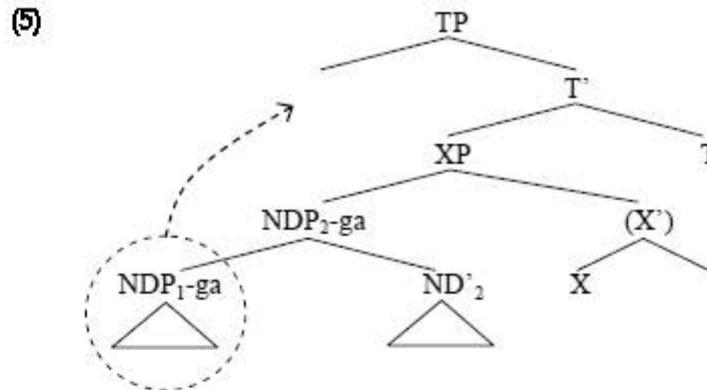
In English, it is widely accepted that only one nominative DP can occupy the specifier position of TP. However, a phenomenon that two or even more DPs with nominative Case are located in the sentence initial position can be found in Korean as in (1) and (2), unlike English.

- (1) a. Chelswu-ka phal-i kil-ta.
 Chelswu-NOM arm-NOM long-DEC
 Speaking of Chelswu, speaking of his arms in
 particular, they are long.
- b. Jenny-ka tongsayng-i yeypu-ta.
 Jenny-NOM sister-NOM beautiful-DEC.

2. Position of DPs with nominative Case

In languages which have only one subject with nominative Case, such as English, it is not difficult to specify the location of subject - specifier position of TP after the displacement. However, things are quite different in Korean as well as Japanese. The issue is how many DPs move to specifier position of TP. If we suppose that only one DP undergoes movement, we have to explain which DP it will be, and how it can move from the base-generated position, specifier of vP, to specifier position of TP. On the other hand, if we assume that more than one DP undergoes movement, the way DPs move has to be explained.

Akiyama (2004) suggests that only the leftmost DP undergoes movement in sentences with two nominative DPs. In other words, NDP_1 located in the specifier position of NDP_2 moves out of VP. This means, NDP_2 is thematic subject and the second nominative DP is some element within ND_2' as in (5).



There are two arguments for this suggestion. First, VP which contains DP2 can be preposed when a focus particle *-sae* 'even' is preceded and the light verb *siru* 'do' occurs as in (6).

- (6) a. [T⁰ Taro-ga [T' [VP imoto-ga byooki-de
 Taro-NOM sister-NOM illness-by
 nakunari]-sae si-ta]].
 die-even do-PAST
- b. *Byooki-de nakunari-sae Taro-ga imoto-ga si-ta.

c. ??Imooto-ga byooki-de nakunari-sae Taro-ga si-ta.

(6) indicates that VP preposing is allowed only when DP2 is within VP. He also added the mild deviance of (6)c is not caused by VP preposing but by Agent-Subject Constraint.

Another argument is that the fact *soo* 'so' can replace VP causes the difference in grammaticality of following sentences.

(7) Saikin-no choosa-ni yor-eba, [TP dansei-ga [AP jumyoo-ga
recent research-DAT according male-NOM life
span-NOM naga] -i] rasi-i-ga ...
long-PRES seem-PRES-though ...
Although recent research says that males' life span is long...

a. ?*... [[dansei-ga jumyoo-ga soo-da] to]
SO-COPULA C

dare-mo omot-tei-nakat-ta.
anyone think-ASP-NEG-PAST

... no one thought that males' life span is so

b. ... [[dansei-ga soo-da] to] dare-mo omot-tei-nakat-ta.

The contrast between (7)a and (7)b shows that DP2 stays in the base-generated position within VP, while DP1 moves out of VP.

Given the arguments above, he suggests local economy principle (8), based on the definition of 'smaller' as in (9).

(8) Attract/Move Smallest (A/MS)

A target T can attract α if there is no β , β is smaller than α , such that T attracts β .

(9) β is smaller than α , if α contains β (Stateva (2002))

From now on, I will apply these two diagnostics to Korean.

(10) a. Mike-ka phal-i pwuleci-kikkaci
Mike-NOM arm-NOM break-even
ha-yss-ta.
do-PAST-DEC.

Speaking of Mike, speaking of arms in particular,
they even broke.

- b. *pwuleci-kikkaci Mike-ka phal-i ha-yss-ta.
c. *??phal-i pwuleci-kikkaci Mike-ka ha-yss-ta.

- (11) Na-nun Bob-i phal-i khilta-ko
I-TOP Bob-NOM arm-NOM long-C
tul-ess-nunte, silceylo bo-ni . . .
hear-PAST-THEN, in reality see-according to
I heard that Bob's arms are long, according to what I saw
. . . a. ... cengmallo, kuleh-ta.
indeed, so-DEC
b. ... cengmallo, Bob-i kuleh-ta.
c. ?... cengmallo, Bob-i pal-i kuleh-ta.
Speaking of Bob, speaking of legs in particular, they
are long.

Little difference in grammaticality between (10)a and (10)b illustrates that two nominative DPs are not within VP in Korean, unlike Japanese. Examples in (11)b and (11)c indicates that both DP1 and DP2 are located out of VP, if VP is substituted for *kulehta* 'so' in Korean too. What we have to pay attention to at this point is that (11)a indicates that *kulehta* 'so' in Korean can replace not only VP but a phrase larger than VP. We can assume that the phrase is TP because it contains the leftmost DP. Look at following examples.

