Syntactic Case vs. PF Case

Yeun-Jin Jung
(Dong-Eui University)

Jung, Yeun-Jin. 2000. Syntactic Case vs. PF Case. *Journal of the Linguistic Association of Korea, 8*(3), 21-45. With the advance of the minimalist program, the non-canonical or exceptional Case marking phenomena in Korean have apparently posed problems to the current shape of grammar, where Case licensing, in particular, is assumed to be executed under the operation Agree (Chomsky 1999). In this paper I attempt to demonstrate that the analysis of Case in languages like Korean, which use morphology extensively to spell out nominals, cannot be totally based on superficial Case forms, and that licensing of non-canonical or exceptional Case particles in Korean should be executed in the PF-component, assuming that Case licensing mechanism in narrow syntax is universal across languages. I argue specifically, based on Dative subject constructions and *tough*-constructions in Korean, that the 'extra' Nominative Case particles available in Korean are *not* syntactic Cases but rather manifestations of a disjointed morphological feature [+Nominative] (Embick 1997, 2000), inserted only postsyntactically. For this analysis, I assume crucially that Universal Grammar utilizes default Case features (Nominative and Accusative) used to spell out nominals that do not receive a Case specification by syntactic means (Schutze 1999), and that the choice of a feature relevant to a particular language is made at Morphology within PF as a parametric option. **(Dong-Eui University)**

1. Introduction

Case systems in Korean are quite complicated phenomena and have led linguists to pursue seriously how such phenomena can be well accommodated within the general picture of generative grammar. In the current minimalist program (Chomsky 1999), Case is assumed to be licensed through the operation Agree. As such the uninterpretable Case-features of N delete under matching of the φ-features with those

of the corresponding functional heads T or v. Therefore, just like the probe's φ-features delete once its φ-value is determined, the goal's Case value deletes once determined, thus entering into no further agreement relations. If we assume that syntactic operations apply universally, non-canonical Nominative Cases in constructions such as Dative subject constructions and *tough*-constructions in Korean pose problems to the theory, since they seem to require either multiple Case checking or the separation of φ-feature checking and Case-checking.

This paper explores how such non-canonical Case phenomena in Korean can be accommodated in the current shape of the minimalist theory. One might argue that the exceptional Korean Cases are manifestations of some parametric differences in the checking mechanisms internal to narrow syntax. I will show, however, that the surface forms of Cases in Korean may result from non-syntactic reasons. I will argue specifically that the 'extra' Nominative Case particles witnessed in constructions such as Dative subject constructions and *tough*-constructions in Korean are not syntactically licensed Cases but rather manifestations of a disjointed morphological feature (Embick 1997, 2000), inserted only postsyntactically, viz. at PF, which has recently been argued to house PF-movement (Aoun and Benmamoun 1998), Morphology (Halle and Marantz 1993; Embick 1997, 2000), and Phonology (Zubizarreta 1998). In proceeding this analysis, I assume crucially that Universal Grammar utilizes default Case features (Nominative and Accusative) used to spell out nominals that do not receive a Case specification by syntactic means (Schutze 1999), and that the choice of a particular feature relevant to a particular language is made at Morphology within PF as a parametric option.

The organization of this paper is as follows: In section 2, I argue that syntactic Case licensing is done only once, holding Chomsky's (1999) view that Case licensing is part of the operation Agree. I suggest that the burden of non-canonical or exceptional Case licensing should be assigned to other components of grammar, especially to PF. Section 3 provides examples of such non-canonical Cases, based on

Dative subject constructions and *tough*-constructions in Korean. I argue in particular that the 'extra' Nominative Case in those constructions is a manifestation of a disjointed morphological feature [+Nominative], inserted only at Morphology within PF. Section 4 is a brief summary.

2. Syntactic Case

In the current minimalist program (Chomsky 1999), it is assumed that licensing of syntactic Cases is executed in the process of φ-feature checking through the operation Agree. So, for English sentences like *Mary loves John*, when the derivation reaches the stage as in (1) by Merge, the uninterpretable φ-features of the probe v delete under matching of the φ-features of the goal *John*, and in this agreement operation, the uninterpretable feature [+Accusative] of *John* also deletes. Likewise, the uninterpretable feature [+Nominative] of the subject *Mary* deletes under matching of the φ-features of the probe T through the operation Agree.

(1) $[_{TP}$ T $[_{vP}$ Mary $[_{v'}$ v $[_{VP}$ loves John]]]

Therefore, under this framework, once the probe's φ-value and the goal's Case value are determined, φ-features and Case features all delete, no longer entering into further agreement relations. If we assume that the syntactic operation Agree holds universally, Korean surface Case systems appear to pose problems to the Case licensing theory. For instance, first, consider ECM out of tensed clauses as in (2b).

(2) a. Mary-ka [John-i (*elisekkeyto) chencay-i-ess-ta-ko] mitnunta.
-Nom -Nom stupidly genius-be-Past-Dec-C believe
'Mary believes that John was a genius.'
b. Mary-ka John$_i$-ul (elisekkeyto) [t$_i$ chencay-i-ess-ta-ko] mitnunta.
-Nom -Acc stupidly genius-be-Past-Dec-C believe
'Mary believes John to have been a genius.'

