

On the Categorical Ambiguity of the Morpheme *kes* in Korean*

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In this paper, I discuss the ambiguous categorical status of the morpheme *kes* in Korean. The morpheme *kes* has been assumed to be a “dependent” or “defective” noun, because it cannot appear alone and its meaning is largely determined by discourse and/or syntactic contexts. Based on empirical data, I show that it may come either with a modifier or with a non-modifier, but exhibits different properties, depending on which it comes with: When it comes with a modifier, it has properties of a lexical N, but when it comes with a non-modifier, it does not have properties of a lexical category, but those of a functional category. As for the categorical status of the morpheme *kes* as a functional category, under the EP hypothesis in H S Choe (2006, 2007b), which suggests that a full realization of a nominal expression is a functional category projection above DP (called EP), I suggest that the morpheme *kes* is a realization of E, when it comes with a non-modifier. Under the present approach, I also attempt to characterize the nature of the syntactic and semantic dependency or defectiveness that the morpheme *kes* exhibits, and to explain some descriptive facts related to noun phrases in Korean.

Keywords: functional category, *kes*, deictic pronouns, deictic demonstratives, deictic locatives, “dependent” or “defective” noun, EP, DP, the EP hypothesis

1. Introduction

In the Korean literature (cf., H-B Choi (1929/1980), Y-K Ko (1970), C Suh (1994), H K Ahn (2001) and references therein), it has been widely assumed that the morpheme *kes* in Korean is a noun, but it has also been considered a “dependent” or a “defective” noun because of its syntactic and semantic dependency or defectiveness: It cannot appear alone or form a one-word phrase (syntactic dependency), and its semantics is “vague” in that its meaning is largely determined by discourse and/or syntactic contexts (semantic defectiveness; cf., C Suh (1994), for example). In this paper, without discussing other “dependent” or “defective” nouns in Korean, I focus on the morpheme *kes* to

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suggest that it is categorially ambiguous: It may or may not be a noun (N). I first discuss that there are two different contexts where the morpheme *kes* appears, and then show that it exhibits two different sets of syntactic and semantic properties, depending on its different distributional properties. I suggest that it should be considered an N in one context, but it may not be considered an N in the other context. As for the categorial status of the morpheme *kes* as a non-N, I suggest, under the EP hypothesis in H S Choe (2006, 2007b), that there is a functional category projection (called EP) above a “regular” nominal expression (DP), and that the morpheme *kes* as a non-N can be best classified as a functional category E that appears above D (cf., Sections 4 and 5).

The organization of the paper is as follows: In Section 2, I discuss some well-known properties of the morpheme *kes* to show that the morpheme *kes* may come with modifiers, and that when it does, it exhibits properties which suggest that it is an N. In Section 3, I discuss that the morpheme *kes* may also come with a non-modifier (which is categorially CP), and that when it does, it exhibits two different sets of properties, which lead to the following suggestions: One set of properties suggests that the whole *kes* phrase is a noun phrase, but the other set of properties suggests that the morpheme *kes* itself may not be considered a lexical N, but rather a functional category. In Section 4, I discuss the EP hypothesis suggested in H S Choe (2006, 2007b) and show that a full nominal expression in Korean and in English should be considered a functional category projection above DP (i.e., an EP), but not a DP. In Section 5, I discuss, under the EP hypothesis, that the morpheme *kes* can be classified either as an N or as an E, depending on its distributional properties, and show how the EP hypothesis explains the different properties of the two instantiations of the morpheme *kes*, and also some (language-particular) descriptive facts in relation to nominal expressions in Korean. A summary is given in Section 6.

2. The Morpheme *kes* as an N

In the literature, it has been widely assumed since H-B Choi (1929/1980) that the morpheme *kes* is a noun. In fact, there are many reasons to assume that it is a noun: First, as shown in (1-3), it can be preceded (or modified) by a relative clause (1), by an (attributive) adjective (2), or by various determiners or quantifiers (3), and the *kes* phrases appear in typical noun phrase positions (cf. H-B Choi (1929/1980)).^{1,2} Second, it can be pluralized and case-marked, ap-

¹ In this paper, the following abbreviations are used:

(i) Nom = nominative marker; Acc = accusative marker; Gen = genitive marker; C = complementizer; Q = question marker; Imp = Imperative marker; Excl = exclamative marker; ToP = topic marker; Con = contrastive (focus) marker; ...

pearing in typical noun phrase positions, as shown in (1-3)' (cf., also (1-3)).

- (1) *([ne-ka ssu-n]) kes-ul poca
 you-Nom wrote-C kes-Acc let's.see 'Let's see the one you wrote.'
- (2) na-nun *(say) kes-ul satta
 I-Top new kes-Acc bought 'I bought a new one.'
- (3) a. *({i/ce/ku}) kes-i *(apeci-uy) kes-ita
 this/that/the kes-Nom Father-Gen kes-is
 'This/That/The} one is Father's one.'
 b. *({amwu/etten/enu/motun}) kes
 any/which/some/every kes
 '{any/which/some/every} one'
- (1)' [ne-ka ssu-n] kes-tul-ul poca
 you-Nom wrote-C kes-pl-Acc let's.see 'Let's see the ones you wrote.'
- (2)' na-nun say kes-tul-ul satta
 I-Top new kes-pl-Acc bought 'I bought new ones.'
- (3)' a. {i/ce/ku} kes-tul-i apeci-uy kes-tul-ita
 this/that/the kes-Nom Father-Gen kes-pl-are
 'These/Those/The} ones are Father's ones.'
 b. {amwu/etten/enu/motun} kes-tul
 any/which/some/every kes-pl
 '{any/which/some/all} ones'

However, it has also been considered a "dependent" or "defective" noun for the following reasons: First, it cannot appear alone, as shown in (1-3): If modifiers, which are underlined in (1-3), do not appear before *kes*, the sentences or phrases in (1-3) are all unacceptable. Second, its reference or meaning tends to

The verbal morphology of Korean has the internal structure shown in (ii).

- (ii) V-Agr-Asp-Tns-{Decl/Q}-C

(where Decl = declarative marker; Agr/Asp/Tns = agreement/aspect/tense markers)

Here, I do not divide verbal morphemes below C or Q simply because the internal structure of the verbal morphology is immaterial in this paper.

² As for the morpheme *kes*, I gloss it as 'kes' here in the cases in (1-3), because it can be interpreted either as *one* or as *thing*. Like the noun *one* in English (i), it may come with an ordinal number (iia), but not with a cardinal number (iib). I thus assume that it is closer to the noun *one* (a pro-form) than to the noun *thing*.

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|--|----------------------------------|
| (i) a. the first one, the second one, ... | b. *one one, *two ones, ... |
| (ii) a. ches (pen)ccay kes, twupencay kes, ... | b. *han(a) kes, *twu(l) kes, ... |
| first kes second kes | one kes two kes |

be determined by discourse and/or syntactic contexts as it is roughly interpreted as *one* (cf., fn. 2)

In (1-3), the morpheme *kes* can be best interpreted as *one*, but it differs from *one*, since it may not refer to a person, unless it is used in intimate or non-honorific speech contexts.³ When it does not have an antecedent, it tends to refer to a concrete object (4aii), but not to an abstract concept or notion (4bii), as shown in the contrast between (4aii) and (4bii).⁴ In (4a) and (4b), the underlined parts function as the modifiers of an N or *kes* ('kes').

- (4) a. Chelswu-ka ponayo-n tayanghan
 Chelswu-Nom sent-C various
 {(i)chayk/(ii)kes}-(tul-)ul cal ilkessta
 book/kes-pl-Acc well read
 '(I) read the various {(i)books/(ii)ones} well that Chelswu sent (to me).' (lit.)

³ One example is shown in (i).

- (i) elin kes(-tul)-i kkapwunta
 infantile kes-pl-Nom behave.rashly '(These/This) infantile one(s) behave(s) rashly.'

⁴ When *tayanghan* ('various') is replaced with *manhun* ('many') in (4bii), (4bii) improves. In fact, in any contexts, the string *manhun kes* ('many kes') is always acceptable, as shown in (i).

- (i) na-nun ne-ey tayhayse manhun kes-ul anta
 I-Top you about many kes-Acc know
 'I know many ones/things about you.' (lit.)

Moreover, there are some cases where *kes* can be considered to refer to an abstract notion, as shown in (iia-b). However, when some other modifiers (like *big* or *about your hometown*) are added in (iia-b), *kes* can be hardly considered to refer to an abstract notion, as shown in (iiaa-b). In (iiaa-b), if *big* and *about your hometown* are replaced with *many*, then the sentences become acceptable, again, as in the case of (4bii) (cf., (i)). Given that (iia-b) can be considered idiomatic or fixed expressions (unlike (iiaa-b)), and also given that the string *manhun kes* ('many kes') can also be considered a fixed expression, I speculate that the morpheme *kes* (as an N) cannot refer to an abstract notion or concept unless it appears in some fixed or idiomatic expressions.

- (ii) a. maum-ey phum-un kes-ul ilu-ela
 mind-in have-C kes-Acc complete-Imp
 'Complete the one (you) have in mind!' (lit.)
 b. meli-sok-ey iss-nun kes-ul pely-ela
 bbrain-inside-at exist-C kes-Acc dismiss-Imp
 'Dismiss the one that exists in your brain.' (lit.)
 (iii) a. maum-ey phum-un khun {ttus/yamang/*??kes}-ul ilu-ela
 mind-in have-C big desire/ambition/kes-Acc complete-Imp
 '{Complete/Realize; the big {desire/ambition/one} (you) have in mind!' (lit.)
 b. meli-sok-ey iss-nun koyang-ey tayhan {sayngkak/*??kes}-ul pely-ela
 brain-inside-at exist-C hometown-about thought/kes-Acc dismiss-Imp
 'Dismiss the {thought/one} on your hometown that exists in your brain.' (lit.)

b. Chelswu-nun ku yengwha-ey tayhan tayanghan

Chelswu-Top the film about various

{(i)somwun/*?(ii)kes}-(tul-)ul tulessta

rumor/kes-pl heard

'Chelswu heard the various {(i)rumors/(ii)ones} about the film.' (lit.)