- (12) a. Tom-i pal-i olunccok-i calp-ko
Tom-NOM leg-NOM right-NOM short-and
John-to kuleh-ta.
John-too so-DEC
b. Tom-i pal-i olunccok-i ccalp-ko
Tom-NOM leg-NOM right-NOM short-and
John-to pal-i kulehta.
John-too leg-NOM so-DEC

In (12)b, *olunccok-i ccalp-ta* is replaced with *kuleh-ta*. If we suppose A/MS works and the smallest DP undergoes movement subsequently, this replacement should not be accepted because they do not form a

constituent. This implies that each DP with nominative Case occupies distinct specifier positions of TP.

Akiyama (2004) also mentions that the principle (8) is universal. If his analysis is on the right track, that principle can be applied to MNCs as well as DNCs. This predicts that sentential adverbs cannot be preceded by the DPs except the leftmost one because those adverbs should be generated in higher position than VP. Following examples, however, tell us that the prediction turns out to be wrong. This is the first problem of his analysis.

- (13) a. Tom-i sinkihakeyto phal-i orunccok-i
 Tom-NOM surprisingly arm-NOM right-NOM
 twukkep-ta.
 thick-DEC
- b. Tom-i phal-i sinkihakeyto orunccok-i
 Tom-NOM arm-NOM surprisingly right-NOM
 twukkep-ta.
 thick-DEC
 Speaking of Chelswu, speaking of arms in particular,
 speaking of right part, surprisingly, it is thick.
- c. John-i ecey elkul-i oynccok-i
 John-NOM yesterday face-NOM left-NOM
 pwu-ess-ta.
 swell-PAST-DEC
- d. John-i elkul-i ecey oynccok-i
 John-NOM face-NOM yesterday left-NOM
 pwu-ess-ta.
 swell-PAST-DEC
 Speaking of John, speaking of face in particular,
 speaking of leftpart, it swelled up yesterday.

(13)a and (13)c match the prediction, while (13)b and (13)d do not in the sense that not only the smallest DP but also DP containing the smallest one underwent the movement. This can be the second argument for the fact that all DPs are out of vP and located in distinct specifier positions of TP. If only the smallest DP moves to TP, the position sentential adverb should be inserted is within DP which used to contain the smallest DP in (13)b and (13)d. However, it can never happen.

Another problem Akiyama (2004) faces is Left Branch Condition. According to LBC, as NDP_1 -ga is the leftmost element in NDP_2 -ga, NDP_1 -ga must not be allowed to be extracted out of NDP_2 -ga. I will put this problem aside here, and deal with it again at the end of this chapter.

Proceeding from what has been mentioned above, it should be concluded that each DP occupies the distinct specifier positions of TP.

Lee (2008) suggests that more than one DP can move to the specifier position of TP. One thing must be answered is how that derivation is possible. To answer this, she assumes that DPs without theta-role have the [+aboutness] feature and those DPs move to satisfy Subject Criterion (SC), which implies that DP which theta-role is assigned to cannot have [+aboutness] feature. What triggers multiple DPs to move is Multiple Move suggested in Hiraiwa (2001) as in (14), quoted from Lee (2008).

- (14) ...Movement of multiple goals is a single simultaneous operation that merges multiple goals without any countercyclic merger and therefore a c-command relation between the goals cannot be changed... Under MULTIPLEMOVE, tucking-in (Richards 1997) is a necessary consequence of a derivation where the movement is triggered by the same single probe feature.

Given these assumptions above, the syntactic derivation of (2)a can be represented as follows.

- (15) a. [_{CP} [_{TP} [_{VP} Chelswu-ka phal-i oluncok-i [_{VP} khil-ta]]]].
 b. [_{CP} [_{TP} Chelswu-ka phal-i [_{VP} *t*_{Chelswu-ka} *t*_{phal-i} oluncok-i [_{VP} khil-ta]]]].

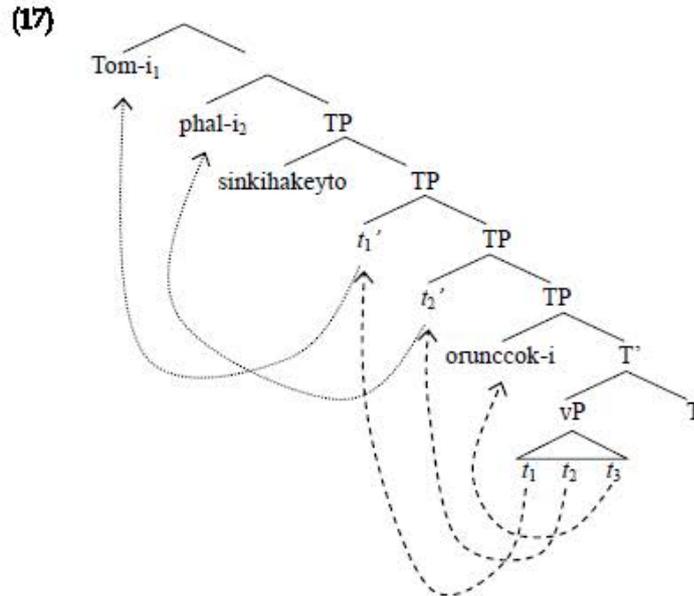
Even though this approach takes the position that multiple DPs moves to the specifier positions of TP, there are two non-trivial problems. First, the distinction between a DP with theta-role and DPs without theta-role is too strong. The adoption of [+aboutness] feature is affected by the fact that DPs in MNCs have topic-like interpretation and Rizzi's (2004) suggestion that subject and topic have the interpretation of aboutness in common and what distinguishes one from the other is D(iscourse)-linkedness. The dichotomous relationship between theta-role and [+aboutness] feature could encounter a contradiction in derivation