As is clear from the contrast between (2a) and (2b) with respect to a sentential adverb, the embedded subject *John* in (2b) must be assumed to have moved to the matrix clause. Since *John* is obviously the embedded subject of a tensed clause and at the same time appears to pick up Accusative Case marker by movement to the matrix clause, it seems that we have to assume that *John* in (2b) checks two Cases, Nominative Case with the embedded T and Accusative Case with the matrix v. Yang (2000) proposes exactly the same line of analysis, with a parameter proposed as in (3). He claims that the actual Case-valuing of the ECMed subject in (2b) has to be performed along with the Case deletion in the matrix clause.

(3) *Parameter for Alternative Case*:
The deletion by the probe through Agree is optional in languages like Korean

However, given the minimalist assumption that Case features are added on N in the formation of the numeration before syntactic computation, it is hard to conceive that the Nominative Case feature of *John* added on in the numeration ends up with a totally different Case value in syntax. Moreover, even if we assume that there exists such a parameter in languages like Korean, this line of analysis cannot escape another serious theoretical problem, especially under the assumption that derivation proceeds strictly by phase (Chomsky 1999). Note that the embedded clause of so-called "ECM" constructions in Korean as in (2b) differs in its structure from that of the English counterpart as in (4b).

(4) a. Mary believes that John (*stupidly) was a genius.
b. Mary (stupidly) believes John to have been a genius.

Unlike English, the embedded clause of Korean ECM constructions has an overt Complementizer as well as an overt Tense morpheme, which indicates that it has a CP structure. Given that CP is a strong

phase (Chomsky 1999), the embedded subject *John* in principle cannot move out of the strong phase CP, since by the time the derivation reaches the matrix vP, the lower CP would have already gone to Spell-Out, blocking any further extraction of 'frozen' elements out of the strong phase. Moreover, the subject *John* need not undergo a further movement, either, since its uninterpretable Nominative Case feature deletes once it agrees with the uninterpretable φ-features of the tensed T.[1)]

The condition (5) cannot save the counter-cyclicity either, because the movement of *John* to the (outer) spec of the embedded CP and a subsequent movement to the spec of the matrix vP for Case reasons would create an improper chain. This problem, however, does not arise with English ECM since its embedded clause is a weak phase with a defective T. Therefore, raising the subject *John* out of the embedded clause in Korean sentences like (2b) should be motivated by something other than purely syntactic reasons that at the same time can overcome counter-cyclicity.

(5) *Phase Impenetrability Condition* (Chomsky 1999):
The domain of H is not accessible to operations outside HP, but only H and its edge.

Another instance of Case phenomena which seems to pose problems to the minimalist assumptions includes multiple Nominative/Accusative constructions, as in (6).

---

1. I assume here that the subject in a tensed clause enters the numeration with [+Nom] only. If it were optionally loaded with [+Acc] in the numeration, as suggested by an anonymous reviewer of the paper, the uninterpretable φ-features of the embedded T would remain undeleted until LF, since the subject NP with [+Acc] is not the proper goal of the probe T. Therefore, the surface Accusative Case on the subject is not something that can be syntactically licensed.

(6) a. Mary-ka son-i yeypputa.
-Nom hands-Nom pretty
'Mary's hands are pretty.'
b. Mary-ka John-ul son-ul ttayliessta.
-Nom -Acc hand-Acc hit
'Mary hit John's hand.'

If we assume the view that the 'extra' Nominative and Accusative Cases in *Mary-ka* in (6a) and *John-ul* in (6b) are syntactically licensed Cases, the availability of multiple Cases, again, raises problems to the minimalist theory, where Case licensing is part of the operation Agree. One could attempt to account for such peculiarities in Korean by manipulating the internal checking mechanisms: since the φ-features of T or v in (6) still remain until PF even after Agree, they may be engaged in other operations of Agree, thus ensuring further Case checking. In fact, Yang (2000) takes such a stance, claiming the following parameter for multiple Case checking in Korean:

(7) *Parameter for Multiple Case*
The deletion of the probe through Agree is optional in languages like Korean.

This claim depicts that the φ-features of the probe T in (6a) and the probe v in (6b) may match with the φ-features of the two Ns involved consecutively. However, given that the operation Agree requires matching of φ-feature sets between the probe and the goal, it seems highly implausible that the φ-feature set of a certain functional head can be compatible with more than one N, which might contain different contents of φ-features of their own, as evidenced from (8).

(8) a. Mary-ka chinkwu-tul-i elkwul-i yeypputa.
-Nom friend-Pl-Nom face-Nom pretty
'Mary's friends' faces are pretty.'
b. Bill-i John-ul yetongsayng-ul son-ul capessta.
-Nom -Acc sister-Acc hand-Acc held
'Bill held John's sister on the hand.'

Thus, the problems so far point out that dealing with surface Cases all within narrow syntax cannot escape ad hoc explanations, especially in languages like Korean which usually utilize morphology extensively to spell out nominals. Moreover, aside from the theory-internal problems, the view that the ECM *lul* in (2b) and the 'extra' Nominative/ Accusative Case particles attached to the possessor NP in (6) are all real Case markers have been challenged by many authors on empirical grounds as well. A common conclusion that has been reached is that the particles at issue are not real Case markers but rather focus markers for numerous syntactic and interpretive reasons (see Yoon (1990), Suh (1992), and Cho (1993) for the focus analysis of the extra Nominative/Accusative Case particles in sentences like (6); see Lee (1991), Yoon (1987), Yoon (1989), and Schutze (2000) for the focus analysis of the ECM *(l)ul*).

