Unpronounced Case Markers and Apparent Subject-Object Asymmetry*

Hee-Don Ahn (Konkuk University) 
Sungeun Cho (Ewha Womans University)

Hee-Don Ahn and Sungeun Cho. 2006. Unpronounced Case Markers and Apparent Subject-Object Asymmetry. Studies in Modern Grammar 43, Case in Korean is morphologically realized by case markers, which attach to nouns as suffixes. The non-pronunciation of case markers on the NPs gives rise to two issues that call for an account. First, whereas case markers can be unpronounced in complement positions, those in canonical subject positions must be pronounced. Second, object wh-phrases without case markers can have either D-linked or non-D-linked interpretation, while subject wh-phrases without them have only D-linked interpretation. Our analysis is based on the following assumptions: (i) Nominals with unpronounced case markers are DPs whose heads are phonologically null Ds, (ii) Since EPP feature is a selectional P feature governing PF configuration, the head of the EPP satisfier must be overtly realized (Landau 2005). We advance two claims: (i) Since subjects in Korean undergo movement, the head of the subject nominals, namely case markers, must be phonetically visible. (ii) Since wh-phases without case markers in derived positions are left-dislocated nominals with null pronoun pro located in argument positions, only D-linked reading is induced like wh-resumption or wh-clitic doubling constructions observed in other languages.

Key words: unpronounced case markers, D-linked interpretation, EPP, left-dislocation, wh-resumption

*We would like to thank Ilan Hazout for his extensive discussion on this material. Thanks also go to Kiyong Choi, Dae-Ho Chung, Jae-Sung Hong, Yong-Tcheol Hong, Hong-Bin Im, Yeun-Jin Jung, Sun-Woong Kim, Jeong-Sik Lee, Myung-Kwan Park and Chang-Yong Sim for their helpful inputs and suggestions on earlier ideas of this paper. Parts of this paper were presented at Seoul Linguistic Forum 2005 at Seoul National University (Dec/10/05) and Workshop on Ellipsis in Korean at Dongguk University (Dec/23/05). Special thanks to anonymous reviewers for extremely careful reading of this paper with valuable comments and criticisms.
1. Introduction

Case in Korean can be morphologically realized by case markers, which attach to nouns as suffixes. When the nouns are in complement positions, the structural case markers can be unpronounced (Ahn 1996, Hong 1994, Kim 1998a,b among others). For example, an accusative case marker *lul* can be unpronounced when nominals occur in the complement positions, as shown in (1).

(1) a. Mary-ka Sue-(lul) manna-ss-e.
    Mary-Nom Sue-(Acc) meet-Past-Dec
    'Mary met Sue.'

b. na-nun Mary-ka Yenghi-(lul) manna-n sasil-ul
    I-Top Mary-Nom Yenghi-Acc meet-Rel fact-Acc
    not-know-Past-Dec
    'I didn't know the fact that Mary met Yenghi.'

When a nominal is in a "canonical" subject position, however, the nominative case marker cannot be unpronounced.\(^1\)

(2) a. John-ul Mary-*ka) po-ass-e.
    John-Acc Mary-(Nom) see-Past-Dec
    'John, Mary saw.'

b. na-nun cip-eyse Mary-*ka) ttwi-n sasil-ul
    I-Top home-at Mary-Nom run-Rel fact-Acc
    not-know-Past-Dec
    'I didn't know the fact that Mary ran at home.'

\(^1\)Here we emphasize "canonical" subject positions since in non-canonical subject positions nominative case can be apparently unpronounced. Non-canonical positions may include left-edge discourse-related positions such as Topic, Focus or Force. In these positions apparent bare NPs can occur in Korean. We will return to this problem in section 3.
The contrast observed in (1-2) gives us crucial research issues that demand not only empirical clarification of unpronounced case markers in Korean but also theoretical exploration of the distribution of null functional categories in general. First, given that argument nominals are in fact "DPs" (Abney 1987) and case markers belong to the category of D (Ahn 1988), the argument nominals with unpronounced case markers may be regarded as DPs whose heads are phonological null Ds, as shown in (3).

\[\text{DP} \quad \text{NP} \quad \text{D} \]

Chelswu ka/lul/∅

Since it is assumed that D is the nominal counterpart of C (Abney 1987), the distribution of null Ds may have ramifications for the distribution of null Cs which has been focused on in recent literature (Ahn 1996, Jeong 1999, Lee 2005).

Second, given that DPs with unpronounced Case markers are DPs whose head is phonetically null, licensing of null Ds reminds us of the empty category principle (ECP) in GB which is intended to restrict the distribution of empty categories. The ungrammatical examples in (2) can be ruled out by the ECP because the null Ds are not properly governed. However, with the advent of the Minimalist Program, the theoretical assumptions embedded in the ECP are no longer tenable. Hence, the same restriction needs to be accounted for by the new mechanism which is available within the Minimalist Program.