of sentences where there is only one nominative DP as a subject. The DP may receive a theta-role from its predicate. Then, it cannot have [+aboutness] feature, which is associated with movement. The problem is that the DP is theta-role assigned and has topic-like interpretation at the same time since it is a subject. Moreover, this could mean that DP with theta-role cannot move to specifier position of TP, which leads the failure of satisfying the criterion effect. One might think that Multiple Move is the appropriate solution to MNCs if we assume that theta-role assigned DP can also have [+aboutness] feature. However, it is not. This is related to the second problem of Lee's (2008) analysis.

The second problem is that Multiple Move itself has limitation in explaining MNCs. Given that Multiple Move is a single simultaneous movement, sentences where sentential adverb is inserted between two nominative DPs need additional derivations besides movement to specifier positions of TP and we need to find out what the additional derivation would be. Look at (16). ((12)b and (13)b are repeated here.)

- (16) a. Tom-i phal-i sinkihakeyto oluncocok-i
 Tom-NOM arm-NOM surprisingly right-NOM
 twukkep-ta.
 thick-DEC
 Speaking of Chelswu, speaking of arms in particular,
 speaking of right part, surprisingly, it is thick.
- b. John-i elkul-i ecey oynccocok-i
 John-NOM face-NOM yesterday left-NOM
 pwu-ess-ta.
 swell-PAST-DEC
 Speaking of John, speaking of face in particular,
 speaking of left part, it swelled up yesterday.

In (16)a, a single feature on T causes all DPs within VP to move to specifier of TP simultaneously. Then suppose that sentential adverb adjoins to TP and for some reason, *Tom-i* and *phal-i* undergo additional movement. We can expect the same derivation will occur in (16)b. The representation of derivation would be like (17).



One possible explanation for the further movement is scrambling. According to Miyagawa (2003, 2005), local scrambling is A-movement caused by EPP on T. Thus, the possibility that additional movement can be scrambling should be excluded. Another possibility is the movement related to phrase in left periphery - FocP or TopP. If we suppose that some nominative DPs moves to FocP or TopP, semantic change should occur necessarily. However, DPs followed by sentential adverb do not have focus or topic interpretation. Of course, even though those DPs get topic-like interpretation, it is not because they move to TopP. If someone argues that they move to TopP, he or she cannot explain how nominative DPs preceded by sentential adverb have topic-like interpretation. Section 5 will deal with the reason nominative DPs have topic-like interpretation, even if they are not topics. (16)b also shows that the position of adverb does not trigger semantic difference at all. This paper makes an alternative proposal, solving all problems presented above through adopting Richards' (2004) analysis for Russian-doll questions in Bulgarian.

(18) a. [Ot kakvo] [kolko gord ____] bese Ivan?

of what how proud was Ivan?
 How proud of what was Ivan?
 b. [Ot koi strani] [po kolko
 from which countries DIST how-many
 studenta ____] predsatvi na Ivan?
 students you-introduced to Ivan?
 How many students from wich countries did you
 introduce to Ivan? (Richards (2004))

Richards (2004) suggests that, in (18), two *wh*-phrases tuck-in different specifiers of the same head C. One argument is that two *wh*-phrase can be separated by the third *wh*-phrases as in (19).

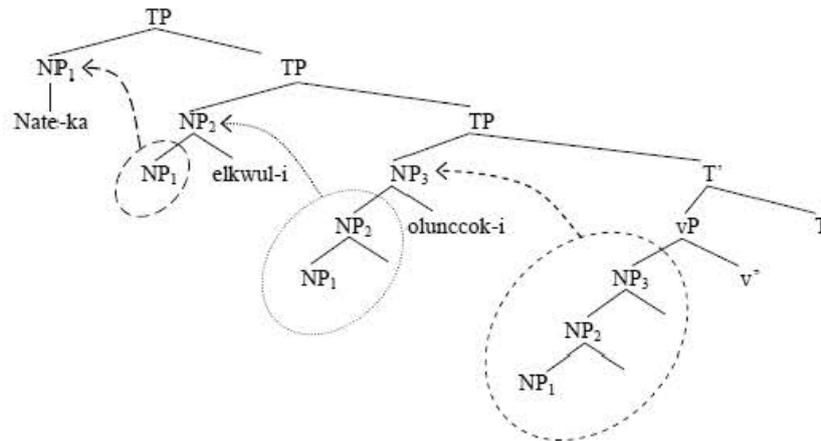
(19) [Ot koi strani] [na kogo]
 from which countries to whom
 [po kolko studenta ____] predsatvi?
 DIST how-many students you-introduced?
 How many students from wich countries did you
 introduce to whom?

Furthermore, he points out that the embedding *wh*-phrase and embedded one do not move simultaneously. Rather movement of embedded *wh*-phrase is preceded by that of embedding *wh*-phrase. In other words, embedding *wh*-phrase moves first to specifier of T and embedded *wh*-phrase undergoes movement subsequently. The landing site of the embedded *wh*-phrase is another specifier position of the identical head T containing some feature that makes the embedding *wh*-phrase move. This implies that the place in which a probe searches goals is not restricted in its c-commanding domain and Agree can occur between head and its specifier.