It may have an antecedent, like the noun *one* (a pro-form) in English, and even when it does, its antecedent may not be an abstract noun. Consider (5a), where the object denotes a concrete object. Whether the noun phrase is plural or not, it can be substituted for a pronoun, as shown in (5aBi). The word *ku-ke(s)* ('the-kes'), which is the morphological amalgamation of the determiner (modifier) *ku* and *kes* ('kes'), is usually considered the pronoun *it*, and its plural form *ku-kes-tul* ('the-kes-pl') is considered the pronoun *they*. As shown in (5aBii), the head N (*book*) can also be substituted for *kes*. When the head N is an abstract N (cf., (5bA)), the whole noun phrase can be substituted for *it* or *they*, as shown in (5bBi), but the abstract N may not be substituted for *kes*, as shown in (5bBii). Thus, it can be concluded that whether or not the morpheme *kes* has an antecedent, it does not tend to refer to an abstract concept or notion (but cf., fn. 4).

(5) a. A: ku elyewun chayk(-tul)-ul ta ilkess-ni?

the difficult book-pl-Acc all read-Q

'Did you read the difficult book(s) all?'

B: {(i) ku-kes(-tul)/(ii) ku elyewun kes(-tul)} ta mos-ilkesse

the-kes-pl/ the difficult kes-pl all not-read

'I didn't read {them/it/the difficult one(s)} all.'

b. A: ku yengwha-ey tayhan ku isanghan somwun(-tul) tules-ni?

the film about the strange rumor-pl heard-Q

'Did (you) hear about the strange rumor(s) about the film?'

B: tules-nuntey, {(i) ku-kes(-tul)/(ii) *??ku isanghan kes(-tul)}

heard-but the-kes-pl/ the strange kes-pl

motwu hessomwun-ya

all groundless.rumor-are

'I heard, but {they/it/*the strange one(s)} {are/is} all (a) groundless rumor(s).' (lit.)

Given the empirical data discussed so far (cf., (1-5)), I suggest that the morpheme *kes* has the properties shown in (6a-e).

- (6) a. The *kes* phrase can be case-marked, appearing in typical noun phrase positions. (cf., (1-3) and (1-3)')
- b. The morpheme *kes* can come with the plural marker *-tul*. (cf., (1-3)')
- c. (i) The morpheme *kes* cannot appear alone, and
 (ii) it may come with modifiers (that can modify an N). (cf., (1-3))
- d. The morpheme *kes* behaves like the *pro*-form *one* in English in that it may or may not have an antecedent: Its meaning or reference is determined either by its syntactic antecedent or by (discourse) contexts. (cf., (1-5))
- e. Whether or not it has a syntactic antecedent, the morpheme *kes* tends to refer to a concrete object. (cf., (4-5))

All the properties of the morpheme *kes* in (6a-e) confirm that it is categorially N, but the properties in (6c-e) suggest that it has some lexical restrictions (which make it different from nouns like *one* in English): It exhibits the syntactic dependency shown in (6ci-ii) and the semantic defectiveness or dependency shown in (6d-e), which can be best considered derived by lexical properties of the lexical noun *kes*. Although it has some dependent or defective lexical properties shown in (6c-e), it seems uncontroversial to conclude that it is an N, given the properties of *kes* in (6a-e).

3. The Morpheme *kes* as a Non-N

Consider the properties of the morpheme *kes* in (6ci-ii). Although it is uncontroversial about (6ci), (6cii) is not always empirically true since there are cases where the morpheme *kes* does not come with a modifier (cf., a relative clause (1), an adjective phrase (2), or a determiner/quantifier (3)): The morpheme *kes* can also appear in *-(nu)n kes* contexts, where a CP clause that ends with *-(nu)n* ('C') comes directly before *kes*, but the CP clause does not form a restrictive relative clause (or clausal modifier), as in the case of (1). There are four such cases: First, some predicates may select a clause that comes with *kes*, as shown in (7a-d). (For reasons I discuss in this Section and in Section 5, to distinguish the morpheme *kes* that appears in the *-(nu)n kes* contexts from the morpheme *kes* as an N in (1-5), from now on, I gloss 'KES' the morpheme *kes* that does not come with a modifier, clausal or non-clausal.)

- (7) a. na-nun [Chelswu-ka ilccik kohyang-ul ttenassta-nun]
 I-Top Chelswu-Nom at.an.early.age hometown-Acc left-C

kes-ul {*alassta/molassta*}

KES-Acc *knew/not.knew*

'I {*knew/didn't know*} that Chelsw left his hometown at his early age.'

b. [*ikes-ul han sikan-nay kkuthnay-nun*]

this-Acc one hour-in finish-C

kes-un {*swuypci anhta/kanunghata*}

KES-Con is.easy not/is.possible

'It is {not easy/possible} to finish this in an hour.'

c. *na-nun [ku-ka kuphi naka-nun] kes-ul poassta*

I-Top he-Nom hurriedly go.away-C KES-Acc saw

'I saw him going away hurriedly.'

d. [*nay-ka pang-ul chungsoha-nun] kes-ul towacwuseyyo*

I-Nom room-Acc clean.up-C KES-Acc help

'Help me clean up the room.'

In (7a-d), the parts in brackets, whose English counterparts are underlined, all form CP clauses that end with *-(nu)n* ('C'), and the CP clauses are directly followed by *kes* ('KES'). Second, the string *-(nu)n kes* can also appear in clausal comparative contexts, as shown in (8a-b). As in the examples in (7a-d), in (8a-b), the parts in brackets end with *-(nu)n* ('C') and are directly followed by *kes* ('KES').⁵

(8) a. *Chelswu-nun [Yenghi-ka nonmwun-ul ssu-n]*

Chelswu-Top Yenghi-Nom paper-Acc wrote-C

kes-pota *te manhun chayk-ul ssessta*

KES-than more many book-Acc wrote

'Chelswu wrote more books than Yenghi wrote papers.'

⁵ The sentence in (8a) is not acceptable to every speaker; but it is to some speakers (cf., J-S Lee (2002) and H S Choe (2007a)). To every speaker, (i) is acceptable where the object (the counterpart of the comparative head in the clause selected by *than*) is dropped, but (i) seems to be ambiguous between (ia) and (ib), meaning either (iia) and (iib), respectively.

(i) *Chelswu-nun [Yenghi-ka ssu-n {(a)kes/(b)kes}]-pota te manhun chayk-ul ssessta*
Chelswu-Top Yenghi-Nom wrote-C KES/kes-than more many book-Acc wrote

(ii) a. 'Chelswu wrote more books than Yenghi wrote.'

b. 'Chelswu wrote more books than the ones Yenghi wrote.'

The data like (ia-b) suggest that Korean employs clausal comparatives as well as phrasal comparatives. As for a discussion about the nature of clausal comparatives in Korean, see H S Choe (2007a).

- b. Chelswu-nun [Yenghi-ka kippheha-n]
Chelswu-Top Yenghi-Nom was.delighted-C

kes-pota te manhi kipphehayssta
KES-than more much was.delighted

'Chelswu was more delighted than Yenghi was delighted.' (lit.)

Third, the string *-(nu)n kes* can also appear in internally-headed relative clause contexts, as shown in (9a-b). In (9a-b), the CP clauses in brackets are directly followed by *kes* ('KES') and the whole *kes* ('KES') phrases function like *him* and *a rat* (in bold letters) in the first conjuncts of the English counterparts of (9a-b)).

- (9) a. na-nun [ku-ka naka-nun] **kes**-ul puthcapassta
I-Top he-Nom go.out-C KES-Acc stopped
'I stopped **him** and he was about to go out.'
b. koyangi-ka etise [cwuy cwuk-un] **kes**-ul mule watta
cat-Nom somewhere rat was.dead-C KES-Acc come.with
'A cat came with **a rat** from somewhere and it was dead.'
(cf., H K Ahn (2001))

Finally, the string *-(nu)n kes* can appear in pseudo-cleft contexts, as shown in (10a-d). In (10a-d) again, the CP clauses in brackets are all directly followed by *kes* ('KES').⁶

- (10) a. [ku-ka alko iss-nun] **kes**-un [Chelswu-ka onta-nun] kes-ita
he-Nom know-C KES-C Chelswu-Nom comes-C KES-is
'What he knows is that Chelswu comes.'
b. [nay-ka ku-ul manna-n] **kes**-un ilnyen-cen-ita
I-Nom he-Acc met-C KES-Con one.year-ago-was
'When I met him was one year ago.'

⁶ One might suggest that the morpheme *kes*'s in (10a-d) can be considered an N since they can be replaced with Ns like *sasil* ('fact'), *ttay* ('time'), *cangso* ('place') and *iywu* ('reason'), which might imply that the CP clauses in (10a-d) are actually relative clauses. However, it seems that the parts in brackets in (10a-d) may not always have to be considered to form a relative clause. Consider (10c), for example. When *kes* ('KES') is replaced with an N, as shown in (i), the phrase followed by *was* should be an NP, but not an PP, unlike (10c). Thus, I assume that Korean employs the pseudo-cleft construction, where the CP under consideration does not form a restrictive relative clause, as in the pseudo-cleft construction in English.

(i) ku-ka Yenghi-lul manna-n {tosi/kos}-un sewul(*-eyse)-(i)yessta
he-Nom Yenghi-Acc met-C city/place-Con Seoul-in-was
'The {city/place} where he met Yenghi was (*in) Seoul.'

- c. [ku-ka Yenghi-lul manna-n] **kes-un** sewul-eyse-yessta
 he-Nom Yenghi-Acc met-C KES-Con Seoul-in-was
 'Where he met Yenghi was in Seoul.'
- d. [ku-ka o-n] **kes-un** Yenghi-lul manna-ki wenhayss-ki
 he-Nom came-C KES-Con Yenghi-Acc meet-N want-N
 ttaymwun-iyessta
 because-was
 'The reason he came was because he wanted to meet Yenghi.'