Adapting Landau's (2005) proposal, we will advance that the distribution of null heads is constrained by the EPP which is a selectional requirement imposed at PF. More specifically, we assume that the EPP is regarded as p-selection (in contrast to c- or s-selection). The selecting feature [P] on a head H of the attractor must be satisfied in a local configuration with a phonetically visible element, "local" meaning a sister of a [P]-bearing node. In this respect, the coverage of EPP is
applied to the head of all the elements in derived positions.2

This paper is organized as follows: Section 2 reviews basic assumptions related to case markers in Korean and EPP in the minimalist program. It observes the distributional properties of null D, Q, C, and P in various languages as discussed in Landau (2005), and provides an account of distribution of null D/Case and C in Korean along the similar lines. Section 3 deals with the apparent Nom deletion in Korean. We propose that apparent Nom deletion is reinterpreted as left-dislocated nominals which are base-generated in sentence initial positions. Hence, they are immune to the particular EPP that we assume here. Further evidence will be given from the interpretation of dislocated wh-phrases to support left-dislocation analysis of apparent Nom deleted nominals.

2. EPP-based approaches to the distribution of null Ds

2.1 EPP as a p-selection (Landau 2005)

The proposal advanced in this paper is based on several theoretical assumptions. In this section, we will briefly review a series of assumptions which are relevant to our proposal. Under the Determiner Phrase (DP) hypothesis originating with Abney (1987), the determiner heads the whole noun phrases and the noun heads its own internal projection, NP. We assume the characteristics of case markers and delimiters in Korean share crucial numbers of properties with determiners in other languages. Ahn (1988) and Jeong (1999) show that the categorial status of case markers may not be different from that of determiners in English. Given this, we assume that when case markers on argument nominals are unpronounced, the distribution of null functional categories may correlate with the condition on extraction domain (CED) proposed by Huang (1982). Ahn & Cho (2005a) attempt to explore the distribution of null Ds and null Cs in Korean under the CED-based account. Although the reinterpretation of CED captures some of the distributions of the null heads, it has the following theoretical problem: why should null functional categories undergo movement? See Kim (1998a,b) and Ahn (1999) for a feature movement analysis of null categories which is no longer adopted here for conceptual reasons.
their heads are null Ds.  

We further adopt Landau’s (2005) proposal on distribution of null heads. Unlike the ECP-account, Landau discards the assumption that null heads are subject to specific licensing conditions. He claims that some of ECP effects that restrict the occurrence of null heads in some environments are subsumed to the generalized EPP effects on functional heads. More specifically, following Holmberg (2000), Chomsky (2000), and Miyagawa (2001), he assumes that EPP is a selectional feature \([P]\) governing PF configurations, and every functional head may bear an EPP feature. His main idea is that the head of the EPP-satisfier must be phonetically realized. This is schematized in (4).

(4) a. In \( [\text{HP} Z\text{P}[H[P]]] \), Z must be pronounced.
   b. Alternatively: \(*[\text{HP} [Z \Theta] [H[H[P]]]]\)

According to (4a), if ZP moves to Spec of H in order to satisfy the EPP property on H, the head of ZP, Z must be phonetically realized. Otherwise, the sentence containing ZP is ruled out, as shown in (4b). In this case, some phonetic materials in a non-head position within the merged phrase cannot save the sentence.

One of the empirical consequences is to account for the well-known distributional asymmetry of bare nouns (BNs) in Romance (Contreras 1986, Longobardi 1994). In Spanish, for instance, BNs do not occur in subject positions.

(5) a. Quiero café.

---

3 Baker (2003) claims that all argument nominals can be bare NPs. Kallulli (2005a), by contrast, argues that generic bare plurals are DPs with a morphologically null D, whereas existential bare plurals and bare singulars are NPs altogether lacking a D-projection. In this paper, we assume without further discussion that argumental nominals are necessarily DPs, following Landau (2005) and Longobardi (1994). Nominals in non-argumental positions, however, can be either DPs or NPs. Predicative or vocative nominals, for example, can be bare NPs. In contrast, base-generated nominals in non-argument positions as in Left Dislocation or Topic constructions are DPs. We will return to this issue in section 3.
want coffee 'I want coffee.'
b.*(Ei) Café me gusta.
(th) coffee me pleases 'I like coffee.'

According to Landau (2005), T unlike V, bears [P] feature, p-selecting an overtly headed specifier, as shown in (6).

\[(6)\]
\[
\begin{array}{c}
\text{TP} \\
\text{DP} \\
\emptyset \\
\text{NP} \\
\text{T}\text{[P]} \\
\text{vP}
\end{array}
\]

Since the head D in the specifier position of T is phonetically null, it doesn't satisfy the EPP on T.