The derivation of MNCs can be represented as in (20), adopting the new notion of Agree suggested by Richards.⁶⁾

6) The reason NP is used instead of DP is explained in the following paragraph.

(20)



A feature with EPP on T Agrees with the largest NP₃ first and NP₃ moves to specifier of TP, which expands the searching domain. Then the identical feature on T search another goal in its specifier and Agrees with NP₂. This derivation expands the searching space again. T keeps looking for another possible goal in its specifier and Agrees with NP₁. In this derivation, a sentential adverb can be adjoined to any TP at any time (Remember that I assume sentential adverbs are adjoined to TP). This approach can solve the problems Akiyama (2004) and Lee (2008) have, mentioned in (11), (12), and (13).

However, we need a premise that makes this approach plausible. That is Left Branch Extraction. In (20), embedded NPs located in the left branch of embedding NPs keep being extracted. To solve this problem, I will follow Bošković (2008).

Bošković (2008) classifies languages into two groups typologically, depending on whether or not they have articles and generalizes that only languages without articles may allow Left Branch Extraction and scrambling. He argues that this generalization is caused by the distinction between DP and NP. This is because languages allowing Left Branch Extraction and scrambling lack articles related to prototypical D. According to his analysis, *that*, *some*, and possessive are considered adjectives. Bošković (2008) presents a lot of evidence in Serbo-Croatian (SC) that they are adjectives as follows.

- (21) a. In SC, they are adjective morphologically.
- | | | |
|-----------------------------|------------------------------|------------------------------|
| nekim | mladim | djevojkama / |
| some _{FEM.PL.INST} | young _{FEM.PL.INST} | girls _{FEM.PL.INST} |
| nekih | mladih | djevojak |
| some _{FEM.GEN.PL} | young _{FEM.GEN.PL} | girls _{FEM.GEN.PL} |
- b. The SC elements in question can occur in typical adjectival positions.
- Ova knjiga je maja.
- * this book is my
- c. The elements in question can stack up in SC.
- ta moja slika
- * this my picture
- d. They have some freedom of word order.
- | | | |
|----------|----------|--------|
| Jovanova | sivša | kuća / |
| Jovan's | former | house/ |
| sivša | Jovanova | kuća |
| former | Jovan's | house |
- e. A SC pronominalpossessive cannot be modified by a possessive.
- | | | |
|--------------|------------|-------|
| * moj/bogati | susjedov | konj |
| my/rich | neighbor's | horse |

Of evidence above, (21)a is not appropriate evidence in Korean, since Korean does not have morphemes specifying parts of speech. (21)b is not also pertinent in Korean because genitive NPs cannot stand alone morphologically unlike SC. On the other hand, (21c-e) are applicable to Korean. Word order is relatively free within NP as in (22).

- (22) a. ce Ron-uy chayk / i Ron's chayk
 that Ron's book / this Ron's book
 (demonstratives)
- b. aluntawun Serina-uy moksoli
 beautiful Serina's voice⁷⁾
 (adjective)

7) *beautiful Serina's voice* is grammatical only when *beautiful* modifies *Serina*. In Korean, *beautiful* can also modify *voice*. Thus, *aluntawun Serina-uy moksoli* is ambiguous - the object of *beautiful* can be either *Serina* or *Serina's voice*.

There is additional evidence that elements with genitive Case are adjunct of N. (23) depicts that a sentence is degraded when head of NP is elided leaving its adjunct, while the ellipsis of the head of NP leaving NP with genitive Case does not affect the grammaticality of a sentence in English.

- (23) a. Tom's face is smaller than Mary's face.
 b. *White piano is more expensive than black piano.
 c. White piano is more expensive than black one.

(23) a delineates that *face* can be elided, while, in (23)b, *piano* cannot be deleted. The difference between (23)a and (23)b resides in distinct property of elements followed by the head of NP - the former is D, while the later is adjunct of N. To avoid the repetition of the same expression, *one*-replacement is mandatory when adjunct is followed as in (23)c. Meanwhile, Korean shows the somewhat different behavior.

- (24) a *Tom-uy elkul-i Mary-uy elkul-pota
 Tom-GEN face-NOM Mary-GEN face-than
 cak-ta.
 small-DEC
 b. *Hayan phiano-ka kemun phiano-pota
 White pinao-NOM black piano-than
 pissa-ta.
 expensive-DEC
 c. Hayan phiano-ka kemun kes-pota
 White piano-NOM black one-than
 pissa-ta.
 expensive-DEC
 d. Tom-uy elkul-i Mary-uy kes-pota
 Tom-GEN face-NOM Mary-GEN one-than
 cak-ta.
 small-DEC

Mary-uy in (24)a and *kemun* in (24)b behave exactly the same, unlike English, and (24)c and (24)d indicates that *kes* 'one' can be preceded by both *Mary-uy* and *kemun*. This implies that *Mary-uy* in (24)a does

not share its property with *Mary's* in (23)a.

To capitulate briefly, we have shown that Korean lacks DP, and elements with genitive Case are not related to D, but adjunct in NP. This suggestion allows Left Branch Extraction in Korean.⁸⁾

The conclusion to be drawn in this chapter is that each NP with nominative Case in MNCs occupies the distinct specifier positions of the same head and this is because the head can Agree with the goal in its specifier. Left Branch Extraction, which used to be considered as an obstacle of the derivation above is solved through suggesting that Korean lacks DP.