In all the data shown in (7-10), the CP clause cannot be dropped, which means that *kes* ('KES') also cannot appear alone, as in the case of *kes* ('kes').

The four cases discussed so far can be schematized, as shown in (11a-d). In all the cases in (11a-d), the *-(nu)n* clause (CP) does not function as a modifier. Given the data in (1-5) and the data in (7-10), the morpheme *kes* can be considered to have two distributional properties, as shown in (12a and b). Although *kes* ('KES') and *kes* ('kes') exhibit different distributional properties, they both show syntactic dependency in that they cannot appear alone: *kes* ('KES') cannot appear without the *-(nu)n* clause (CP), while *kes* ('kes') cannot appear without modifiers.

- (11) a. The phrase [...-(*nu*)*n kes* ('KES')] functions as a complement clause.
 b. The phrase [...-(*nu*)*n kes* ('KES')] functions as a complement of *than*.
 c. The phrase [...-(*nu*)*n kes* ('KES')] forms an internally-headed relative clause.
 d. The phrase [...-(*nu*)*n kes* ('KES')] can appear in a pseudo-cleft context: [..._[XP 0] ...]-(*nu*)*n kes* ('KES') *be* XP
- (12) a. *(modifier(s)) - *kes* ('kes')
 b. *(non-modifier CP) - *kes* ('KES')

In the Korean literature, *kes* ('kes') and *kes* ('KES') have not been considered categorially different, and therefore, it has been implicitly or explicitly assumed that both *kes* ('kes') and *kes* ('KES') are categorially the same (i.e., Ns). To see whether the previous/traditional view is correct that the morpheme *kes* is always an N, consider the case in (11a) where *kes* ('KES') comes with a clausal CP complement. It has been discussed (especially in relation to the case of (11a)) that the meaning of the morpheme *kes* is largely determined by the preceding clause, and in fact, it has been noted that the morpheme *kes* can be replaced with a lexical noun (cf., C Suh (1994: 1194), for example; cf., also Y-K Ko (1970), H K Ahn (2001)): As shown in (13a-d), the morpheme *kes* ('KES')

in (7a-d) can be replaced with an abstract N, which is semantically compatible with the preceding clause and also with the matrix predicate.

- (13) a. na-nun [Chelswu-ka ilccik kohyang-ul ttenassta-nun]
 I-Top Chelswu-Nom at.an.early.age hometown-Acc left-C
sasil-ul {alassta/molassta}
 fact-Acc knew/not.knew
 'I {knew/didn't know} the fact that Chelsw left his hometown at his early age.'
- b. [ikes-ul han sikan-nay kkuthnay-nun] il-un
 this-Acc one hour-in finish-C matter-Con
 {swuypci anhta/kanunghata}
 is.easy not/is possible
 'The matter of finishing this in an hour is {not easy/a possibility}.'
- c. na-nun [ku-ka kuphi naka-nun] {mosup/kwangkyeng}-ul
 I-Top he-Nom hurriedly go away-C look/scene KES-Acc
 poassta
 saw
 'I saw his look when he went away hurriedly.' or
 'I saw the scene in which he went away hurriedly.'
- d. [nay-ka pang-ul chungsoha-nun] il-ul towacwuseyyo
 I-Nom room-Acc clean.up-C work-Acc help
 'Help me with the work of cleaning up the room.'

Given the data like (13a-d) where the morpheme *kes*'s in (7a-d) are replaced with Ns, one might suggest that the morpheme *kes* ('KES') is also an N which can select a clausal complement or that an abstract N that selects a clausal complement can be replaced with *kes*. In fact, as in the case of the *kes* ('kes') phrases (cf., (6a)), the *kes* ('KES') phrases can be case-marked, appearing in noun phrase positions, and as in the case of *kes* ('kes') (cf., (6ci-ii)), *kes* ('KES') cannot appear alone: *kes* ('KES') should appear with a CP clause, just as *kes* ('kes') should appear with a modifier. Thus, one might conclude that abstract nouns that can select a CP can be replaced by *kes*, and therefore that *kes* ('KES') and *kes* ('kes') can be considered "dependent" or "defective" nouns in that they should be preceded by a CP complement or by a modifier.⁷

⁷ As reviewer C points out, there can be an alternative view, which is that *kes* ('KES') is C or part of C. However, the view may trigger non-trivial problems with the cases in (11a-

However, there seem to be some differences between the two, which suggest that *kes* ('KES') should not be classified as an N. First, while *kes* ('kes') can always be replaced with a lexical N (as in the case of the word *one* in English), *kes* ('KES') may not: As shown in (14),⁸ it is not the case that an abstract N (that can come with a clausal complement) can always be replaced with *kes* ('KES') (cf., (7a-d) and (13a-d)); and as shown in (15-6), there are some cases where one cannot think of any abstract nouns which could replace *kes* ('KES'). Furthermore, in the cases of (11c-d), *kes* ('KES') cannot be replaced with a lexical noun (cf., also fn. 6). Thus, it may not be plausible to suggest that *kes* is a replacement of an abstract noun.

- (14) ku-nun Yenghi-lul manna-l/mannass-ul {kanungseng/*kes}-i
 he-Top Yenghi-Acc meet-C/met-C possibility/KES-Nom
 issta/epsta
 is/not.is

'There {is/is not} a possibility that he {will meet/met} Yenghi.'

- (15) a. ku-ka maywu pappu-n kes kaththa
 he-Nom very be.busy-C KES seem
 'It seems that he is very busy.'
 b. ikes-i na-ul kes katha
 this-Nom be.better-C KES be.likely
 'It seems that this is better.'

- (16) a. Chelswu-ka mence tochakha-n kes-iyessta
 Chelswu-Nom in.advance arrived-C KES-was
 'It was that Chelswu arrived in advance.'
 b. i-ttay-nun camcakho iss-nun kes-ita (from H K Ahn (2001))
 this-time-Con without.a.word is-C KES-is
 'It is that (you) do not say a word in this case.'

Second, while the morpheme *kes* ('KES') should come with a CP, unlike *kes* ('kes'), it cannot be modified in any case (cf., (6cii)), which means that it does not have a typical property of N. Consider relative clause data in (17) and

d) (cf., H S Choe (In progress) who discusses that the *kes* ('KES') phrases in (11a) and (11c-d) form complex noun phrases). For example, consider here the case of (11c). If the *kes* ('KES') phrase should be considered a CP, the verbs like *stop* and *come with* in (9a-b) should be suggested to be able to select a CP clause, which is very problematic (cf., also (28) below).

⁸ Without arguments, I gloss *-(u)l* as C. It doesn't matter whether it is C or not. What matters here is that the *-(u)l* phrase is clausal and it does not function as a modifier of *kes* ('KES').

noun complement clause data in (18). When the head of a relative clause refers to a concrete object, as shown in (17a), it can be replaced with the morpheme *kes*, as shown in (17b). In this case, the morpheme *kes* can be further modified by a genitive phrase or by a determiner (cf., the underlined part in (17b)). On the other hand, as shown in (18a), when an abstract N selects a clausal complement, the N can also be modified, but when it is replaced with *kes* ('KES'), it cannot be modified, as shown in (18b). The same fact can be found in (19). The data in (18b) and (19) show that *kes* ('KES') does not behave like an N in that it cannot be modified, and therefore confirm that no intervening element is allowed between *-(nu)n* ('C') and *kes* ('KES') so that *kes* ('KES') may directly follow a CP. If *kes* ('KES') should be considered an N that selects a CP complement, then to explain why it cannot be modified, one has to resort to lexical idiosyncrasies, which is theoretically uninteresting or undesirable (cf., also fn. 11).

(17) a. Chelswu-ka ponayo-n {con-uy/ku}chayk-ul cal ilkessta
Chelswu-Nom sent-C John-Gen/the book-Acc well read
'(I) read {John's/the} book that Chelswu sent (to me).'

b. Chelswu-ka ponayo-n {con-uy/ku} kes-ul cal ilkessta
Chelswu-Nom sent-C John-Gen/the kes-Acc well read
'(I) read {John's/the} one that Chelswu sent (to me).'

 (lit.)

(18) a. [nalssi-ka tewecinta-nun] {con-uy/ku} cwucang-i macta
weather-Nom become.hot-C John-Gen/the claim-Nom is.right.
'{John's/the} claim that the weather is getting hot is right.'

b. [nalssi-ka tewecinta-nun] (*{con-uy/ku}) kes-i macta
weather-Nom become.hot-C John-Gen/the KES-Nom is.right.
'(*{John's/the}) KES that the weather is getting hot is right.'

 (lit.)

(19) [con-i ttenassta-nun] {ku sasil/(*ku) kes}-i allyecyessta
John-Nom left-C the fact/the-KES-Nom be informed.
'{The fact/(*The) KES} that John left was informed.'

 (lit.)

In short, the data in (14-16) and in (18-19) suggest that *kes* ('KES') may not be considered an N: Given the data like (14-16) and the cases in (11c-d), where *kes* ('KES') may not be replaced with an N, *kes* ('KES') may not be considered a replacement of an abstract noun; and given the data in (18-19), which says that *kes* ('KES') does not come with a modifier (in any case), *kes* ('KES') may not be considered an N.

Given the data and the discussion so far, the following can be said: As in the case of the *kes* ('kes') phrases (cf., (6a,ci)), the *kes* ('KES') phrases has the property in (20a), and *kes* ('KES') cannot appear alone (cf., (20b)), but the two

properties of *kes* ('KES') shown in (21a,b) suggest that *kes* ('KES') may not be considered a replacement of an abstract N (cf., (21a)), or an N that selects a CP complement (cf., (21b)).