Another consequence is observed with a class of adverbials in English, expressing time, place or manner which can occur as the surface form of bare NPs (Larson 1985).

\[(7)\]
\[
a. \text{I saw John that moment/hour/day/week/year.} \\
b. \text{You have lived every place that Max has lived.} \\
c. \text{We were headed that direction.} \\
d. \text{You pronounced my name that way.}
\]

These adverbials are claimed to be PPs whose heads are null (Bresnan & Grimshaw 1978, Emonds 1987, and McCawley 1988). Bare NP adverbs as PP with null P heads predict that these adverbials are excluded from environments like (4b). Given that the PPs undergo movement to Spec of T, it follows that its heads must be phonetically realized. Likewise, distribution of the following adverbials is predicted under the EPP-based account (Czepluch 1982).

\[(8)\]
\[
a. \text{They slept (for) an hour and then went to work.} \\
b.*(For) an hour, they slept, and then went to work.
\]
(9) a. She has lived (in) few places with so much sunlight.
   b.* (In) few places with so much sunlight has she lived.

(10) a. He came back (on) October 1st.
   b.* (On) October 1st, he came back.

Landau (2005) suggests that the P heads on the preposed adverbials have phonetic realization to satisfy the [P] feature of Top.

The EPP account is also supported by subject-object asymmetry related to QPs in French.

(11) a. Jean ne voudrait pas que tu boives [QP Ø de biere].
    John neg would-like not that you drink of beer
    'John wouldn't like you to drink beer.'
   b.*Jean ne voudrait pas que [QP Ø de biere] lui coule desus.
    John neg would not that of beer to spill on
    'John wouldn't like beer to spill on him.'

Landau (2005) analyzes the empty category inside the object of (11a) as a QP whose head is phonetically null. The null-headed QPs are excluded from subject positions. Under Landau's EPP account, an element in specifier of T must have a phonetically realized head.

2.2 Unpronounced case makers in Korean

Following Landau's proposal of the distribution of null Ds under the EPP-based account, the heads on moved elements should be phonetically realized. We further advance two main claims: (i) Regarding non-pronunciation of case markers, the subject-object asymmetries are not real, and (ii) The real

---

4 Hong (1994) gives an interesting generalization regarding unpronounced case markers. According to him, the head of the nominals with unpronounced case markers must undergo incorporation. Complement-to-head incorporation is accepted whereas specifier-to-head incorporation is not. Under this account, unpronounced case markers on
asymmetry lies between moved and non-moved nominals.\(^5\)

Before discussing distribution of unpronounced case markers, let us look at how Case is licensed in Korean. Under the recent version of the Minimalist Program put forward by Chomsky (2000, 2001), the operation Agree takes the place of feature checking mechanism of Chomsky (1995), and nominals already have unspecified Case feature from the numeration and later Case value on the nominals is assigned as a result of Agree. The type of Case value on the nominal depends on what the case valuer is: when the case valuer is T, Case value on the nominal is Nominative; when the case valuer is v, Case value on the nominal is Accusative. Finite (tensed) T as a nominative Case-valuer is supported by the following data (Ahn 1991:206).\(^6\)

\[(12)\ a. \text{John-un [sensayngnim-i chencay-i-ess-ta]-ko} \quad \text{mit-nun-ta.}
\]

---

(subject nominals are predicted to be ill-formed. However, Baker (1988:178) shows that incorporation of the head of a phrase in Spec position to a higher projection is licit with respect to the Empty Category Principle (under the Government Transparency Corollary). Even though this equation is not directly supportive in the Minimalist Program, this result shows that restrictive theories of movement have found it necessary to allow this kind of derivation (cf. Larson 1997 and Cho 2000).

\(^5\) A similar claim was made by Kim (1998a). He proposes that in the case of subject which remains in the Spec of \(v\), the case marker can be unpronounced. However, his proposal is different from ours in two respects. First, Kim (1998a) assumes that non-pronunciation of a Nom case marker is completely prohibited on \(wh\)-phrases, which is possible in our analysis, as soon will be clarified. Second, unlike Kim (1998a), we assume that structural nominative case licensing accompanies movement without exception.

\(^6\) For some speakers, (12b) may sound acceptable. The sentence improves if the matrix verb is replaced as the past tense \(mitess\) 'believed' in (12b).


John-Top teacher-Acc genius-be-Past-Dec-Comp believe-Past-Dec

'John believed that the teacher was a genius.'

The morpheme \(-ess\) in Korean can be interpreted as either Past Tense or Perfect Aspect. We speculate that (12b) and (i) are acceptable only with aspectual reading of \(-ess\) in embedded clause, and this reading is more easily obtained in (i) if the matrix T and embedded T share the same temporal denotation.
John-Top teacher-Nom genius-be-Past-Dec-Comp believe-Pres-Dec
'John believes that the teacher was a genius.'

John-Top teacher-Acc genius-be-Past-Dec-Comp believe-Pres-Dec
'John believes that the teacher was a genius.'

As shown in (12b), exceptional case marking (ECM) is inhibited; this naturally follows if Tense is a Nom case valuer. The general situation for the ECM is as in (13).

(13) [DP ......X.....] V

Where X, a functional category cannot assign a Case value to the nominal, the external verb assigns Case value to the DP. The embedded tense in (13) assigns Nominative Case value to the embedded subject. Hence, accusative-valued sensayngnim-ul is not possible in (12b).