Along with this line, I argued further in Jung (2000) that multiple Case markers found in sentences like (2b) and (6) are instances of positional focus markers that are manifested via access to PF-movement to the domain of either vP or TP[2] and Morphology, with the assumption that the feature [+focus] is a [PF[+Interpretable]] feature, following Kidwai (1999), its interpretation being heavily dicourse-conditioned.[3]

---

2. It is claimed in Jung (2000) that [+focus] is checked at the outer spec of XP by XP's focus licensing head (T or v) and realized as a positional focus marker--*(l)ul* at the spec of vP and *ka* at the spec of TP--in the PF-component. For possibilities of PF movement on the outcome of syntactic computation, see Aoun and Benmamoun (1998) and Kidwai (1999).

Under this line of analysis, not only can the problems of the Case analysis, viz. its ad hoc nature and counter-cyclicity matter and so on, be resolved, but the core nature of the focus interpretation that the extra particles at issue invariably get can be captured systematically.

Thus, if we assume the correctness of the focus analysis of the extra Nominative or Accusative Case particles above, it is suggested that surface Case forms in Korean do not necessarily ensure that they are syntactically licensed Cases. In the following section, I will show that the extra Nominative Case particles found in Dative subject constructions and *tough*-constructions in Korean exemplify non-syntactic Cases that are licensed at PF.

3. PF Case

3.1 Dative Subject Constructions

A salient characteristic of Dative subject constructions as in (9) is that the Experiencer argument is marked as Dative Case and the Theme argument as Nominative Case.

(9) a. Mary-eykey paym-i mwusepta.
-Dat snake-Nom fearful 'Mary is fearful of snakes.'
b. Mary-eykey John-i cohta.
-Dat -Nom like 'Mary likes John.'

If the analysis of Case is only based on the surface Case forms, the superficial Case facts in (9) would lead us to conclude that the "Case"

3. I assume with Kidwai (1999) that structures derived via PF-movement are interpreted at a level distinct from LF, viz. Domain Discourse, located at the edge of PF. As noted in Kidwai (1999), the question that arises is whether there can be Domain Discourse and LF interactions. In this paper, I will take the stance that both PF and LF outputs are accessed by the C-I systems, so that discursive meaning is layered over logico-semantic meaning.

of the Nominative object is a real Nominative Case that must be syntactically licensed. However, as explicitly argued in Ura (1999, 2000), in Korean (and Japanese) Dative subject constructions, the φ-features of T in reality agree with the Dative subject, rather than the Nominative object. As evidence for T's agreement with the Dative subject in the contents of φ-features, Ura provides the following data: The Dative subject can bind a subject-oriented anaphor, as in (10a); it can control the missing subject of an adjunct-subordinate clause, as in (10b); it can trigger the subject-oriented honorification, as in (10c).

(10) a. John-eykey$_i$ Harry-ka$_k$ [casin-uy$_{i/*k}$ sengkong]-ul]-wihayse philyoha-ta
-Dat -Nom self-Gen success-Acc-for need-Dec
'Lit: John needs Harry for self's success.'

b. [PRO$_i$ haksayng-i-myense], John-eykey$_i$ [manhun ton]-i philyoha-ta.
student-be-though -Dat much money-Nom need-Dec
'Although PRO being a student, John needs much money.'

c. Sensayng-nim-ekey ton-i philyoha-si-ta.
teacher-Hon-Dat money-Nom need-Hon-Dec
'The teacher needs money.'

On the other hand, the Nominative object does not exhibit any of such syntactic properties for agreement, as illustrated below:

(11) a. John-eykey$_i$ Harry-ka$_k$ [casin-uy$_{i/*k}$ sengkong]-ul]-wihayse philyoha-ta
-Dat -Nom self-Gen success-Acc-for need-Dec
'Lit: John needs Harry for self's success.'

b. [PRO$_{k/*i}$ Mikuksimin-i-myense], apeci-ekey$_k$ thongyekkwan-i$_i$ philyoha-si-ta
US citizen-be-though father-Dat interpreter-Nom need-Hon-Dec
'Although PRO bein a US citizen, father needs an interpreter.'

c. *Ku haksayng-eykey kyoswunim-i philyoha-si-ta.
the student-Dat professor-Nom need-Hon-Dec
'The student needs the professor.'

Based on these observations, Ura proposes that in Korean (and Japanese) T's φ-feature checking may be executed independently of T's Nominative Case-feature checking. That is, T's (strong) φ-feature is checked with the Dative subject (at overt syntax), which is assumed to have Dative Case as an inherent Case assigned by the light verb v, whereas T's (weak) Nominative Case feature is checked with the Nominative object (at LF).[4]

Although Ura's observations on the agreement facts are correct, another important aspect that should be noted is that Nominative Case marking is completely possible with the Experiencer subject in Korean. So sentences in (12) illustrate that Dative Case of the Experiencer subject can freely alternate with Nominative Case.