- (20) a. The *kes* ('KES') phrase can be case-marked, appearing in a typical noun phrase position. (cf., (6a))
 b. The morpheme *kes* ('KES') cannot appear alone. (cf., (6ci))
- (21) a. *kes* ('KES') may or may not be replaced with an N, while *kes* ('kes') can always be replaced with an N, like the pro-form *one*.
 b. (i) The morpheme *kes* ('KES') should appear with the (non modifier) CP clause that ends with *-(nu)n* ('C'), but (ii) it may not be modified in any case so that no intervening modifiers may appear between *-(nu)n* ('C') and *kes* ('KES'). (cf., (6cii))

kes ('KES') and *kes* ('kes') exhibit the same property in that their phrases can be case-marked and they cannot appear alone (cf., (6a,ci)) and (20a-b)), but they also differ in relation to their distributional properties (cf., (6cii) and (21a-b); cf., also (12a-b)). Thus, it is interesting to see whether *kes* ('KES') exhibits the other properties of *kes* ('kes') in (6b) and (6d-e). Consider first the property of *kes* ('KES') in relation to (6b). It seems that although the *kes* ('KES') phrase can be case-marked, like any other noun phrases, *kes* ('KES') itself may not be pluralized. Abstract nouns can be pluralized in Korean, as shown in (22), but the morpheme *kes* ('KES') cannot be pluralized: In the context in (11a), when the head N can be pluralized, as shown in (23), the morpheme *kes* ('KES') (which seemingly appears in the position of the N) cannot be pluralized: When the plural marker *-tul* appears after *kes* ('KES') in (23), for example, the sentence becomes unacceptable.

- (22) *sasil-tul* ('fact-pl'); *il-tul* ('matter/work-pl'); *mosup-tul* ('look-pl'); *kwang-kyeng-tul* ('scene-pl'); ...
- (23) {*na/kutul*}-*nun* Chelswu-ka *saphyonay-ko* Yenghi-ka
 I/they-Top Chelswu-Nom resigned-and Yenghi-Nom
sungcinha-n {*il-tul/sasil-tul/kes(*-tul)*}-*ul* *anta*
 be.promoted-C matter-pl/fact-pl/KES-pl-Acc know
 ' {I/They} know {the matters/the facts/KES(*-s)} that Chelswu
 resigned and that Yenghi was promoted.' (lit.)

The same is true of the cases in (11c-d), as shown in (24-26), respectively.

- (24) Chelswu-nun [Yenghi-ka nonmwun-ul ssu-**n**] **kes**(*-tul)-pota
 Chelswu-Top Yenghi-Nom paper-Acc wrote-C KES-pl-than
 te manhun chayk-ul ssessta
 more many book-Acc wrote
 'Chelswu wrote more books than Yenghi wrote papers.'
- (25) na-nun [haksyang-tul-i naka-lye-**nun**] **kes**(*-tul)-ul
 I-Top student-pl-Nom went.out.try-C KES-pl-Acc
 motwu puthcapassta
 all stopped
 'I stopped all the students when they attempted to go out.'
- (26) [nay-ka Chelswu-lul manna-**n**] **kes**(*-tul)-un il-nyen-cen-kwa
 I-Nom Chelswu-Acc met-C KES-pl-Con one-year-ago-and
 o-nyen-cen-iyessta
 five-year-ago-was
 'When I met Chelswu was one year ago and five years ago.' (lit.)

Although *kes* ('KES') cannot be pluralized, as shown in (23-26), the *kes* ('KES') phrase can be substituted for the pronoun *ku-ke(s)* ('the-kes' = *it*), as shown in (27), which further suggests that the *kes* ('KES') phrase forms a noun phrase: As shown in (27b), the pronoun *it* can refer to the denotation of the clausal *kes* ('KES') phrase in (27a).

- (27) a. ku-ka sungcinha-**n** **kes**-ul alass-ni?
 he-Nom was.promoted-C KES-Acc knew-Q
 'Did (you) know that he was promoted?'
 b. ani, ku-ke(s) mollasse
 no, the-kes not.knew
 'No, (I) didn't know it.' (lit.)

It can also be substituted for the plural pronoun *ku-kes-tul* ('the-kes-pl' = *they*), when *kes* ('KES') appears in contexts where it can be replaced with a plural abstract N, as shown in (28ai, 28b). However, even when the *-(nu)n kes* phrase can be substituted for a plural pronoun (cf., (28b)), *kes* ('KES') cannot come with the plural marker, as shown in (28aii). Thus, I conclude that *kes* ('KES') may not be pluralized in any case.⁹

⁹ When the subject is plural, the plural marker *-tul* in Korean can be spread so that it may appear on nominal or non-nominal major XPs within the clause. Nevertheless, it cannot

- (28) a. Chelswu-ka saphyonay-ko Yenghi-ka sungcinha-n
 Chelswu-Nom resigned-and Yenghi-Nom be.promoted-C
 {(i) il-tul/sasil-tul/(ii)kes(*-tul)} alass-ni?
 matter-pl/fact-pl/KES-pl know-Q
 'Do (you) know {(i)matter-pl/fact-pl/(ii)KES(*-pl)} that Chelswu
 resigned and that Yenghi was promoted?' (lit.)
- b. ani, ku-kes-**tul** mollasse
 no, the.kes-pl not.knew
 'No, (I) didn't know them.' (lit.)

Moreover, *kes* ('KES') differs from *kes* ('kes') with respect to its semantics: In all the contexts in (11a-d), *kes* ('KES') cannot be interpreted as *one* (or as *thing*). In fact, it cannot be understood as referring to a concrete object (or a person) at all. Consider the case in (11a) first whose examples are given in (7a-d). In this case, *kes* ('KES') is not interpreted as referring to a concrete object, and it cannot be considered to have an antecedent, but its meaning or reference may be determined by the preceding CP and/or the predicate. In the cases of (11c-d), it is not entirely clear what the morpheme *kes* ('KES') means so that one may speculate that its meaning is "vague." Thus, it can be concluded that *kes* ('KES') does not have the properties in (6d-e), either.

Given the discussion above, I suggest that *kes* ('KES') has the properties in (29a-d), instead, which suggest that it differs from *kes* ('kes') in many ways:

- (29) a. The morpheme *kes* ('KES') may not be modified (in any case).
 (cf., (6cii); cf., also (21bii))
- b. The morpheme *kes* ('KES') cannot be pluralized in any case.
 (cf., (6b))
- c. The morpheme *kes* ('KES') is not interpreted as *one* (or as *thing*); and it does not refer to a concrete object. (cf., (6e))
- d. The morpheme *kes* ('KES') may not have a syntactic or discourse antecedent; but its meaning or reference may be considered either determined contextually or "vague." (cf., (6d))

However, as shown in (6a) and (20a), *kes* ('kes') and *kes* ('KES') also have the same properties in that their phrases form noun phrases. Moreover, the *kes* ('KES') phrase can be substituted for pronouns *it* and *they* (cf., (27-28b)), which

appear on the *kes* ('KES') phrase even via spreading in the case of (11a) (cf., (23)) and also in the cases of (11b-d) (cf., (24-26)). The data in (23), for example, show that even when the subject is plural (cf., *they*), the plural marker may hardly be able to appear on *kes* ('KES'), which suggests that *kes* ('KES') cannot come with the plural marker even via spreading.

implies that both the *kes* ('kes') phrase and the *kes* ('KES') phrase should be considered noun phrases. Given that Korean is a head-final language, *kes* ('kes') and *kes* ('KES') both should be considered heads, since they come last within a noun phrase. Nevertheless, the properties of *kes* ('KES') shown in (29a-d) and (21b) suggest that *kes* ('KES') is best analyzed not as a lexical N, but as a functional category.¹⁰ If a nominal phrase cannot be pluralized in case its lexical head N is null, then the following can be said: The property in (29b) suggests that *kes* ('KES') is actually a functional category within a noun phrase whose lexical head is null. If this is the case, the properties in (29d) can be properly explained: The *kes* ('KES') phrase cannot be interpreted as *one* since the null N cannot be considered the pro-form *one* as the pro-form *one* cannot select a clausal complement, and an abstract N that can select a CP clause cannot refer to a concrete object (29c). The meaning of the *kes* ('KES') phrase is determined by a null N whose reference is determined contextually (29d). Furthermore, note that as shown in (28), even when *kes* ('KES') can be substituted for the pronoun *them*, it itself cannot come with the plural marker. The fact shown in (28) can also be explained, if the *kes* ('KES') phrase contains a null N, forming a complex noun phrase. On the other hand, if *kes* ('KES') should be considered an N, one should postulate that there are many different *kes* ('KES')'s (which is not desirable), and also stipulate that although it is an N, it cannot come with the plural marker (cf., fn. 9). In fact, if the morpheme *kes* ('KES') is classified as an N, all the properties in (29a-d) would not be easy to explain or should be considered problematic. Given that a functional head may not be modified, and also given that no intervening element may come between a functional head and its complement, the property in (29a/21bii) also says that *kes* ('KES') may be a functional head. Thus, I suggest that the *kes* ('kes') and the *kes* ('KES') phrases, which should form noun phrases (cf., (6a) and (20a); cf., also (27-28)), can be analyzed, as shown in (30a) and (30b), respectively.¹¹

¹⁰ In fact, whether it is *kes* ('KES') or *kes* ('kes'), the morpheme *kes* has also been named "formal noun" (cf., Y-K Ko (1970) and Chung (1946) (cited in Y-K Ko (1970) and also in H K Ahn (2001))), since it has "some grammatical function and does not have a meaning itself." From the present perspective, only *kes* ('KES') should be considered "formal," or non-lexical.

¹¹ Reviewer C mentions a view that *kes* ('KES') is an N. Under the view, one has to resort to lexical idiosyncrasies to explain the property in (29b): It cannot come with the plural marker for lexical reasons. However, given that virtually any major XPs within a clause (nominal or non-nominal) can bear the plural marker via spreading in Korean, the view may not be theoretically interesting. It is better dispensed with if there is a way to explain why it cannot come with the plural marker even via spreading.