Now, let us consider unpronounced case in the object position, as shown in (14).

(14) Mary-ka Sue manna-ss-e.
    Mary-Nom Sue meet-Past-Dec
    'Mary met Sue.'

In (14), a phonetically null D occurs in the object position. (14) has the following

Kang (1986) claims that nominative case marking may occur through default case licensing. We simply note here that default case mechanism may be responsible for some instances of Nom in Korean. The default case licensing, however, seems not to be related to the EPP issue discussed here. According to Schütze (2001) and Cho & Park (2004), the default case mechanism is capitalized on to spell out nominal expressions whose case feature fails to be valued because of the deficiency of the case value licensing head. Therefore, the default case is never assigned to anything by anything and no functional categories are related to default case mechanism.
structure at some point in the derivation:

(15)

As shown in (15), the object DP remains in its base-generated position without movement and the lexical category V doesn't have an EPP feature. The object DP is not subject to the EPP and the head D can be phonetically null. By contrast, the subject DP moves to Spec of T in order to satisfy

---

8 As pointed out by Ahn (1988), the dative marker -eykey and other postpositions such as -eyse cannot be unpronounced. However, there seem to be apparent exceptions as shown in (i).

   Chelswu-Nom book-Acc Yengmi-Dat/Acc give-Past-Dec
   'Chelswu gave a book to Yengmi.'

   b. Ai-ka cip-(eyse/ul) nawa-ss-ta.
   child-Nom house-/out-of/Acc get-Past-Dec
   'A child left home.'

   grandmother-Nom Seki-Acc son-in law-(as/ Acc) make-Past-Dec
   '(His) grand mother made Seki her son-in-law.' (Kim 1998b:273)

Ahn (1988) claims that the example mentioned above cannot be a real exception since accusative case markers can occur in these contexts. In other words, accusative markers rather than other postpositions are unpronounced in (i). Again, our analysis captures non-pronunciation of accusative case markers shown in (i) because the nominals do not undergo movement and are not subject to the EPP. However, the following example seems to need a more explanation.
the EPP property on T. In this case, the head on DP is subject to the EPP and must be phonetically realized.

Now, let us turn to non-pronunciation of case markers in the subject position as shown in (2a), repeated here as (16).

(16) John-ul Mary-?*(ka) po-ass-e.
    John-Acc Mary-(Nom) see-Past-Dec
'John, Mary saw.'

The sentence in (16) has the following structure at some point in the derivation.9

(ii) Chelswu-ka hakkyo-(ey)/*ul iss-ta
    Chelswu-Nom Seoul-at be-Dec
'Chelswu is at school.'

In (ii), the location hakkyo cannot occur with an accusative case marker. Hence, it seems necessary to explain why the postposition can be unpronounced unlike others. However, we should note the acceptance is not quite general.

(iii) Chelswu-ka cip-*(ey)/*ul iss-ta
    Chelswu-Nom home-at be-Dec
'Chelswu is at home'

We leave this issue for future research. See Ahn et al. (2002) and Choi (2005) for related discussion of this issue.

FP here is assumed to be ForceP. Force may express the illocutionary force (Rizzi 1997), modality (Whitman 1989) or the clausal type (Ahn & Yoon 1989). Grohmann (2000a) claims that clausal structure consists of three domains.

(i) The concept of prolific domains
a. Θ-domain: the part of the derivation where theta relations are created.
b. φ-domain: the part of the derivation where agreement properties are licensed
c. ω-domain: the part of the derivation where discourse information is established.

Θ-domain, φ-domain and ω-domain are considered to be proliferation of vP, TP and CP, respectively. Svenonius (2002:3) also notes that we can deconstruct the
In (17), both the subject and the object undergo movement. The moved elements are subject to the EPP. Both Ds must have phonetic realization. Otherwise, the sentence will be degraded.

Suppose Mary remains in Spec of v.

In (18), the object DP undergoes movement, while the subject DP remains in Spec-Force unless it is already occupied by other elements such as a scrambled object. See Ahn & Cho (2005a) for further discussion of this issue.

---------------------------

traditional subject into three components, one thematic-aspectual (the thematically most prominent argument of a predicate), one morphosyntactic (classically identified by case and/or agreement), and one discourse-informational (the topical or thematic entity named in a proposition). Based on these ideas, we assume that subjects in topic-prominent languages should move to the sites in which discourse information is established (see also related discussion in Miyagawa 2005). Thus, the subject in Korean undergoes movement to Spec-Force unless it is already occupied by other elements such as a scrambled object. See Ahn & Cho (2005a) for further discussion of this issue.
its base-generated position. If this kind of derivation were possible, non-pronunciation of case makers on the nominal Mary would be possible. However, we advance that this kind of derivation is impossible. Following Landau (2005), we assume that the EPP feature on T is parasitic on the presence of some anchoring features like Case or Agreement (Landau 2005:30). As long as T has an EPP feature, the subject DP must enter into local relation with T since the object cannot participate in Agree/Case Valuation with T.