(12) a. Mary-ka paym-i mwusepta.
-Nom snake-Nom fearful
'Mary is fearful of snakes.'
b. Mary-ka John-i cohta.
-Nom -Nom like
'Mary likes John,'

Given that Nominative Case is completely a possible option for the Experiencer subject, T's Nominative Case feature cannot be considered a weak feature, but should be taken as being checked at overt syntax. As a matter of fact, as (13) illustrates, the Nominative Case-marked Experiencer subject exhibits exactly the same kind of subjecthood that the Dative subject obtains. Therefore, assuming with Chomsky (1999), where Case licensing is part of the operation Agree, the Nominative Case of the Experiencer subject in (13) must be checked off in the

4. Note that Ura (1999, 2000) assumes Chomsky (1995), whereby T is assumed to have two kinds of uninterpretable features, that is, Case-feature and φ-features. In Chomsky (1999), on the other hand, which this paper is adopting, T is assumed to bear only φ-features, while Case features are borne by nominals.

process of φ-feature checking with T, not delayed until LF.

(13) [PRO$_i$ pwuca-i-myense], kyoswunim$_i$-i casin$_i$-uy cha-ka upsu-si-ta.
rich-be-though professor-Nom self-Gen car-Nom not have-Hon-Dec
'Lit: Although PRO being rich, the professor does not have his self car.'

From these observations, I suggest that what is actually going on in the Case alternation between (9) and (12) is that the Experiencer subject bears a structural Case feature associated with T's φ-features, in addition to its inherent Dative Case (Chomsky 1999), and the ultimate form of the Case alternation is restricted by a morphological well-formedness condition like (14), which operates at Morphology within PF.

(14) Case particles cannot co-occur morphologically.

In other words, the Experiencer subjects in (9) and (12) both have inherent Dative Case feature assigned by V and structural Nominative Case feature, and the morphological realization of each feature is mutually exclusive due to (14).[5) 6)]

---

5. This might sound quite a strong claim, especially considering data like the following:

(i) Mary-eykey-ka paym-i mwusepta.
-Dat-Nom snake-Nom fearful
'Mary is fearful of snakes.'

In (i) the Experiencer subject is marked with Dative plus Nominative Case particles. This phenomenon has been considered a typical case of "Case stacking" in the literature. However, Schutze (2000) argues quite convincingly that the Nominative Case particle stacked with Dative Case in sentences like (i) is not a real Case at all, but rather a focus maker. Under this focus analysis, which I believe is correct, the combination of *eykey* plus *ka* in (i) is not a problem to the generalization (14). See Schutze (2000) and Jung (2000) for detailed arguments.

Another potential counter-example to (14) is the combination of *eykey* plus a real Case marker, as shown in (ii), especially when the Case marker is Genitive.

(ii) a. Mary-eykey-uy senmwul
-to-Gen present 'a present to Mary'

An underlying guideline of this proposal is that in languages like Korean, which uses morphology extensively to spell out nominals, morphological realizations of surface particles are outcomes of intricate interaction between syntax and morphology, in the sense of Distributed Morphology (Halle and Marantz 1993). Distributed Morphology operates in terms of Late Insertion, the idea that phonological features are supplied to terminal nodes which contain abstract features only at Morphology (within PF), with the syntax proper manipulating set of features. So when morphemes are realized by Late Insertion at Morphology, the realization itself is subject to language-particular morphological well-formedness conditions (Cf. Cho and Sells 1995). For instance, sentences in (15) instantiate that the topic/contrastive marker always takes priority over Nominative and Accusative Case markers in its morphological realization.

---

b. Mary-eykeyse-uy senmwul 'a present from Mary'
-from-Gen present

Notice, however, that *eykey* has been analyzed as either Dative Case or a postposition in the literature. Given that Dative Case is in principle a Case inherently assigned by V, not possibly by N, it seems implausible that *eykey* in (i) is a real Dative Case. Therefore, I rather assume it is a postposition that patterns with other postpositions, as illustrated in (iii).

(iii) a. Keki-lul kanuntey-nun, Seoul-puthe-ka coh-ta.
there-Acc go-Top -from-Nom good-Dec
'In order to go there, it is good to go from Seoul.'
b. Keki-lul kanuntey-nun, Seoul-puthe-lul thayhay-la.
there-Acc go-Top -from-Acc choose-Imp
'In order to go there, choose to go from Seoul.'

6. An anonymous reviewer points out that *ka* in *Mary-eykey-ka* in footnote (5) could be a morphological realization of [+Nom] + focus[+Nom]. However, the particle *ka* at issue behaves distinctively from the Nominative *ka* in many respects. I will not go into the details of the arguments for space reasons here. See Schutze (2000) for the detailed discussions of the issue.

(15) a. Mary-ka John-un mannessta.
-Nom -Top/Contr met
'Mary met John.'
b. Mary-nun John-ul mannessta.
-Top/Contr -Acc met
'Mary met John.'

This kind of priority rule determining the ultimate morphological form is not something that can be specified in the syntax proper, but rather it is a morphological rule that applies at the terminal nodes reached by the syntactic computation. In this sense, the condition (14) may well be taken as a working condition at Morphology in Korean.