Reviewer B also suggests an alternative view: *kes* ('KES') may be considered a sort of dummy noun (N) or expletive (head). This view might be able to explain why *kes* ('KES') cannot come with the plural marker since a dummy noun may not be pluralized. However, it does not seem to be a theoretically attractive one, since there are non-trivial (empirical and theoretical) problems with the alternative view under the current version

- (30) a. [β ... [_{NP} ... *kes* ('kes')] ...] (*kes* ('kes') as a pro-form N (=one))
 b. [β ... [_{NP} ... [_{CP} ... -(nu)n]-N(0)] ... *kes* ('KES')]
 (*kes* ('KES') as a functional category)

In the following Section, to show that the structures in (30) are on the right track, based on the empirical data in Korean and English, I discuss the categorical status of a (full) noun phrase in English and Korean under the EP hypothesis suggested in H S Choe (2006, 2007b) that there is a functional category above a "regular" noun phrase. In Section 5, based on the discussion/conclusion in Section 4, I suggest, assuming that a "regular" noun phrase is DP, that the category β in (30a-b) is a functional category projection above DP, which suggests that a "regular" noun phrase has a sort of shell in a certain sense, and that *kes* ('KES') is a functional category above D.

4. The EP Hypothesis

Consider the following English data, which have been considered derived by right dislocation (cf., Ross (1967)).

- (31) a. He_i is a great scoundrel, [that husband of hers]_i.
 (from Jespersen (1924))
 b. I like him_i, your brother_j. (from Rothstein (1995))

As shown in (31a), in right dislocation data, a noun phrase appears in the sentence-final position, and its original position is occupied by its pronominal counterpart. The data in (31a) suggests that right dislocation may also be considered to be applied in (31b), and in the literature, the data like (31b) have in fact been considered derived by right dislocation (cf., Rothstein (1995), for example). If (31b) should be derived only by right dislocation, the two elements before and after the comma/pause in (31b) (*him* and *your brother*) may not form a constituent. However, unlike the case in (31a), (31b) seems to be ambiguous, because of the data like (32a-c). The data in (32a-c) containing conjunction structure suggest that the two elements before and after the comma in

of theoretical framework: First, a stipulation is required that a dummy element can select a CP complement. Second, if it is a dummy or expletive element, it would be difficult to explain its syntactic dependency shown in (20b), given that "expletives" usually appear alone, cross-linguistically. Third, under various versions of standard theory, a dummy element is usually considered required to satisfy formal requirements of a clause. However, it is not clear what formal requirement of a clause could be satisfied by *kes* ('KES'), or why it is required at all in the contexts shown in (11a-d). Finally, if Chomsky (1995) is correct, the lexicon may not include heads that have no semantic features.

(31b) may also form a constituent (i.e., a noun phrase).^{12,13}

- (32) a. I like [him, your brother] and [her, your sister].
 b. [We, the linguists] and [you, the philosophers] may work together.
 c. We agree with [them, the biologists] and with
 [them, the philosophers].

Given the data like (32a-c), (31b) may or may not be considered derived by right dislocation, and the two elements before and after the comma in (31b) may be considered to form a full realization of a nominal expression, forming a sort of “apposition” structure. Since the phrase after the comma has been assumed to form a DP, the data in (32a-c) suggest that a full noun phrase is not a DP, but a functional category projection above DP, and that the functional category projection above DP may form a full realization of a nominal expression. Based on the data like (32a-c), H S Choe (2006, 2007b) (Choe (2006, 2007b) from now on) in fact suggests the EP hypothesis shown in (33a-b) below, which suggests that there is a functional category above D (which is called E in Choe (2006, 2007b)) and that a deictic pronoun can appear in [Spec, E]. Choe (2006) further suggests that all the nominal expressions that require (abstract) Case are categorially EP, having the structure shown in (33b), and that a DP that is embedded by E (called DP*) should be distinguished from a DP that is not embedded by E.¹⁴ In (33b), DP* may contain all the elements of a “regular” noun expression containing a determiner or a genitive phrase (i.e., a modifier), and a deictic element may appear in [Spec,E] (or above DP*),

¹² Pesetsky (1978) discusses “apposition” phrases like (i), where the two underlined elements are divided by the comma, comparing the data like (ii) where they are not (cf., also Postal (1970) and Abney (1987) for discussions on the data like (ii)). However, he does not discuss whether the elements before and after the comma may form a constituent. As for the differences between (i) and (ii), see Pesetsky (1978) and also see H S Choe (2006, 2007b).

(i) we, the linguists (ii) we linguists

¹³ I'd like to thank Gillian Gallagher (p.c.) for the judgments of the data.

¹⁴ Choe (2006, 2007b) suggests that [deixis] at least is an interpretable/valued feature of E, just as [genericity], [definiteness], [wh], or [referentiality] is an interpretable/valued feature of D, and that deictic pronouns are [Spec, E] elements, but not Ds (or DPs). Choe (2006, 2007b) further suggest that E is also the locus of the formal features of a nominal expression including the case feature, and that while all the nominal expressions that require Case are categorially EPs, so-called *nominal predicates* are DPs (not EPs). In this respect, the notion of EP is similar to the notion of KP (Case Phrase) in Lamontagne and Travis (1986), which suggests that “Case (K) is the head of all lexically realized nominal arguments” (cf., also Travis and Lamontagne (1992)). However, the notion of EP suggested in Choe (2006, 2007b) is different from the notion of KP since the category EP is suggested to contain a deictic element in [Spec,E] (triggering a sort of “apposition” reading), unlike the category KP suggested in Lamontagne and Travis (1986). As for the various instantiations of EP and also as for the exact nature of EP, see Choe (2006, In progress).

triggering a sort of “apposition” reading.

- (33) a. The EP Hypothesis: A nominal expression forms the EP structure, as in (33b):
 b. [_{EP} deictic element, E DP*] (where the comma/pause is derived by a function of E)

Interestingly enough, the EP structure in (33b) can also be found in Korean where a nominal expression is divided by the comma/pause and the element before the comma is a deictic element (in a certain sense), triggering an “apposition” reading. Unlike English EPs where a deictic pronoun before the comma is a pro-form of the DP* followed by the comma in general, the morpheme *ku* (which is usually considered an equivalent of *the* in English) may appear before the comma, which is in turn followed by a “regular” noun phrase. Consider (34a-c), where quantifier phrases or “regular” nominal expressions are conjoined, respectively. As shown in (35a-c), the morpheme *ku* followed by the comma (a pause) may also come with a quantificational phrase (35a-b) or with a “regular” nominal expression (35c), and as in English, the two elements before and after the comma seem to form a constituent, given the conjoined structures in (35a-c). (To distinguish the morpheme *ku* that is followed by the comma from the one that is not, I gloss it as ‘ku’ (not as ‘the’), from now on.)

- (34) a. [mwues]-kwa [nwu]-ka ku-ul mancoksikhil-kka
 what-and who-Nom he-Acc will.please-Q
 ‘What and who will please him?’
 b. [etten cwucang]-kwa [etten pantay]-to heyongtoynta
 any claim-and any objection-also are.permitted
 ‘Any claims and any objections are permitted (here).’
 c. [con-uy emeni]-wa [mayli-uy emeni]-nun maywoo
 John-Gen mother-and Mary-Gen mother-Top very
 hwullywung hasyessta
 were.great
 ‘John’s mother and Mary’s mother were very great.’
- (35) a. [ku, mwues]-kwa [ku, nwu]-ka ku-ul mancoksikhil-kka
 ku, what-and ku, who-Nom he-Acc will.please-Q
 b. [ku, etten cwucang]-kwa [ku, etten pantay]-to heyongtoynta
 ku, any claim-and ku, any objection-also are.permitted
 c. [ku, con-uy emeni]-wa [ku, mayli-uy emeni]-nun maywoo
 ku, John-Gen mother-and ku, Mary-Gen mother-Top very

hwullywunghasyessta
were.great

In (35a-c), the morpheme *ku* ('ku') triggers a certain meaning, which differs from the typical (determiner or modifier) meaning of the morpheme *ku* (which does not appear before the comma).¹⁵ (35a) has the following question interpretation: *Among all the things which can be imaginable and among all the persons which can be under consideration, what and who will please him?*;¹⁶ and (35b) has the following interpretation: *all the claims and all the objections which could be available or could be under consideration were permitted*. The data in (35a-b) thus suggest that the morpheme *ku* ('ku') does not trigger the typical meaning of the determiner *ku* ('the') as a modifier (which should be considered "base-generated" below DP* from the present perspective). Even in the case of (35c) where the morpheme *ku* ('ku') comes with a referential nominal expression, it may not trigger a typical determiner meaning, triggering a certain deictic demonstrative meaning, which leads to a sort of existence assertion (as it denotes a location in some way, like a deictic locative): The reference of DP* exists somewhere where the speaker and the hearer know or can imagine (cf., also fn. 19 below). Moreover, in all the cases in (35a-c), the morpheme *ku* ('ku') triggers a sort of "apposition" reading, which means that it does not simply function as a modifier, unlike determiners as modifiers. Thus, I suggest that when it is followed by the comma, the morpheme *ku* ('ku') appears in [Spec,E], and that when it does, it does not function as a modifier, but is used as a deictic element, since it has the semantics of a deictic demonstrative, denoting a location.

There is evidence that there is a distributional difference between the morpheme *ku* ('the') as a DP*-internal element and the morpheme *ku* ('ku') as a [Spec,E] element. First, although scrambling is possible among modifiers in Korean, in (35b), for example, the morpheme *ku* cannot come after *etten* ('some') (cf., **etten ku N*), although the string *ku, etten N* is acceptable (cf., (35b)). If *ku* functions only as a modifier/determiner, this is unexpected. However, from the present perspective, the contrast can be easily explained. When the morpheme *ku* appears after a quantifier, it should be used as a modifier

¹⁵ Note that the morpheme *ku* always appears before N, which suggests that it is not a head because Korean is a head-final language. I thus assume here that it is a Spec element, whether or not it precedes the comma. In fact, it may be the case that determiners are not heads even in English, since they can be modified, as shown in (ia-b). In fact, if *a* and *the* are Ds, as widely assumed, one need postulate that in the case of D, the head can modify its complement (i.e., NP), which is not theoretically desirable.