3. MNCs, Case, and position of NPs with nominative Case

Another issue associated with MNCs is how multiple NPs get nominative Case. There have been two major analyses - default Case or Structural Case⁹⁾.

8) English does not allow Left Branch Extraction, while Serbo-Croatian allows as follows.

- a. *Expensive / That_i he saw [t_i car]
 b. Skupa / Ta_i je video [t_i kola] (SC)
 expensive/that_i is seen car
 (2008) (Bošković)

In Korean, Left Branch Extraction seems to be ruled out when left most adjectives is extracted out of NP from the following example.

- *pissan / ce_i ku-ka [t_i cha-lul] po-ass-ta.
 expensive/ that_i he-NOM car-ACC see-PAST-DEC.
 He saw an expensive car.

I suggest that this sentence is degraded not because of the violation of Left Branch Condition. Rather, it is related to the property of EPP that triggers the left element to move. I think EPP in Korea does not make adjective undergo movement. I will not go further on this problem, since it is beyond the scope of this paper.

9) Lee (2008) proposes that nominative Case marker '-i/-ka' in MNCs are default Case because Korean lacks syntactic head that can assign structural nominative Case to the multiple NPs. An argument for this suggestion is that there are some cases that Nominative Case can appear without Tense as in (5).

- a. Chelswu-ka [Younhee-ka kongpuha-key] ha-yss-ta.
 Chelswu-NOM Younghee-NOM study-CAUSATIVE do-PAST-DEC

In this paper, I propose that nominative Case in MNCs are all structural.

Ko (2007) adopted Feature Sharing suggested in Pesetsky and Torrego (2007) and argues that nominative Case multiple NPs get is structural. (25) and (26) show how Agree of Feature Sharing version can occur.

(25) Agree

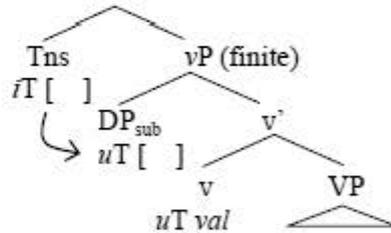
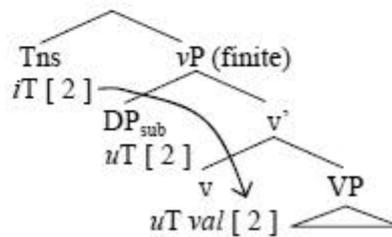
(Feature Sharing version based on Pesetsky and Torrego (2007))

- (i) An unvalued feature F (a probe) on a head H at syntactic location α (F_α) scans its c-command domain for another instance of F (a goal) at location β (F_β) with which to agree.
- (ii) Replace F_α with F_β , so that the same feature is present in both locations.

(26) T-feature sharing and nominative Case in a finite clause
(Pesetsky and Torrego (2007))

-
- Chelswu made Younghee study.
- b. Chelswu-ka [Younhee-ka pyengwon-ey ka-tolok]
Chelswu-NOM Younghee-NOM hospital-to go-to
seltukha-yss-ta.
persuade-PAST-DEC
Chelswu persuaded Younghee go to a hospital.
- c. Chelswu-ka [PRO/caki-ka halyeko] ha-yss-ta.
Chelswu-NOM self-NOM do-to do-PAST-DEC
Chelswu himself tried to do (it).

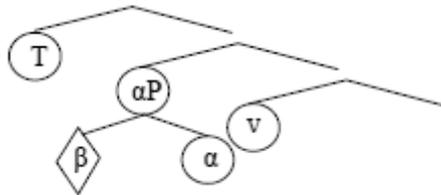
However, [-tense] can involve in nominative Case assigner as well. In this respect, considering nominative Case in MNCs default Case is rather radical.

Step 1: Agree with subject (no valuation)**Step 2: Agree with finite verb (evaluation occurs)**

According to feature sharing, unvalued iT on T searches its c-command domain and undergoes Agree with DP which contains unvalued uT , establishing a link between T and DP. And it keeps probing and agrees with valued $uT val$ on the verb. Then, iT on T, uT on NP and uT on v can have the same feature through (25)b. As a result, DP can get nominative Case (Recall that Pesetsky and Torrego (2000) suggests that nominative Case is the T feature).

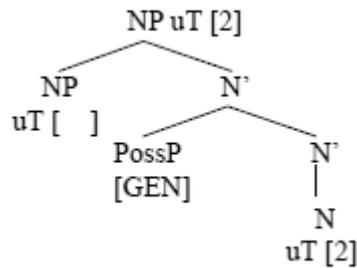
Ko (2007) argues that this Case agreement by feature sharing is obligatory in order not to cause intervention effect only when Case-bearing elements are in c-commanding relationship and if there is an element which is not c-commanding relationship, it does not matter whether or not that element shares the feature with T since it does not cause intervention effect as in (27).

(27) Optional Feature Sharing (Ko (2007))

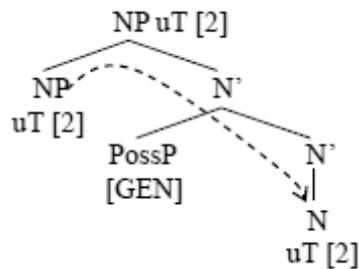


(27) indicates that β can have either nominative Case or genitive Case. She adds that β can have nominative Case when it functions as a probe for α . Amalgamating her proposal with my suggestion that genitive NP is adjunct of N produces representations as in (28).