Then, the question that directly concerns us is how the Nominative Case of the Theme object in (9) and (12) is licensed. Under our present assumption that syntactic Case is licensed through the operation Agree, T in those sentences cannot license the Nominative Case of the Theme object, since, as discussed above, T's φ-features do *not* agree with those of the Theme object. And since T's φ-features delete in the process of Agree operation with the Experiencer subject, they cannot and need not be engaged in another operation of Agree with the Theme object. Therefore, even if we assume that the Theme object is supplied with Nominative Case-feature as its lexical idiosyncrasy upon entering the numeration, the feature cannot be properly licensed in the syntactic computation. Hence, the conclusion deduced from these facts is that the Nominative Case of the Theme object in (9) and (12) cannot be considered a syntactically licensed Case.

I instead propose that it is a manifestation of a disjointed morphological feature [+Nominative], termed PF Case, inserted only at Morphology in the PF-component. This proposal is embedded in the context of Distributed Morphology (Halle and Marantz 1993; Marantz 1994, 1995; Embick 2000). Embick (2000) generalizes the hypothesis of Late Insertion in terms of Feature Disjointness:

(16) *Feature Disjointness*

Features that are phonological, or purely morphological, or arbitrary properties of vocabulary items, are not present in the syntax; syntacticosemantic features are not inserted in morphology.

The aspect of this position that is relevant for the present discussion is that features that have no syntactic status are not present in the syntactic derivation. In fact, the Nominative Case on the Theme object in (9) and (12) has no syntactic relevance in the sense that it is engaged in no agreement relations with T. Note also that the presence or absence of Case-features does not have any LF effects either, since all syntactic Case features, being uninterpretable, delete before reaching LF. This means that the Theme object NP enters into syntactic computation without any Case feature specification. Then, the feature [+Nominative] on the Theme object in (9) and (12) can be best viewed as being inserted only postsyntactically.

A significant question that arises at this point is why the non-canonical Case of the Theme object in (9) and (12) should be Nominative Case in Korean, rather than Accusative Case. Since the Nominative Case at issue is not the kind of Case that is syntactically licensed and hence its morphological form is not something predictable from the derivation, a question naturally arises as to how Morphology determines the right form of Case. Related to this matter, assuming that Universal Grammar utilizes default Case features (Nominative and Accusative) used to spell-out nominals that do not receive a Case specification by syntactic means (Schutze 1999),[7] I suggest that the

7. Schutze (1999) demonstrates that languages use Nominative or Accusative Case as a default spellout universally: while English uses Accusative Case as a default spellout, languages like German, Icelandic, Greek, Russian, and Latin etc. use Nominative Case as a default spellout. Under his approach, default Case is supplied in one fell swoop to all non-Case-receiving positions. In this respect, he suggests, default Case is just one instance of a more general property of

choice of the feature [+Nominative] in Korean is made at Morphology as a parametric option.

Thus, the arguments so far make it clear that the analysis of Case systems in languages like Korean, which use morphology extensively to spell out nominals, cannot be totally based upon the superficial forms of the Case particles. In the following section, I will take up a further instance of non-syntactic Case, based on Korean *tough*-constructions.

3.2 *Tough*-constructions

The so-called Korean *tough*-class constructions as in (17a) and (17b) are apparently of the same kind of constructions except for the Nominative Case and topic markers attached to the sentence-initial element (I will call (17a) type I and (17b) type II hereafter).

(17) a. John-i culkepkey haycwu-ki-ka swipta.
-Nom please-KI-Nom easy-Dec
'John is easy to please.'
b. John-un culkepkey haycwu-ki-ka swip-ta.
-Top please-KI-Nom easy-Dec
'John is easy to please.'

What is of our direct concern in (17) is the three Nominative Cases realized on NPs. If we merely stick to the surface Case forms, all of the three Nominative Cases should be analyzed as the very same kind of Nominative Case that is licensed via the same Case licensing mechanism in syntax. However, I will argue in the paragraphs below that it is not the case at all: the Cases of *ka* in (17b) and *John-i* in (17a) are real syntactic Cases, whereas *ka* in (17a) is a PF Case.

To reach the relevant point, let us first examine the nature of the

---

morphology whereby it always makes available a default spellout for any element that the syntax can deliver to it, in the light of Halle and Marantz (1993).

two constructions. One of the most salient features of the first Nominative Case-marked NP, *John-i*, in Type I is that its occurrence is quite restricted, being sensitive to its co-occurring *tough*-class predicates. As the contrast of grammaticality of (18a) and (19a) implies, its occurrence with Nominative Case marker becomes legitimate only when it is predicated of by a *tough*-class predicate. This restriction, on the other hand, does not apply to its topic-marked counterparts, as illustrated in (18b) and (19b).

(18) a. *John-i [Mary-ka seltukhayssta].
-Nom -Nom persuaded
'John, Mary persuaded.'
b. John-un [Mary-ka seltukhayssta].
-Top -Nom persuaded
'John, Mary persuaded.'

(19) a. John-i [Mary-ka seltukha-ki] swipta.
-Nom -Nom persuade-KI easy
'Lit: John is easy that Mary persuades.'
b. John-un [Mary-ka seltukha-ki] swipta.
-Top -Nom persuade-KI easy
'Lit: John, that Mary persuades is easy.'

This contrast indicates that unlike Type II, the sentence-initial Nominative Case-marked NP in Type I serves as the external argument of the *tough*-class predicate, just like the English counterpart as in (20), in which the binding relation of the subject with the gap within the embedded clause is assumed to be mediated by a null operator moved to the Spec of CP of the embedded clause (Contreras 1986).