Further, observe that when bare nominals are conjoined, they can occur in subject positions (Contreas 1986). (19a) and (19b) are Spanish and Italian examples, respectively.

(19) a. Viejos y ninos escuchaban con atención sus palabras.
   old-pople and children listened with attention his/her words.
   'Old people and children listened with attention to his/her words.'
   
   b. cane e gatto sono sempre nemici.

10 If v has an EPP [P] feature like T, this representation is also ruled out. We assume that the EPP feature on v is optional. If v has an EPP feature, case marker on object should be pronounced. Regarding this issue, see also Lee & Cho (2003).

11 Unpronounced nominative case makers in complements are acceptable.

(i) Sue-ka Mary-(ka) slik-ess-e.
   Sue-Nom Mary-(Nom) dislike-Past-Dec
   'Sue disliked Mary.'

The EPP requirement of T is fulfilled by Sue-ka in (i), hence, the non-pronunciation of nominative case marker on Mary in (i) is allowed since it need not undergo movement solely for the EPP satisfaction.

12 As pointed out by Daeho Chung (p.c.), it will be an issue whether the P selection on T is satisfied in the case of null subjects. Landau (2005) claims that the p-selection can be satisfied through verb movement to T in null subject languages. However, it is not clear to us that the same explanation can extend to Korean since unlike other null subject languages, Korean has relatively poor verbal morphology. Alternatively, we may assume that a null pronoun subject, which does not have structural case requirement, can occur with T which doesn't have EPP and Nom. In this case, the EPP issue will not arise.
dog and cat are always enemies
'The dog and the cat are always enemies.'

Landau (2005) indicates that the head of the conjunction is \(y/e\). The overt item serves as the head of the phrase in Spec-T to satisfy the \([P]\) requirement of T.

In contrast to Spanish, conjoined nominals in subject positions cannot occur without overt case makers in Korean, as shown in (20).

   not-know-Past-Dec
   'Sue didn't know the fact John and Mary ran.'

b. Sue-nun Joan-kwa Mary-*(ka) yeppe-sssta-nun sasil-ul Sue-Top Joan-and Mary-(Nom) pretty-Past-Dec-Rel fact-Acc molla-ss-ta.
   not-know-Past-Dec
   'Sue didn't know the fact Joan and Mary were pretty.'

Notice that overt case makers must occur in the second nominal. We suggest that the conjoined nominals in (20) have the following structure.

(21)

In (20), the head of the conjoined nominal is D. Hence, the null D cannot
head the phrase because only items with phonetic content serve as the head of the phrase in Spec-T to satisfy the [P] requirement of T.

2.3 Null C

Landau (2005:14) further suggests that the compulsory appearance of complementizers in the following sentential subjects can nicely fit his analysis.

(22) a.*(That) politics is corrupting is widely assumed.
    b.*(For) Mary to be our representative would be preferred by everyone.

He notes that whether the preposed clause occupies subject or topic position, the head of the preposed clause must be phonetically realized since the head is selected by p-features of T or Top.13

Null Cs in Korean pattern similarly with null Cs in English.

---

13 Alrenga (2005) claims that sentential subjects are analyzed as topic phrases linked to a phonologically null DP in Spec-T. Following Koster (1978), he observes: sentential subjects mirror topic phrases in that they cannot appear after sentence-initial topics ((a)) or preposed auxiliaries ((b)); they are degraded in most kinds of embedded contexts such as in adjunct clauses ((c)) or clausal complements of nouns ((d)):

(i) a. John, that the Giants lost the World Series shouldn’t have bothered.
    b.*Would for the Giants to lose the World Series really suck?
    c.?*Mary is unhappy because for her to travel to Tahiti is no longer necessary.
    d.?*Jim raised the possibility that for the house to be destroyed would upset you.
(ii) a.*John, the book, I gave to.
    b.*Did John, the article really bother?
    c.?*Mary is unhappy because her trip to Tahiti, I’ve had to cancel.
    d.?*Jim raised the possibility that Mary, your antics would upset.
Complementizer *ko* in Korean can be unpronounced if the clause introduced by it is in the complement position (Ahn 1996: 13).

(23) na-nun ku-ka olhta-(ko) sayngkakha-n-ta
    I-Top he-Nom right-Dec-C think-Pres-Dec
    'I think (that) he is right.'

In striking contrast, if the clause headed by C takes place in the non-canonical position, silent C is not possible.

(24) a. na-nun cengmal sayngkakha-n-ta, ku-ka olh-ta-*(ko)
    I-Top really think-Pres-Dec he-Nom right-Dec-C
    'I really think (that) he is right.'

b. ku-ka olh-ta-*(ko) na-nun cengmal sayngkakha-n-ta
    he-Nom right-Dec-C I-Top really think-Pres-Dec
    'I really think (that) he is right.'

c. na-nun ku-ka olh-ta-?*(ko) pwunmyenghi sayngkakha-n-ta
    I-Top he-Nom right-Dec-C for sure think-Pres-Dec
    'I think for sure *(that) he is right.'

d. ku-ka olh-ta-*(ko) Sue-eykey sayngkaktoye ci-ess-ta
    he-Nom right-Dec-C Sue-by think Pass-Past-Dec
    'That he is right has been thought by Sue.'