(i) a. not a one b. all the books

¹⁶ The data in (35a) can also be interpreted as a rhetorical question (meaning *Nothing and nobody will please him*), which is not supposed to be triggered by the semantics of a determiner.

In addition to the morpheme *ku* ('ku'), the morphemes *i* and *ce*, which are usually considered demonstratives *this* and *that*, respectively, can also appear before the comma when they come with a quantificational or non-referential phrase, as shown in (37a-b). In (37a-b), the morphemes *i* and *ce* that appear before the comma do not function as modifiers, but as demonstrative deictic elements, denoting a location, like deictic locatives. From the present perspective, I thus suggest that when they come before the comma, *i* and *ce* function as [Spec,E] elements, but not as demonstratives/modifiers. (From now on, I gloss *i* and *ce* as [Spec,E] elements 'i' and 'ce,' respectively.)¹⁸

- (37) a. [i, mwusun mangpal]-i-nka
 i, what absurd.remark-is-Excl
 'What an absurd remark it is!'
 (i) *mwusun i mangpal

'The man who you told (me) yesterday came (this morning).'

Reviewer A, however, points out that the data like (ii) is fine where a relative clause (a modifier) appears before *ku* ('ku'), which in turn appears before a non-referential phrase. (The commas and some modifications are added to reviewer A's example).

- (ii) ne-ka iyakihaysste-n, ku, {etten salam/ kwukwu}-to an-wassta
 you-Nom met-C ku any person/anyone-also not-came
 'Anyone who you told (me) about didn't come.'

When a relative clause comes before *ku* ('ku'), which comes after the comma, the comma/pause seems to be required after the relative clause, as shown in (ii). In fact, in the case of (ib), if the comma comes after the relative clause, the sentence improves, as shown in (iii).

- (iii) ne-ka ecec iyakihaysste-n, ku, namca-ka wassessta

Given the semantics of *ku* ('ku') in (iii), it should be considered a [Spec,E] element in (iii).

Given the data like (ii) and (iii), I suggest that a relative clause may be either a DP*-internal modifier or an EP modifier, unlike other modifiers which may function only as DP*-internal modifiers, and therefore that the structure of (ii) or (iii) should be analyzed, as shown in (iv). If this is the case, it can be said that the pause is required after a relative clause, when the relative clause is adjoined to an EP, modifying the entire EP.

- (iv) [_{EP} [_{CP} ...], [_{EP} *ku*, ...]]

¹⁸ It seems that *i* ('i') and *ce* ('ce') (as [Spec,E] elements) appear in some restricted ways, and that there are some co-occurrence restrictions: *ce* ('ce') does not tend to appear after *mwusun* ('what'), and *mwukwu* ('who') does not usually come with *i* ('i') or *ce* ('ce'). As shown in (i), *i* ('i') and *ce* ('ce') may, however, be (marginally) allowed to come with a referential phrase.

- (i) a. (?)? i, con-uy chayk b. (?)? ce, con-uy chayk
 i, John-Gen book ce John-Gen book

Although there are some restrictions in relation to the distribution of *i* ('i') and *ce* ('ce'), the data in (37a-b) suggest that they can be used as [Spec,E] elements. Interestingly enough, according to Hyang-Sook Sohn (p.c.), in Gyeongsang dialects, *i* ('i') or *ce* ('ce') can also appear before the comma, when it comes with a referential phrase, as in the case of *ku* ('ku').

- b. [ce, etten papo]-lul com po-la
 ce, some fool-Acc please look-Imp
 'Please look at that {some/a certain} fool.' (lit.)
 (i) *etten ce papo

In general, *i* ('this') or *ce* ('that') (demonstratives as modifiers) cannot come after the *wh*-determiner *mwusun* ('what') or *etten* ('some/a certain'), as shown in (37ai-bi). This is also predicted, as in the case of (35b): When *i* or *ce* comes after a DP*-internal element, it is used as a modifier (a demonstrative). Thus, as long as it is not semantically compatible with a quantifier, it is correctly predicted not to come after a quantifier. On the other hand, in the cases of (37a-b), *i* or *ce* is used as a deictic element (a [Spec,E] element). Since it functions not as a modifier, but as a demonstrative deictic element, denoting a location in some way, it may come with a non-referential phrase, as shown in (37a-b). The comma/pause in fact seems to play an important role because if the comma does not come before *i* or *ce* in (37), the sentences become very awkward or unacceptable, as shown in (38a-b).

- (38) a. */??[i mwusun, mangpal]-i-nka
 b. */??[ce etten, papo]-lul com po-la (cf., (37a-b))

Given the contrast between (37) and (38), it can be concluded that both word order and pauses are responsible for determining the role/function of a pre-N element.

Given the discussion so far, I suggest the following: In Korean, *ku*, *i* or *ce* can be used either as a modifier or as a demonstrative deictic element (which triggers a sort of "apposition" reading, denoting a location, like a deictic locative). When it is used as a modifier, it appears within DP* and it cannot come with a non-referential phrase which is not semantically compatible with it, but when it is used as a demonstrative deictic element appearing in [Spec,E], it may, since it does not directly modify N unlike a quantifier. Note also that I've discussed that when it comes before the comma, *ku*, *i* or *ce* functions as a deictic element which triggers a demonstrative deictic reading, which is close to the semantics of a deictic locative. Interestingly enough, the deictic locatives *yeki* ('here') and *ceki* ('there') can also appear before the comma (which means that they can be [Spec,E] elements), and they can also come with noun phrases with demonstratives as modifiers (which are semantically compatible with them). The relevant data are, as shown in (39a-b), which are drawn from Y-T Hong (2006) with some modifications.¹⁹

¹⁹ Choe (2006, 2007b) suggests that in English, deictic locatives can also appear in [Spec,E] and that existential *there*, which is considered a deictic locative (cf., Kayne

- (39) a. [yeki i yehanksyang(-tul)]-kwa [ceki ce namhaksyang(-tul)]-ul
 here, this female.students-pl-and there that male.student-pl-Acc
 po-ala
 see-Imp
 'Look at [here, {these/this} female student(s)] and [there, {those/that} male student(s)].' (lit.)
- b. [yeki i yehanksyang(-tul)-eykey]-wa
 here, this female.students-pl-to-and
 [ceki ce namhaksyang(-tul)-eykey] cenha-yla
 there that male.student-pl-to send-Imp
 'Send (it) [to [here, {these/this} female student(s)]] and [to [there, {those/that} male student(s)]]'. (lit.)
 (cf., also (26) and (29) in Y-T Hong (2006))

Y-T Hong (2006) notes that the underlined *yeki* ('here') and *ceki* ('there') in (39a-b) can also bear the genitive marker, as shown in (39a-b)'. Given that the phrases in (39a-b)' are somewhat awkward, consider the data in (40) and (41), instead.

- (39)' a. yeki-uy i yehanksyang(-tul) b. ceki-uy ce namhaksyang(-tul)
 here-Gen this female.students-pl there-Gen that male.student-pl
- (40) a. {yeki/ceki}-uy {i/ce} chayk
 {here/there}-Gen {this/that} book
 (cf., (19) in Y-T Hong (2006))
 (i) '{this/that} book {here/there}'
- b. {yeki/ceki}-uy {i/ce} namwu
 {here/there}-Gen {this/that} tree
 (i) '{this/that} tree {here/there}'
- (41) a. {yeki/ceki}(,) {i/ce} chayk b. {yeki/ceki}(,) {i/ce} namwu
 here/there this/that book here/there this/that tree

(2006)), is "base-generated" as a [Spec,E] element, deriving the existential *there* construction via *there*-raising. However, *ceki*, which is an equivalent of locative or thematic *there*, is not a counterpart of existential *there* in Korean. In fact, Choe (2006) suggests that the morpheme *ku* ('ku') as an [Spec,E] element is an equivalent of existential *there* in Korean, although Korean does not exhibit *ku*-raising for a certain reason (cf., the splitting hypothesis in Choe (2006, 2007b)). See also Kayne (2006) who notes that various deictic elements can appear as "expletives" in existential *there* sentences.

From the present perspective, in (40a-b), *yeki* and *ceki* phrases should be used as modifiers, but in (41a-b), when they appear before the comma, they may not. There is in fact a meaning difference between (40a-b) and (41a-b). In (40a-b), the genitive phrase functions as a modifier of N, just as genitive noun phrases do: (40a-b) tend to mean ‘this book that belongs to this (particular) place’ or ‘the tree that belongs to that (particular) place,’ respectively. In fact, (40a-b) can be interpreted, as shown in (40a-bi), which means that in (40a-b), *here* and *there* function as modifiers. When the genitive marker does not appear, as shown in (41a-b), *yeki* (‘here’) and *ceki* (‘there’) may or may not be followed by the comma. When they are not in (41a-b), the meanings of (41a-b) are not different from those of (40a-b), which implies that the genitive marker can be optionally dropped. On the other hand, when there is a pause before them, the phrases in (41a-b) tend to have the following semantics of apposition: ‘this book, which is seen (right) here’ (41a) and ‘the tree, which is seen over there’ (41b). Thus, I suggest that *yeki* and *ceki* can also be ambiguous like the morpheme *ku* (‘the’ or ‘ku’) and also like *i* (‘this’ or ‘i’) and *ce* (‘that’ or ‘ce’): They can appear in [Spec,E] (before the comma) or within DP*. When they appear in [Spec,E] (before the comma), *yeki* and *ceki* (deictic locatives) are not interpreted as modifiers, while when they appear within DP* (with no pause after them), whether or not their case markers are dropped, they are interpreted as (genitive) modifiers, triggering the meanings in (40a-bi).^{20,21}

²⁰ As reviewer A points it out to me, under his proposal for the structure of noun phrases (which I will not discuss here for the lack of space), Y-T Hong (2006) suggests that the structures of (40) and (41) are different, as roughly shown in (ia) and (ib), respectively.