(20) John is easy [0_i [PRO to please t_i]]

The evidence that Type I *tough*-constructions actually involve null operator movement, contrary to Type II, comes from their various island

effects, as illustrated below.

(21) a. *Wh-island*:
*I os-i [[Mary-ka way sassnun-ci]
this dress-Nom -Nom why bought-CI
ihayha-ki-ka] elyep-ta.
understand-KI-Nom difficult-Dec.
'Lit: This dress is difficult to understand why Mary bought.'

b. *Complex NP island*:
*i os-i [[Mary-ka pati-ey ipko kaess-ta-nun
this dress-Nom -Nom party-to wear went-NUN
somwun]-ul mit-ki-ka] elyep-ta.
rumor-Acc believe-KI-Nom Difficult-Dec
'Lit: This dress is difficult to believe the rumor that
Mary went to the party with.'

c. *Adjunct island*:
*I os-i [Mary-ka [ipepo-ki-ceney] ton-ul
this dress-Nom -Nom try on-KI-before money-Acc
cipulhaessta-ko mit-ki-ka] elyep-ta.
paid-C believe-KI-Nom difficult
'Lit: That this dress, (we) believe Mary paid for
before trying on is difficult.'

These observations, therefore, further support the claim that the first NP in Type I *tough*-constructions is the external argument of the *tough*-predicate. If this is the case, the Nominative Case attached to it is the canonical Nominative Case that is licensed by the matrix T.

On the other hand, the NP with topic marker in Type II does not show any direct sensitivity to the *tough*-predicate, as shown above. The immediate implication of this fact is that the topic-marked NP does not serve as the external argument of the *tough*-class predicate, but rather the topic of the sentence that has undergone topicalization from the

internal argument position of the embedded verb.

(22) John-un$_i$ [pro t_i culkepkey haycwu-ki]-ka swip-ta.
-Top please-KI-Nom easy-Dec
'John, [to please t] is easy.'

One might argue alternatively that (17a) and (17b) are exactly of the same structure, differing only in the respect that (17b) underwent a further topicalization from the subject position of the matrix clause, as in (23).

(23) [John-un$_i$ t_i [0 [pro culkepkey haycwu-ki]]-ka swip-ta].

However, this kind of conjecture is immediately challenged by the fact that Type II shows none of the island effects that Type I exhibited above, as in (24). If Type II constructions started from Type I, they would show exactly the same kinds of island effects related to the movement of null operator.

(24) a. *Wh-island*:
I os-**un** [[Mary-ka way sassnun-ci]
this dress-Top -Nom why bought-CI
ihayha-ki-ka] elyep-ta.
understand-KI-Nom difficult-Dec.
'Lit: That this dress, (we) understand why Mary bought is difficult.'

b. *Complex NP island*:
I os-**un** [[Mary-ka pati-ey ipko kaess-ta-nun
this dress-Top -Nom party-to wear went-NUN
somwun]-ul mit-ki-ka] elyep-ta.
rumor-Acc believe-KI-Nom Difficult-Dec.
'Lit: That this dress, (we) believe the rumor that Mary

went to the party with is difficult.'

c. *Adjunct island*:
I os-**un** [Mary-ka [ipepo-ki-ceney] ton-ul
this dress-Top -Nom try on-KI-before money-Acc
cipulhaessta-ko mit-ki-ka] elyep-ta.
paid-C believe-KI-Nom difficult
'Lit: This dress is difficult to believe Mary paid before trying on.'

For this, I suggest that the lack of island effects in Type II is only apparent if we assume that the internal arguments of the (most) embedded clause underwent a local topicalization, as illustrated in (25), hence avoiding the island effects.

(25) a. [[i os-**un** Mary-ka way sassnun-ci]
this dress-Top -Nom why bought-CI
ihayha-ki-ka] elyep-ta.
understand-KI-Nom difficult-Dec.
'Lit: [That (we) understand why this dress, Mary bought] is difficult.'

b. [[[[i os-**un** Mary-ka pati-ey ipko kaess-ta-nun]
this dress-Top -Nom party-to wear went-Dec.-NUN
somwun]-ul mit-ki-ka] elyep-ta.
rumor-Acc believe-KI-Nom difficult-Dec.
'Lit: [That (we) believe the rumor that this dress, Mary went to the party with] is difficult.'

c. [[i os-**un** [Mary-ka ipepo-ki-ceney]]
this dress-Top -Nom try on-KI-before
pro ton-ul cipulhaessta-ko] mit-ki-ka] elyep-ta.
money-Acc paid-C believe-KI-Nom difficult
'Lit: [That (we) believe that Mary paid money before this dress, she tried on] is difficult.'

Indeed, examples in (25) become worse when the topic element moves beyond the local domain.

(26) a. ??*[i os-**un** [John-i [Mary-ka way sassnun-ci]
this dress-Top -Nom -Nom why bought-CI
ihayha-ki-ka]]] elyep-ta.
understand-KI-Nom difficult-Dec.
'Lit: [That this dress, John understands why Mary bought]
is difficult.'

b. ??*[i os-**un** [John-i [Mary-ka pati-ey ipko
this dress-Top -Nom -Nom party-to wear
kaess-ta-nun somwun]-ul mit-ki]]-ka elyep-ta.
went-NUN rumor-Acc believe-KI-Nom difficult-Dec.
'Lit: [That this dress, John believes the rumor that Mary
went to the party with] is difficult.'

c. ??*[i os-**un** [John-i [Mary-ka ipepo-ki-ceney
this dress-Top -Nom -Nom try on-KI-before
ton-ul cipulhaessta-ko] mit-ki-ka]]] elyep-ta.
money-Acc paid-C believe-KI-Nom difficult
'Lit: [That this dress, John believes that Mary paid money
before trying on] is difficult.'