The analysis advanced in the previous section can be naturally extended to null Cs in Korean. Again, we claim that the null C asymmetry results from movement/non-movement distinction. Unlike the clauses in (23), the ones in (24) undergo movement. Consequently, the Cs in (24) are subject to the EPP, [P]-selection principle and they must have phonetic realization.¹⁴ ¹⁵

*¹⁴ An (2004) accounts for the distribution of null Cs in terms of intonational phrases. According to him, the head or specifier with one intonational phrase must be pronounced. Because DP isn't generally considered to be intonational phrase itself, we doubt whether his analysis can be extended to the distribution of null Ds.
We extend the analysis to the head of following adjunct clauses in Korean.

   Mary-Nom home-to go-P study-Past-Dec
   'Mary went home and studied.'

b. cip-ey ka-* (se) Mary-ka kongpwuhay-ss-ta.
   home-to go-P Mary-Nom study-Past-Dec
   'Mary went home and studied.'

(26) a. Mary-ka manhi apha-(se) kyelsekhay-ss-ta.
   Mary-Nom a lot sick-P absent-Past-Dec
   'Mary was absent because she was very sick.'

b. manhi apha-* (se) Mary-ka kyelsekhay-ss-ta.
   a lot sick-P Mary-Nom absent-Past-Dec
   'Mary was absent because she was very sick.'

Adjunct particles (sequential P in (25) and reason P in (26)) must be pronounced when their clauses are dislocated. Suppose adjunct clauses are moved to topic positions, then the null P cannot satisfy the topic selectional [P] feature.16 17

16 Null Cs in Korean, however, seem to occur in more limited environments than null D. Null D nominals can occur in left-dislocated constructions. By contrast, this option may not be available to null C clauses due to some independent reasons. We propose in section 3 that the left-dislocated DP must license null resumptive pronoun. Perhaps there are no resumptive pronouns (neither overt nor covert) available for clauses in Korean. Hence, left-dislocated CPs cannot occur.

17 Landau (2005:15-18) observes similar phenomena in PP adjuncts in Hebrew. He points out that ki-adjuncts in Hebrew resist topicalization since the null preposition for reason adjuncts cannot satisfy EPP requirement for Top.

18 An anonymous reviewer points that the following examples can be an argument against our analysis.

(i) a. Chelswu-ka pap-ul mek-ko-(se) cam-ul ca-ss-ta
   Chelswu-Nom rice-Acc eat-Comp-EMP sleep-Acc make-Past-Dec

   Perhaps there are no resumptive pronouns (neither overt nor covert) available for clauses in Korean. Hence, left-dislocated CPs cannot occur.
3. Left-dislocated Nominals

Although we claim that null Ds are not permitted in subject positions, there are examples which seem to show null Ds are possible even in these positions.

(27) Mary-(ka) ku chayk ilk-ess-ni?
    Mary-Nom the book read-Past-Q
    'Did Mary read that book?'

Ahn's (1999) solution to this apparent problem, following Kim (1998b) in part, is to treat Mary in (27) as a left-dislocated nominal. A left-dislocated nominal is base-generated in a sentence-initial position, while a resumptive pronoun is located in an original subject position. The presence of resumptive pronoun in (28a) gives us non-trivial evidence for the left-dislocation analysis. The subtle difference between (28a) and (28b) results from the fact that the resumptive pronoun is pro or unpronounced in (27), as shown in (28b).

(28) a. Mary ku nye-ka ku chayk ilk-ess-ni?
    Mary she-Nom the book read-Past-Q
    'Lit. As for Mary, did she read the book?'

b. Mary pro ku chayk ilk-ess-ni?
    Mary the book read-Past-Q
    'Lit. As for Mary, did she read the book?'

'Chelswu ate rice and slept.'

b. pap-ul mek-ko-(se) Chelswu-ka cam-ul ca-ss-ta.
    rice-Acc eat-Comp-EMP Chelswu-Nom sleep-Acc make-Past-Dec
    'Chelswu ate rice and slept.'

The particle -se in (i), however, functions differently, compared with the one in (25) and is used as an emphatic particle. Hence, it can be ellipted freely.
In (28b), Mary is base-generated in the sentence-initial position as a left-dislocated NP and a null resumptive pronoun is located in the subject position on a par with (28a) (see also Hong 2004 for an extensive discussion on this issue).