(28) a. when the highest NP Agreed with



b. when a probe NP Agrees with a valued goal



In (28) a, the largest NP and its head N got valued after sharing T feature by agreeing with T. Then NP in the specifier position of NP looks for a way to get Case and it comes to function as a probe. This probe looks for a valued goal in its c-commanding domain. At last, it

gets the same value, the nominative Case. This analysis can explain the cases that NP with genitive Case is followed and preceded by NPs with nominative Case at the same time as in (29).

- (29) a. Tom-i elkwul-uy oluncok-i phalkah-ta.
 Tom-NOM face-GEN right-NOM red-DEC
- b. Nampanku-ka mwunmyengkwukka-ka
 Southern hemisphere-NOM civilized countries-NOM
 namca-uy swumyeung-i ccalp-ta.
 men-GEN life-span-NOM short-DEC

According to (28), T first agrees with the specifier of vP, NP and then agrees with v. As a result, *oluncok-i* can have nominative Case in (29)a. At this point, *elkwul-uy* already have genitive Case within PossP. Then, *Tom* acts as a probe, it can get nominative Case since there is an element with T value related to nominative Case in its c-commanding domain. Likewise, in (29)b, *mwunmyengkwukka-ka* gets nominative Case after it Agrees with *swumyeung-i* and *Nampanku-ka* gets nominative when it makes an Agree relationship with the valued goal, *mwunmyengkwukka-ka*, in its c-commanding domain.

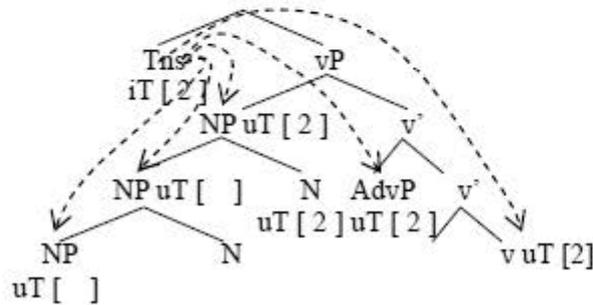
The Feature sharing approach can deal with some cases where advP can host nominative Case as in (30).

- (30) a. Hankwuk-i suthabeksu-ka kephi-ka
 Korea-NOM Starbucks-NOM coffee-NOM
 il talle-ka pissa-ta.
 a dollar-NOM expensive-DEC
 Speaking of Korea, speaking of Starbucks in particular,
 speaking of coffee in particular, it is expensive by a
 dollar.
- b. Hayngsa-ka kayhoysik-i
 Event-NOM opening ceremony-NOM
 isippwun-i yenki-toy-ess-ta.
 twenty minute-NOM delay-PASSIVE-PAST-DEC
 Speaking of the event, speaking of the opening ceremony
 in particular, it was delayed by twenty minutes.

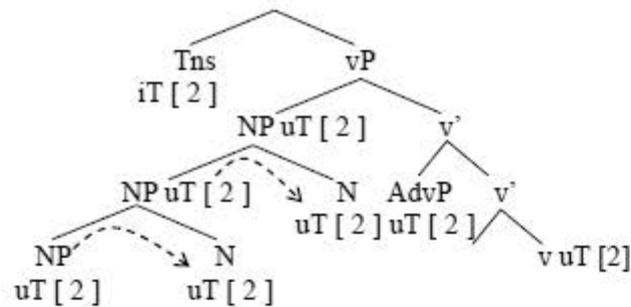
il talle in (30)a and *isippwun* in (30)b are all advPs containing unvalued

uT . They enter into a relationship of Agree with T. After T Agrees with finite verb, advPs can get nominative Case as in (31).

(31) Step 1. Agree with element with uT



Step 2. Agree with finite verb



In addition, (31) delineates that NPs are generated in the specifier position of larger NPs, unlike existing literature (Lee (2008), Choi (2008), Yoon (2007b), among others). This is why (2) is not derived from (3). Here, I propose the relationship between the inner position of NP and Case as follows:

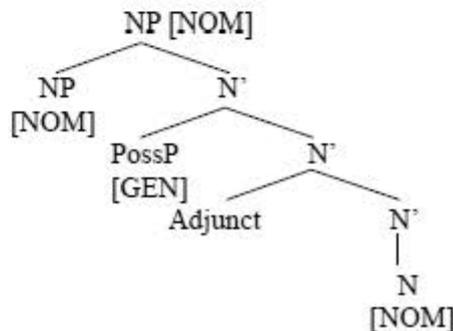
(32) Relationship between the inner position of NP and Case

- (i) NP occupying the specifier position of NP gets only nominative Case when it functions as a probe.
- (ii) Possessive Phrase with genitive Case is adjunct of the head of NP.¹⁰

(32) implies that specifier position of NP is not the place where elements in that position can get Case within NP, while genitive Case is related to Agree within Possessive Case.¹¹⁾

Taking into account discussion so far, the NP structure can be represented as in (33).

(33) a. when PossP precedes Adjunct



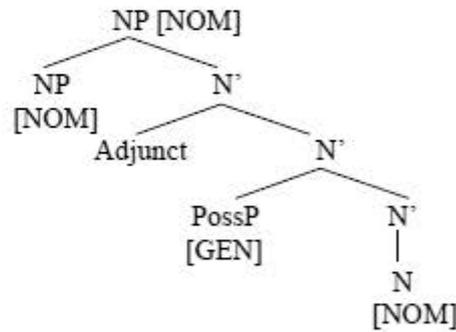
b. when Adjunct precedes PossP

10) NP in PossP cannot have nominative Case because it already got genitive Case within PossP.