Given that the topic-marked *tough*-constructions all involve a local topicalization, it means that unlike the Nominative Case-marked subject in Type I, the topic-marked NP in Type II is located within the embedded clause. Therefore, if the proposed analysis of Type II *tough*-constructions is correct, the best candidate of the external argument of the *tough*-predicate in Type II is the clause headed by *-ki*. The fact that there exist constructions like (27) in Korean further supports the claim that the external argument of the *tough*-predicate in Type II is the *ki*-clause.

(27) [(Wuli-ka) John-ul culkepkey haycwu-ki]-(ka) swip-ta.
we-Nom -Acc please-KI-Nom easy-Dec
'Lit: [That (we) please John] is easy.'

If so, the Nominative Case realized at the *ki*-clause is no surprise: it should be a real Nominative Case that is licensed by the matrix T. Under the GB framework, nominal particles like *-ki* were often analyzed as a morphological rescuer which is inserted to make the clause eligible for Case assignment (Kang 1988). With the minimalist assumptions (Chomsky 1999), however, the nominal particle *-ki* cannot be considered simply a morphological means to get Case. It must be present from the numeration, loaded with inherent φ-features and an optional Case-feature, differing from full nominals only in its affixal nature. The evidence that the particle *-ki* is actually loaded with φ-features come from the following data:

(28) a. [John-ul culkepkey haycwu-ki]$_i$-nun *ku cachey*$_i$-ka swipci
-Acc please-KI-Top itself-Nom easy
ahn-ta.
not-Dec
'That (we) please John itself is not easy.'
b. John-uy sengkyek$_i$-un *ku cachey*$_i$-ka hungmilopta.
John-Gen personality-Top itself-Nom intriguing
'John's personality itself is intriguing.'
c. Johni-un *ku casin*$_i$-i/**ku cachey*$_i$-ka kekcengtoynta.
-Top himself-Nom/itself-Nom worry
'John worries about himself.'

(28a) shows that the anaphor *ku cachey* can be co-referential with the *ki*-clause. (28b) shows that the very same anaphor can be co-referential with the full noun *John-uy sengkyek*, but not with *John*, as shown in (28c). This suggests that the nominal particle *-ki* has its own φ-features, just like full nominals.

Another piece of evidence for the presence of φ-features in the particle *-ki* comes from the possibility that the clause headed by *-ki* can be manifested by a null pronoun.

(29) a. [**pro** elyep-ciman] John-un culkepkey haycwu-ki-ka swipta.
difficult-but -Top please-KI-Nom easy
Lit. 'Although being difficult, that John, (we) please is easy.'
b. [[*(talun salamtul-ul) culkepkey haycwu-ki-nun*] elyep-ciman]
(other people-Acc) please-KI-Top difficult-but
John-un culkepkey haycwu-ki-ka swipta.
-Top please-KI-Nom easy
'Lit: Although that (we) please (other people) is difficult,
that John, (we) please is easy.'

The missing subject of the adjunct-subordinate clause in (29a) is something like the italicized *ki*-clause as shown in (29b). If the null pronoun pro is a null counterpart of an overt full nominal loaded with φ-features, the possibility of pro in place of the *ki*-clause leads to the conclusion that the *ki*-clause behaves just like full nominals, thus eligible for Case licensing.[8)]

The Nominative Case marker attached to the *ki*-clause in Type II presents an interesting contrast with that in Type I. As noted earlier, the external argument of the *tough*-predicate in Type I is the subject *John*, and hence, again, under the strict interpretation of the minimalist program (Chomsky 1999), the matrix T's φ-features can no longer enter into agreement relations with the *ki*-clause after matching with the φ-features of the subject NP and deleting. In this respect, the extra Nominative Case available for the *ki*-clause in Type I constitutes

8. The apparent optionality of Nominative Case witnessed in the *ki*-clause in Type II is not due to optional Nominative Case checking, but due to an optional deletion operation at Morphology in the PF-component, which is quite a common practice in Korean Case morphology, especially when the Nominative-Case holder is a clause.

another instance of PF Case. In other words, the Nominative Case attached to the *ki*-clause in Type I is not the morphological realization of syntactic Nominative Case feature, having no syntactic effects whatsoever. It can be, therefore, best construed as a morphological realization of a disjointed morphological feature [+Nominative], inserted only postsyntactically to spell out the nominal expression, just like the Nominative Case of the Theme object in Dative subject constructions.

The arguments thus far provides a clear stance that the account of how Case licensing is executed in Korean should be contingent upon what nature the Case-marked NPs have in the sentence. This is especially true given that Korean is a language that uses complex morphology to spell out nominals. Therefore, the real status of the surface morphemes which happen to be of the same form as the canonical Case morphemes can only be determined with careful investigation into the construction-particular properties in which they occur.