This claim is also supported by the fact that non-pronunciation of case markers in subject positions is not allowed in the following embedded contexts (Ahn 1999:7).18

(29) a. na-nun ecey Mary-?*(ka) coaha-nun yeca-lul
     I-Nom yesterday Mary-(Nom) like-Rel woman-Acc
     manna-ss-ta.
     meet-Past-Dec
     'Yesterday I met the woman who Mary likes.'

b. na-nun cip-eyse Mary-?*(ka) John-ul ttayly-esski
     I-Top home-at Mary-Nom John-Acc hit-Past
     ttaymwuney hwakana-ss-ta.
     because angry-Past-Dec
     'I got angry because Mary hit John at home.'

---

18 In this context nun-marked Topic Mary-nun is prohibited, too (see Hong 2005 for extensive discussion and illuminating generalization). Rizzi (2004) and Rizzi & Shlonsky (2005) put forward a definition of topics as [+aboutness +D-linking] in contrast to subjects as [+aboutness] plus [D-linking] feature unspecified. The relation "aboutness" can occur if some kind of predication is involved: "a process selecting an argument as the starting point of the event description, and expressing the event as somehow involving that argument" (Rizzi 2004:18). Following Rizzi’s idea of topicality, one may think that parallel behaviors of nun-marked nominals and LD nominals can be explained if they share the interpretive property of "topics." Jaeger (2004), however, points out that topicality is equivalent to "aboutness," the notion that is more broadly accepted as whatever a piece of discourse is 'about' and 'given' in the discourse, which further implies D-linking. We will not attempt to make a particular choice among the definitions of "aboutness" or "topicality" here, but simply indicate that nun-marked nominals and LD nominals have crucial semantic/discourse properties in common, namely topicality or aboutness in some narrow (Jaeger 2004) or broad (Rizzi 2004) sense. See Ahn & Cho (2006) for extensive discussion.
Since left dislocation is generally barred in embedded contexts, impossible non-pronunciation of case markers in (29) can be naturally explained.\textsuperscript{19}

Another piece of evidence is observed in a sharp contrast related to non-pronunciation of case markers on \textit{wh}-phrases.

\begin{enumerate}[\textit{(30)}]
\item a. Nwukwu Yenghi-lul manna-ss-ni?\textsuperscript{20}
  \quad Who Yenghi-Acc meet-Past-Q
\item b. Nwuka Yenghi-lul manna-ss-ni?
  \quad Who-Nom Yenghi-Acc meet-Past-Q
  \quad 'Who met Yenghi?'
\end{enumerate}

\begin{enumerate}[\textit{(31)}]
\item a. Yenghi-ka nwukwu manna-ss-ni?
  \quad Yenghi-Nom who meet-Past-Q
\item b. Yenghi-ka nwukwu-lul manna-ss-ni?
  \quad Yenghi-Nom who-Acc meet-Past-Q
  \quad 'Who did Yenghi meet?'
\end{enumerate}

Interestingly, the subject \textit{wh}-phrase \textit{nwukwu} in (30a) has only D\textit{iscourse}-linked interpretation, whereas the object \textit{wh}-phrase in (31a) can be interpreted either as D-linked or non-D-linked one (in the sense of Pesetsky 1987).

Given that subject with an unpronounced case marker is a left-dislocated nominal, \textit{nwukwu} in (30a) is a left-dislocated nominal that is base-generated

---

\textsuperscript{19} Even for the speakers who judge (30a) less acceptable, (i) seems to be acceptable.

\begin{enumerate}[\textit{(i)}]
\item i cwung-eyse nwukwuYenghi-lul manna-ss-ni?
  \quad this group-among who Yenghi-Acc meet-Past-Q
  \quad 'Which person of this group met Yenghi?'
\end{enumerate}

As a result of domain specification like \textit{i cwung-eyse}, (i) seems to be more natural than (30a). This observation supports our claim that subject \textit{wh}-phrases with unpronounced case makers always induce D-linked interpretations.

\textsuperscript{20} \textit{Nwukwu} reduces to \textit{nwu} when it is marked with nominative case.
in a sentence-initial position while a resumptive pronoun is located in an original subject position, as shown in (32).21

(32) [Nwukwu] [pro Yenghi-lul mannaassni]

We assume that wh-phrases in Korean variable-bind not overt resumptive pronouns but pro (cf. Montalbetti 1984, Hong 1985, Boeckx 2004). For this reason, the following sentence is not well-formed.

(33)*Nwukwu ku-ka Yenghi-lul manna-ss-ni?
   Who he-NomYenghi-Acc meet-Past-Q
   'Who is such that he met Mary?'