- (i) a. [yeki-uy [i chayk]] b. [[yeki i] chayk]

He further notes that in (ia), *yeki* modifies N (*chayk*), like *i*, but in (ib), it modifies *i*. I agree with him in that the genitive phrase functions as a modifier of N, but I partly disagree with him in relation to the function of the word *yeki* in (ib), since *yeki* can also be interpreted as a modifier of N even when it does not bear the genitive marker, depending on where the pause appear. In fact, the comma can appear either after *yeki/ceki* or after *i/ce*, as shown in (41) and (ii) below. Note also that (39a), for example, can also have a different pause position, as shown in (iii).

- (ii) a. {yeki/ceki} {i/ce}, chayk b. {yeki/ceki} {i/ce}, namwu
 here/there this/that book here/there this/that tree
 (iii) [yeki i, yehanksyang(-tul)]-kwa [ceki ce, namhaksyang(-tul)]-ul po-ala
 here this female.student-pl-and there that male.student-pl-Acc see-imp

From the present perspective, in case that (41a) should be analyzed as in (ib), the comma should appear in the way shown in (ii-iii), and in this case, *yeki* and *ceki* are interpreted as modifiers of *i* and *ce*, respectively (cf., also Y-T Hong (2006)), and therefore the strings *yeki i* and *ceki ce* should be considered [Spec,E] elements. However, when the comma appears, as in (41), then *i* and *ce* are interpreted as modifiers of N, while *yeki* and *ceki* are interpreted as [Spec,E] elements.

²¹ As shown in (i), both a relative clause and *i* or *ce* can appear after the comma, when *yeki* and *ceki* appear before the comma. In (i), both a relative clause and *i* or *ce* function as

Note that the deictic locatives *yeki* and *ceki* in (40a-b) can be replaced with a full genitive (noun) phrase, as shown in (42a-b). In this case, whether the genitive marker is dropped or not, no meaning change is obtained, which means that genitive noun phrases can function only as modifiers. This is also expected under the EP hypothesis, since under the EP hypothesis, only a deictic element can appear in [Spec,E].^{22,23}

modifiers. On the other hand, the words *yeki* and *ceki* before the comma function as [Spec,E] element, triggering a sort of “apposition” reading, denoting a location.

- (i) [*yeki*, *Chelswu-ka sim-un i namwu*]-wa [*ceki*, *Yenghi-ka sim-un ce*
here, Chelswu-Nom planted-C this tree-and there, Yenghi-Nom planted-C
namwu]-lul po-ala
that tree-Acc look.at-Imp (cf., fn. 14 in Y-T Hong (2006))

‘Look at [here, this tree that Chelswu planted] and [there, that tree that Yenghi planted].’

As in the case in (41a-b), *yeki* can also be interpreted as a modifier, when it is not followed by the comma. As shown in (iia-b), *yeki* can appear between a relative clause and the determiner *i*. In this case, as in the cases of (ii-iii) in fn. 17, a pause tends to appear, as specified in (iia), and in (iia), *yeki* is interpreted as modifying *i*, which means that the string *yeki i* forms a constituent as a [Spec,E] element

- (ii) a. [*Chelswu-ka sim-un, yeki i, namwu*]
Chelswu-Nom planted-C here this tree
b. [*Chelswu-ka sim-un, yeki, i namwu*]
Chelswu-Nom planted-C here this tree

Given that a relative clause can be adjoined to an EP, as discussed in fn. 17, (iib) is also expected where *yeki* functions as a [Spec,E] element and *i* as a modifier. Note also that when a genitive phrase, which functions only as a modifier of N, appears after *yeki*, as shown in (iii), the pause may appear only after *yeki*, as shown in the contrast between (iiia) and (iiib), which is correctly predicted from the present perspective.

- (iii) a. [*Chelswu-ka sim-un, yeki, Yenghi-uy namwu*]
Chelswu-Nom planted-C here Yenghi-Gen tree
b. *[*Chelswu-ka sim-un, yeki Yenghi-uy, namwu*]
Chelswu-Nom planted-C here Yenghi-Gen tree

²² Reviewer A points out that the genitive marker may not be dropped in (42), also noting that in the case of (i), the genitive marker is required.

- (i) *Chelswu*(-uy) i chayk* (‘Chelswu-Gen this book’)
(cf., (18) in Y-T Hong (2006))

The dropping of the genitive marker is possible in the cases of (42), but not in (i), according to my judgments. However, when case dropping is possible is beyond the present paper, but what matters here is that genitive phrases do not function as deictic [Spec,E] elements (cf., also the data in fn. 23).

²³ Other genitive temporal phrases can appear before the morpheme *ku* (‘the’) (as a modifier), as shown in (i). Whether or not the genitive marker is dropped, the (genitive) temporal phrase is interpreted as a modifier in (i). Given that modifiers are elements of DP* under the present approach, the morpheme *ku* (‘the’) as a [Spec,E] element is correctly predicted to come with the temporal phrase, as shown in (ii).

- (i) {*yecey/yeysnal*}(-uy) ku yaksok (ii) ku, {*yecey/yeysnal*}(-uy) yaksok
yesterday/old.days-Gen the promise ku yesterday/old.days-Gen promise

- (42) a. {i kakey/ce kakey}-uy {i/ce} kanphan
 {this store/that store}-Gen {this/that} signboard
 ‘{this/that} signboard of {this/that} store’
 b. {i kakey/ce kakey}-uy {i/ce} namwu
 {this store/that store}-Gen {this/that} tree
 ‘{this/that} tree of {this/that} store’

Given the discussion so far, I suggest that the EP hypothesis can also explain Korean data, and that the full realization of a nominal expression has the form shown in (43a), which means that both *ku/i/ce* and *yeki/ceki* are used ambiguously: They may be used either as a deictic element in [Spec,E] or as a DP*-internal modifier, as shown in (43ai-ii). When they are used as deictic elements in [Spec,E], appearing before the comma, they do not function as modifiers (43ai). On the other hand, when they are used as DP*-internal elements, they do not appear before the comma and function only as modifiers (43aii). Whether or not the genitive marker is dropped, genitive (noun) phrases can function only as modifiers (cf., (43aii)), and therefore they may not appear before the comma, as shown in (43b).^{24,25}

- (43) a. (i) [EP {*ku/i/ce/yeki/ceki*}, [DP* ... [NP ... N] D*(0)] E(0)]
 (ii) [EP ... [DP* {*ku/i/ce/yeki(-uy)/ceki(-uy)/NP(-uy)/...*}
 [NP ... N] D*(0)] E(0)]
 b. *[EP {*yeki-uy/ceki-uy/NP(-uy)*}, [DP* ... [NP ... N] D*(0)] E(0)]

(43ai-ii) suggest that demonstratives (*ku, i, ce*) and locatives (*yeki, ceki*) in Korean can be used ambiguously. They may be used as DP*-internal elements, which function as modifiers, and they may also be used as [Spec,E] elements, appearing before the comma/pause. I’ve suggested that when they are used as [Spec,E] elements, they function not as modifiers, but as demonstrative deictic elements or deictic locatives, triggering a sort of “apposition” reading, denoting a location. Under the present approach, I predict that there may be more than one modifier, but there may be only one [Spec,E] element. In fact, it

²⁴ I assume here that mostly because of a requirement of semantic compatibility, there are some co-occurrence restrictions in relation to which [Spec,E] element cannot come with which DP*-internal modifier (e.g., **ceki, i...*, **i, ceki...*). The exact nature is however beyond the present paper.

²⁵ As reviewer A notes, *i, ku, ce, yeki* and *ceki* are all deictic expressions. Under the present view, as long as they are not followed by the comma/pause, without triggering a sort of “apposition” reading, denoting a location, they function as modifiers (appearing within DP*), like the deictic expression *here* or *your* in the English phrase *a book here* or *your book*. Note also that Choe (2006) discusses that there are two different case, agreement marking processes and apposition systems within EP (DP*-external and DP*-internal), which exhibit different properties (cf., also Larson and Yamakido (2006) which suggests that there are two different case marking systems within a nominal expression).

seems that there is a restriction in relation to the distribution of deictic [Spec,E] elements: More than one modifier can come before N and their word order is not strictly restricted, but only one [Spec,E] element can appear. When the morpheme *ku* ('ku') appears before the comma, as shown in (44a), for example, *ceki* or a noun phrase can appear after the comma, whether the genitive marker appears or not. However, when there is a pause after *ceki* or a noun phrase, as shown in (44b), the whole phrase sounds very awkward, which means that only one deictic element should appear before a pause. In short, from the present perspective, the unacceptability of (44b) is expected under the EP hypothesis: Since there is only one Spec in EP, only one deictic element can come before the comma, appearing above DP*.

- (44) a. (?) *ku*, {*ceki*/*ce kakey*}(-uy) *ce* {*kanphan*/*namwu*}
 ku, there/that store-Gen that signboard/tree
 b. **ku*, {*ceki*/*ce kakey*}, *ce* {*kanphan*/*namwu*}
 ku, there/that store that signboard/tree

So far, I've discussed the following under the EP hypothesis in (33) suggested in Choe (2006, 2007b): Given the English data like (32a-c) which show that there must be a functional category above a "regular" nominal expression (usually considered a DP) which contains all the modifiers, the category of a full nominal expression should be considered a functional category above DP, which contains a deictic element that appears before the comma, triggering a sort of "apposition" reading (cf., the EP hypothesis in (33)). I've also examined nominal expressions in Korean to show that the nominal expressions in Korean can also be considered to have the EP structure in (33b), which contain a deictic element that triggers a sort of "apposition" reading, denoting a location. As shown in (43ai), *ku/i/ce* and *yeki/ceki* can appear before the comma, as non-modifiers, and in this case, they can be followed by a "regular" nominal expression (i.e., a DP), and trigger a sort of "apposition" reading, denoting a location, which implies that the [Spec,E] elements in Korean all behave like deictic locatives. Furthermore, I've also suggested that *ku/i/ce* and *yeki/ceki* may also appear after the comma, functioning as modifiers, as shown in (43aii). Given the nominal structure shown in (43a) and also English data like (32a-c), I conclude that the EP hypothesis is empirically well-motivated that a full realization of nominal expression is a functional category projection above a "regular" noun phrase (which I call EP here, following Choe (2006, 2007b)).