11) In Korean, not just possessor but also place, time span, NP adjunct, among others can have genitive Case within NP.

- a. cwungchen-uy hay (place)
midheaven-GEN sun
the sun in the up and high
- b. sipnyen-uy wuceng (time span)
ten year-GEN friendship
friendship which lasted ten years
- c. hayansayk-uy os (NP adjunct)
white color-GEN cloth
white clothes

I will use Possessive Phrase as a term representing phrases containing elements with genitive Case. This does not cause any syntactic difference in NP structure in that other adjuncts can be followed by genitive NP. A lot of arguments supporting (31ii) are already mentioned in the previous chapter.



(33) depicts that Possessive Phrase is a kind of adjunct and can be adjoined before another adjunct adjoined to N' .

4. Interpretation of NPs

While rightmost NP which seems to have theta-role are considered subject based on the traditional and prototypical property of subject, studies have held widely different views on what the real identity of the other NPs. In case of DNCs, Moon (2000), Im (2002), Yoon (2007b), and Lee (2008) suggest that both the first NP and the second one are subjects. Meanwhile, Kuno (1973), Cho (1999), Kim (2001), and Vermeulen (2005) argue that NP which does not get a theta-role is a focus. A suggestion that the first NP is a topic is proposed by Sohn (1981) and Suh (1996). This paper proposes that all NPs in MNCs are subjects in the broad sense.

One of arguments some literature suggests that non-subject NPs are focus is that they have focus interpretation, especially contrastive meaning. The focus meanings of (1) are as follows: (1)a - It is not someone else but *Chelsu* whose arms are long, (1)b - It is not someone else but *Jerry* whose sister is beautiful, (1)c - It is not somewhere else but *Southern hemisphere* where there are a lot of men.

However, Yoon (2007b) presents evidence that non-subjects are not interpreted as foci when NPs are in the inclusive relation as in (33).

- (33) a. Cheli-ka aped-ka hakkyo-ey encey
 Cheli-NOM father-NOM school-to when
 o-si-ese-ni?

- come-HON-PAST-Q
When did Cheli's father come to school?
- b. Cheli-ka khi-ka ku-ta.
Cheli-NOM height-NOM tall-DEC
Cheli is tall.

According to the one of the functions of foci - answer for the *wh*-question, nominative NPs cannot have focus interpretation because the *wh*-phrase has focus interpretation in (34)a. In addition, the first NP in (34)b does not have to be interpreted as focus necessarily.

Kim (2001) points out that the second NP in DNCs cannot be focus, but subject, providing an example showing that the second NP cannot be the answer for the *wh*-question as in (34).

- (34) a. Nwu-ka apeci-ka kyoswu-si-ni?
 who-NOM father-NOM professor-HON-Q
 (lit.) Who is it whose father is a professor?
- b. *John-i nwu-ka kyoswu-si-ni?
 John-NOM who-NOM professor-HON-Q
 (lit.) John's 'who' is a a professor?

However, this is because the processing is difficult when *nwu-ka* is preceded by NP in kinship relationship. Following examples shows that the second NP can be a focus in kinship relation.

- (35) A: Cheli-ka etten atul-i uysa-ci?
 Cheli-NOM which son-NOM doctor-Q?
 Which son of Cheli is a doctor?
- B: Cheli-ka cangnam-i uysa-ci.
 Cheli-NOM eldest son-NOM doctor-DEC.
 The eldest son is a doctor.

So far, I have shown evidence that non-subject NPs are not foci. Even though it is true that the first NP can have focus interpretation, the fact NPs, following the first NP and even adverbs without nominative Case can have focus interpretation in MNCs casts doubt on the claim that the first NP is focus.

Another possibility is topic. In Korean, there is non-controversial topic

marker ‘-nun’. If we assume that left most NPs are topic, we can predict that more than one topic marked NP can be presented in the sentence initial, as examples in (1) and (2) can.

- (36) a. Khokkili-nun tali-nun kil-ta.
 Elephant-TOP leg-TOP long-DEC.
 ≠As for elephants, as for legs especially, they are long.
- b. *?Into-nun khokkili-nun tali-nun kil-ta.
 Indonesia-TOP elephants-TOP legs-TOP long-DEC
 ≠As for Indonesia, as for elephants especially, as for legs especially, they are long.

However, (36)a and (36)b are grammatical only when all NPs except the first topic are interpreted as contrastive, which means a sentence cannot have more than one non-contrastive, typical topic. This fact implies that elements with nominative Case in MNCs are not topic.

In the previous chapter, Rizzi’s (2004) suggestion was mentioned that what distinguishes topic from subject is D-linkedness - the former is always D-linked. Thus, Lee (2008) points out that the first NP in MNCs is not a topic, providing following examples.

- (37) a. Mwusun il-i ilena-ass-ni?
 what matter-NOM happen-PAST-Q?
 what happened?
- b. Chelswu-ka tachi-ess-e.
 Chelswu-NOM get hurt-PAST-DEC
 Chelswu got hurt.
- c. *Chelswu-nun tachi-ess-e.
 Chelswu-TOP get hurt-PAST-DEC
 As for Chelswu, (he) got hurt.