4. Conclusion

In this paper I attempted to demonstrate that the analysis of Case in languages like Korean, which utilize morphology extensively to spell out nominals, cannot be totally based upon the superficial forms of Cases, and that licensing of non-canonical or exceptional Case particles in Korean, should be executed in other components of Grammar than in narrow syntax. I argued especially that the 'extra' Nominative Case particles in Dative subject constructions and *tough*-constructions in Korean are *not* syntactic Cases, but rather PF Cases, which are manifestations of a disjointed morphological feature [+Nominative], inserted only at Morphology in the PF-component. The proposed analysis, therefore, provides an implication that the real status of the surface morphemes which happen to be of the same form as the canonical Case morphemes can only be determined with careful investigation into the construction-particular properties in which they occur.

References

Aoun, Joseph, and Elabbas Benmamoun. 1998. "Minimality Reconstruction, and PF movement," *Linguistic Inquiry* 29.4.

Cho, In-Ja. 1993. "A Reconsideration of Case Assignment in Inalienable Possession constructions in Korean," in S. Kuno et al. eds., *Harvard Studies in Korean Linguistics*, 252-261.

Cho, Young-Mee Yu and Peter Sells. 1995. "A Lexical Account of Inflectional Suffixes in Korean," *Journal of East Asian Linguistics* 4, 119-174.

Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge: MIT Press.

Chomsky, Noam. 1998. "Minimalist Inquiries: The Framework. *MIT Occasional Papers in Linguistics* 15.

Chomsky, Noam. 1999. "Derivation by Phase. Ms. MIT.

Contreras, Heles. 1986. "Open and Closed A'-chain," in P. Coopmans et al. (eds.), *Formal Parameters of Generative Grammar-II*. University of Utrecht.

Cummins, Sarah and Yves Roberge. 1994. "Romance Inflectional Morphology In and Out of Syntax," *MIT Working Papers in Linguistics 22*.

Embick, David. 1997. "Voice Systems and the Syntax/Morphology Interface," in H. Harley (ed.) *Proceedings of the Penn/MIT Workshop on Aspect, Argument Structure and Events*. Cambridge: MIT Press.

Embick, David. 2000. "Features, Syntax, and Categories in the Latin Perfect," *Linguistic Inquiry* 31.2.

Halle, Morris and Alec Marantz. 1993. "Distributed Morphology," in S. J. Keyser and K. Hale eds., *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, 111-176. Cambridge: MIT Press.

Jung, Yeun-Jin. 2000. "Multiple Case Marking and Its PF Interpretation," Ms. Dong-Eui University.

Kidwai, Ayesha. 1999. "Word Order and Focus Positions in Universal Grammar," in G. Rebuschi and L. Tuller eds., The Grammar of Focus. New York: Oxford University Press.

Lee, Jeong-Shik. 1991. "Case Minimality: Case Alternation in the Korean ECM Constructions," in S. Kuno et al., *Harvard Studies in Korean Linguistics*, 317-828.

Marantz, Alec. 1994. "A Late Note on Late Insertion." Ms., MIT.

Marantz, Alec. 1995. "'Cat' as a Phrasal Idiom: Consequences of Late Insertion in Distributed Morphology," Ms., MIT.

Schutze, T. Carson. 1999. "On the Nature of Default Case," Ms., University of

California, Los Angeles.

Schutze, T. Carson. 2000. "Does Korean Really Have 'Case Stacking'?, Paper presented at the 12th International Conference on Korean Linguistics, Prague, the Czech Republic.

Suh, Sung-Ki. 1992. "The Distribution of Topic-& Nominative-marked Phrases in Korean: The Universality of IP Structure," in Andreas Kathol and Jill Beckman eds., *MIT Working Papers in Linguistics* 16, 207-221.

Ura. Hiroyuki. 1999. "Checking Theory and Dative Subject Constructions in Japanese and Korean," *Journal of East Asian Linguistics* 8.3.

Ura. Hiroyuki. 2000. *Checking Theory and Grammatical Functions in Universal Grammar*. University of Oxford Press.

Yang, Dong-Whee. 2000. "Atypical Aspects of Korean Case: A Minimalist Perspective." Paper presented at the 12th International Conference on Korean Linguistics, Prague, the Czech Republic.

Yoon, James. 1987. "Some Queries Concerning the Syntax of Multiple Subject Constructions in Korean," in S. Kuno et al., *Harvard Studies in Korean Linguistics*, 138-162.

Yoon, James and Jeong-Me Yoon. 1991. Chain Condition, Ambiguity of Government and Derivational Grammars, in Tim Sherer ed., *Proceedings of the North East Linguistic Society* 21, 415-429.

Yoon, Jeong-Me. 1989. "ECM and Multiple Subject Constructions in Korean," in S. Kuno et al., *Harvard Studies in Korean Linguistics*, 369-381.

Yoon, Jong-Yurl. 1990. *Korean Syntax and Generalized X-bar Theory*. PH.D. Dissertation, University of Texas at Austin.

Zubizarreta, Maria Luisa. 1998. *Prosody, Focus, and Word Order*. Linguistic Inquiry Monograph 33, Cambridge: MIT Press.

Dept. of English Language and Literature
Dong-Eui University
24 Kaya-dong, Pusanjin-gu
Pusan 614-714, Korea
E-mail: yjjung@hyomin.dongeui.ac.kr
Tel: +82-51-890-1230
Fax: +82-51-890-1222