Consequently, the chain <nwukwu, pro> in (32) induces only D-linked reading like many other wh-resumption or wh-clitic doubling constructions (Boeckx 2003, Boeckx & Grohmann 2004, Grohmann 2005, Hirose 2003, Jaeger 2004).22 Assuming that accusative case markers can be freely

---

21 Categorial status of the LDs nominal is less clear under the analysis advanced here. They can be either NPs or DPs, depending on the nature of dislocated positions. Kallulli (2005a) indicates the bare singulars and bare plurals as [-aboutness], and analyzes these nominals as NPs lacking D-projection. If she is correct, apparent bare LD nouns should be treated as DPs since they are necessarily interpreted as [+aboutness]. Even if they are DPs, the heads are not subject to the EPP if we assume, following Longobardi (1994), N-to-D movement for LD nominals, motivated by strong topical/referential interpretation. Hence, the null D is no longer vacant and is filled with the moved N, and it would satisfy p-requirement of Top's EPP, if any. Alternative explanations are given in Landau (2005). Modifying his proposal somewhat, on Tn, [p] is anchored by case/phi-features; on Fn, the anchor is simply [+force]. And further assume that case/phi-features are specified on D, while [+force] is a feature of N. Then, it is N that must be phonetically visible to satisfy [p]. Hence, a null D is tolerated in Spec-F. Or, we may adopt his alternative proposal that left-dislocated (null D) bare NPs are adjoined to TP (rather than occupy a Spec position), and this would explain the absence of [p]-requirement. Either way, we may account for the exempt behavior of left-dislocated DPs with null Ds.
unpronounced when the nominals stay in their base-generated positions, we claim that (31a) and (31b) have the same structure. Hence, they don’t have any crucial interpretive differences.

Furthermore, when an object wh-phrase with an unpronounced case marker undergoes scrambling, only D-linked reading is induced, as shown in (34).23

(34) Nwukwu Yenghi-ka manna-ss-ni?
   Who Yenghi-Nom meet-Past-Q
   'Who is such that Yenghi meet (him)?'

Under our analysis, nominals which undergo movement are subject to the EPP. Hence, heads on the moved nominals must be pronounced. However, since the object wh-phrase nwukwu in (34) does not have a pronounced case maker, our analysis predicts that the object wh-phrase nwukwu is a left-dislocated nominal. Our prediction is borne out since the chain

---

22 Kallulli (2005b) also points out that clitic doubling under wh-movement is restricted to D-linked wh-phrases in Albanian.

(i) a. Çfarë (*e) solli Ana?
   what ktL.Acc brought Ana
   'What did Anna bring?'

b. Cil-in libër (e) solli Anna?
   which-the Acc book ktL.Acc brought Ana
   'Which book did Ana bring?'

23 In some dialects of Korean, wh-questions can be distinguished from yes-no questions by sentential endings; namely, -no for wh-Q vs. -na for yes/no-Q. According to our informants of these dialects, the following wh-question also yields D-linked reading only (for some speakers (i) is only marginally accepted, though):

(i) Nwukwu Yenghi-ka manna-ss-no?
   who Yenghi-Nom meet-Past-Q
   'Who did Yenghi meet?'

We thank an anonymous reviewer for bringing this fact to our attention.
<nwukwu, pro> has only D-linked reading.\textsuperscript{24}

4. Conclusion

In this paper, we have tried to give a unified analysis of distribution of null Ds and null Cs in Korean. Given that the head of the EPP satisfiers must have phonetic realization, Ds and Cs in specifier positions selected by EPP features must be overtly realized. We also capture meaning differences in \textit{wh}-phrases with or without case markers. We observe that object \textit{wh}-phrases without case markers can have either D-linked or non-D-linked interpretation, whereas subject \textit{wh}-phrases without them have only D-linked interpretation. We further advance that \textit{wh}-phrases without case markers in derived positions are left-dislocated nominals with null resumptive pronouns

\textsuperscript{24} Note in passing that \textit{totayche} 'the hell' in Korean can occur with dislocated \textit{wh}-phrases.

(i) \textit{totayche} nwukwu-(nun) Yenghi-ka manna-ss-ni?
the hell who-(Top) Yenghi-Nom meet-Past-Q
'Lit. Who the hell is such that he met Mary?'

Note that \textit{wh-the-hell} constructions in English induces aggressively non-D-linked reading only.

(ii) *Which the hell book does he want to read?

The \textit{totayche} 'the hell' in Korean, in contrast, is compatible with \textit{which}-phrases (see similar patterns with Chinese \textit{daodi} and Japanese \textit{ittai} as observed in Huang & Ochi 2004):

(iii) \textit{totayche}y enu namca-ka Mary-lul manna-ss-ni?
the hell which man-Nom Mary-Acc meet-Past-Q
'Lit. Which the hell man met Mary?'

Thus, the \textit{hell} compatibility is not a reliable test for D-linking in Korean. See, however, some interesting properties of \textit{wh-the-hell} in Chinese and Japanese compatible with English in Huang & Ochi (2004).
located in linked-argument positions. Hence, only D-linked reading arises as in *wh*-resumption or *wh*-clitic doubling constructions found in many other languages.

**References**


Hee-Don Ahn
Department of English, Konkuk University
1 Hwayang-dong 11-1 Daehyung-dong
Kwangjin-gu Seodaemun-gu
Seoul 143-701, Korea Seoul 120-750, Korea
hdahn@konkuk.ac.kr scho1007@yahoo.com

Sungeun Cho
Department of English, Ewha Womans University
11-1 Daehyung-dong
Seodaemun-gu
Seoul 120-750, Korea