What differentiates between (37)b and (37)c is this: when not any context is given, NP with a topic maker ‘-nun’ cannot be used as an answer for the question, as in (37)c, while (37)b with nominative NP is pertinent answer for the question.

Discussions so far tell us that nominative NPs are not either foci or topics. The last option we have is that they are all subjects. From the point of view of languages which have only one subject forming

one-to-one correspondence with elements with theta-roles, such as English, this sounds a little strange. However, I propose that the idea that all NPs in MNCs are subject is plausible when we extend the definition of subjects as follows.¹²⁾

- (38) Extended definition of subjects
Subjects
- a. must be NPs with nominative Case.
 - b. must be located in specifier position of TP.
 - c. must satisfy either i) or ii) semantically.
 - i. specify following nominative NPs
 - ii. get theta-role from unsaturated predicates

(38)a, (38)b and (38)cii are the same with the traditional definition of subjects. A disparity resides in (38)c i. This definition is the corollary of what we saw in chapter 2 and 3. Given that nominative NP is base-generated in the specifier position of the larger NP and the specifier plays a role in specifying its head in semantic aspect, it is inevitable for the preceding NPs specify the following NP when they all occupy specifier positions of TP. In other words, (38)c i is relevant to NPs except the rightmost NP which does not have a following NP in MNCs. Meanwhile, (38)c ii is applicable to all nominative NPs in MNCs.

12) Kim (2001) provides evidence that the first NP in MNCs is not a subject as follows.

- (i) Plural marker *'-tul'* and subject honorific marker *'-si'* in verbs agree with the second NP.
- (ii) The first NP cannot bind *'-caki* (self)' because it is not a subject but a focus.

However, this paper solves the problem (i) through presenting the inner structure of NP as in (33). What determines whether NP can host subject honorific marker is not specifier or adjunct of NP, but the head of NP. Meanwhile, following example shows (ii) is not true.

John _i	khij-ka	caki _i /ᄃ	pan-eyse	ceyil	khu-ta.
John-NOM	height-NOM	self	classroom-LOC	most	tall-DEC

John is the tallest student in the class.

If the problem (ii) is on the right track, Kim (2001) turns out to be inconsistent in the sense that the first NP bind *'-caki'* instead of the second NP.

Explanation on why all NP have theta-role will be given at the end of this chapter.

A question arises at this time is how on earth NPs in MNCs have topic-like interpretation even though they are subjects. To solve this problem, I will adopt Rizzi's (2004) suggestion that topic and subject share aboutness. This means that not all elements that have topic-like interpretation are topics and subject can have topic-like interpretation.

- (39) Hankwuk-i suthabeksu-ka kephi-ka
 Korea-NOM Starbucks-NOM coffee-NOM
 il talle-ka pissa-ta.
 a dollar-NOM expensive-DEC
 ≠ speaking of Korea, speaking of Starbucks in particular,
 speaking of coffee in particular, speaking of a dollar in
 particular, it is expensive.
 = Speaking of Korea, speaking of Starbucks in particular,
 speaking of coffee in particular, it is expensive
 by a dollar.

Examples above ((30)a is repeated here.) show that *saminchi-ka* cannot have topic-like interpretation because it is not subject, even though it has nominative Case.

From now on, I will examine how my proposal and other studies arguing that all NPs in MNCs are subjects relate to each other. Yoon (2007b) classified subjects into two groups, technically - Grammatical Subject (GS) and Major Subject (MS), pointing out that MNCs have more than one subject. In MNCs, it is GS that is selected by one-place predicate, while MS is not argument of unsaturated predicate. Instead, the predicate of MS is the Sentential Predicate, the thematically saturated sentence. Speaking of semantic relation between MS and SP, MS should be characterized by SP. To sum up, MNCs consists of one GS and more than one MSs as in (40).

- (40) a. Cheli-ka(MS) [SP khi-ka(GS) ceyil khu-ta]
 Cheli-NOM height-NOM most tall-DEC
 Cheli is the tallest.
 b. *?khi-ka(MS) [SP Cheli-ka(GS) ceyil khu-ta]

should be located in distinct specifier positions of TP. This derivation is possible since the identical head T keeps searching its goals in its specifier, which implies that the searching space of a probe extends to specifier position of T as its c-commanding elements move, as Richards (2004) analyzes the Russian-doll questions. Furthermore, we have seen that NPs in MNCs are base-generated in the specifier position of larger NPs and a premise that Korean lacks DP is needed to allow nominative NPs to undergo Left Branch Extraction. It has been discussed that NPs in MNCs get nominative Case through T-feature sharing adopting Pesetsky and Torrego (2007), and Ko (2007). This can explain how adverbs between T and ν can get nominative Case, too. In Korean, unlike English, specifier of NP is the position where some element can get Case within NP. It is also shown that PossP which is related to genitive Case is the adjunct based on the empirical evidence that it can be either preceded or followed by another adjunct, such as AdjP. This relatively free word-order tells us that genitive NP cannot occupy the specifier position of NP.

In regard to the interpretation of NPs in MNCs, this paper has elucidated that they are all subjects when we extend the definition of subjects. Subjects should be NPs with nominative Case and be located in specifier position of TP. In addition, subjects must specify following nominative NPs or unsaturated predicates semantically. At last, the reason all NPs are interpreted as topic was provided. That is because they are all subjects which share "aboutness" with topics semantically, according to Rizzi (2004).

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