5. The Morpheme *kes* ('KES') as E

As discussed in the previous Section, if a full nominal expression is an EP in Korean (and also in English), which is divided into a non-modifier deictic element (in [Spec,E]) and a DP* which contains all the modifiers (cf., genitive phrases or determiners), it is plausible to suggest that the morpheme *kes* ('KES') in Korean is a realization of E. Let me thus suggest that the category β in (30a-b) is EP, as shown in (45a-b), which means that the morpheme *kes* is categorially ambiguous between N and E.

- (45) a. [_{EP} ... [_{DP} ... [_{NP} ... *kes* ('kes')] -D(0)]]
 (*kes* ('kes') as a N pro-form (=one))
 b. [_{EP} ... [_{DP} ... [_{NP} ... [_{CP} ... -(nu)n] -N(0)] -D*(0)] *kes* ('KES')]
 (*kes* ('KES') as an E)

In (45a), *kes* ('kes') is considered an N so that it may be modified, but in (45b), the N, which selects a clausal complement, is null so that it may not have (overt) modifiers. Under the proposal shown in (45a-b), the properties of *kes* ('KES') shown in (29a-d) can be properly explained: First, given that *kes* ('KES') is a functional category (E), the property in (29a) is explained: *kes* ('KES') cannot come with a modifier, since a functional head may not be modified. It also follows that no element can intervene between *-nun* (C) and *kes* ('KES') (cf., (21bii)): Since the null N cannot be modified, no modifiers or no elements can intervene between them. On the other hand, *kes* ('kes') can come with a modifier, since it is a lexical category (N) (cf., (6cii)), and it must come with a modifier because of its lexical property which triggers syntactic dependency. Second, given that the head of its complement (i.e., N) is null, the property in (29b) is explained that the *kes* ('KES') phrase cannot be pluralized. If an XP can bear the plural marker only when the lexical head within the XP is overt, which seems to be the case, then it can be explained why *kes* ('KES') cannot be followed by the plural marker even when the whole nominal expression is considered as plural (cf., (28a-b)) (cf., also fn. 9). Third, given that the null N in (45b) selects a CP complement, the whole *kes* ('KES') phrase or *kes* ('KES') cannot be considered to refer to a concrete object or to be interpreted as *one* (or as *thing*), since an N which selects a CP complement is an abstract N (cf., (29c)). The present approach can also explain why *kes* ('KES') cannot have an antecedent and why it does not have its own meaning, unlike *kes* ('kes') (cf., (29d)): Since it is a functional head, it does not have a reference itself in any sense, but since it is a functional category that comes with a null N, the reference of the *kes* ('KES') phrase may be actually determined by the null

N whose meaning is determined by (syntactic) contexts (cf., (29d)).²⁶

The present approach given in (45) has some further advantages, as it can provide an account of the syntactic and semantic dependency of the morpheme *kes*: It can provide a possible account of semantic dependency of *kes* ('kes') and *kes* ('KES') shown in (6d-e) and (29c-d). Consider the semantic dependency of *kes* ('kes') in (6d-e). Given that *kes* ('kes') can be best interpreted as *one* (a pro-form) in (45a), the property in (6d) can be plausibly explained: The meaning or reference of the morpheme *kes* is determined syntactically or contextually, because it is a pro-form like *one*, whose reference is determined syntactically or contextually (6d). The property shown in (6e) can also be attributed to a lexical property of the noun *kes* ('kes'): *kes* ('kes') has the feature [+concrete]. The approach given in (45) can also explain the semantic dependency of *kes* ('KES') shown in (29c-d): Since it is a functional category, its phrase cannot be interpreted as referring to a concrete object or may not have an antecedent (29c-d). In the case of *kes* ('KES'), given that the N should be null, as shown in (45b), which means that an overt N and *kes* ('KES') do not appear at the same time, descriptively speaking, the meaning of the *kes* ('KES') phrase should be attributed to the semantics of the null N and also that of the preceding CP. Thus, in some cases (but not in every case), the meaning of the null N may be largely determined by the syntactic and/or semantic nature of the CP clause directly followed by it (cf., (11a) and (29d)). Thus, from the present perspective, the semantic defectiveness or dependency is interpreted in two different ways: In the case of *kes* ('kes'), it is derived by the lexical properties of *kes* ('kes') as a pro-form (6c-e), but in the case of *kes* ('KES'), it is basically derived by the existence of a null N, whose meaning may be determined contextually.²⁷ Since the N is null, the reference of the whole "NP" (EP here) should also be contextually determined.

The present approach can also properly characterize the syntactic depend-

²⁶ Reviewer B points out that the structure shown in (45b) where the existence of null N and null D is postulated is best considered a stipulation, as it is not empirically well-motivated. However, the postulation of null N is not new and is empirically well-supported: Since Kiparsky and Kiparsky's (1970) work, factive verbs have been implicitly or explicitly assumed to select a complex noun phrase containing a null N. Given the existence of demonstratives or genitive phrases in Korean, it is also plausible to assume a functional category above N (i.e., D) for the following reasons: D is usually known to be responsible for genitive marking. Moreover, demonstratives are closely linked with [referentiality], which cannot be considered a feature of a lexical category N. Assuming that N and D are required for "regular" noun phrases, the EP hypothesis suggests that there must be one more functional category, which is responsible for [deixis], at least.

²⁷ As for the different functions and meanings of the *kes* ('KES') phrases in (11a-d), the present approach suggests that complex noun phrase structures are involved in (11a-d), as in the case of factive sentences (cf., Kiparsky and Kiparsky (1970)), and therefore that the null N's involved in the constructions in (11a-d) are responsible for them, without postulating many different *kes* ('KES')'s, which is a welcome result.

ency of the morpheme *kes* shown in (6ci) and (20b) in the following way: In the case of *kes* ('KES'), I suggest, assuming a (descriptive) generalization in (46), which seems to be empirically true, that it may not appear alone for a syntactic reason: Given (46) and given that the head N is null within the *kes* ('KES') phrase, it follows that the morpheme *kes* ('KES'), which is a functional category, should come directly with a (clausal) complement of the head N.

(46) A functional category cannot form a (non-clausal) phrase alone.

On the other hand, in the case of *kes* ('kes'), it may not appear alone for a lexical reason: It is lexically "defective" or "dependent" in that it needs to be modified. As lexical properties usually allow exceptions, I predict that some exceptions can be found, and the prediction seems to be borne out: The morpheme *kes* ('kes') may appear alone in some restricted contexts, as shown in (47), but no exceptions can be found in relation to the property of the morpheme *kes* ('KES') in (20b).

(47) *kes*(-tul) *cham kwuyyepta*
kes-pl pretty are.cute
 '(These) things are pretty cute.' Or '(This) thing is pretty cute.'

From the present perspective, one question can be raised since *kes* ('KES') does not come with a deictic [Spec,E] element (that comes before the comma), as shown in (48a). The sentence in (48a) shows that *kes* ('KES') cannot appear with the morpheme *ku* ('ku') as a [Spec,E] element in Korean, which means that a [Spec,E] element and E cannot be overt at the same time, given the structure of (48a) in (49a). On the other hand, as shown in (48b), whose structure is, as shown in (49b), when *kes* ('KES') appears instead of N (for example *fact*), the morpheme *ku* ('ku') (as a [Spec,E] element), which is always followed by the comma, may optionally appear.²⁸

²⁸ Reviewer C notes that when *chakhan* ('good') is added, (48a) improves with *ku*. However, I think that the sentence can be acceptable because *ku* can be interpreted as related with *chakhan Chelswu* or with *chakhan*, (but not with the *kes* ('KES') phrase), as shown in (ia) or (ib).

- (i) a. [*ku, chankan Chelswu*] b. [[*ku chankan*] *Chelswu*]
 ku good Chelswu *ku good Chelswu*

In (ia), *ku* is used as a [Spec,E] element, but in (ib), *ku* can be considered used as a degree adverb, like *this* or *that* in the English data shown in (ii). In fact, *i* and *ce*, which are equivalents of *this* and *that* can function as degree adverbs in Korean, as shown in (iiia), and as predicted, *i* and *ce* can also be interpreted as [Spec,E] elements, as shown in (iiib).

- (ii) This is not {*this/that*} good.
 (iii) a. [[{*ce/i*} *chankan*] *Chelswu*] b. [{*ce/i*}, *chankan Chelswu*]

- (48) a. motwu-ka [(**ku*,) Chelswu-ka papo-la-nun kes]-ul anta
 everyone-Nom ku Chelswu-Nom genius-is-C KES-Acc know
 'Everyone knows that Chelswu is a fool.'

- b. motwu-ka [(*ku*,) Chelswu-ka papo-la-nun
 everyone-Nom ku Chelswu-Nom fool-is-C
 somwun/sasil]-ul anta
 rumor/fact-Acc know

'Everyone knows the rumor/the fact that Chelswu is a fool.'

- (49) a. [_{EP} (**ku*,) ... [_{NP} [_{CP} ...-(*nu*)*n*] N(0)] ... *kes*] (where N is null)
 b. [_{EP} (*ku*,) ... [_{NP} [_{CP}-(*nu*)*n*] *N*] ... E(0)] (where E is null)

As for the reason of why *kes* ('KES') cannot come with a deictic element in [Spec,E], given the structures in (49a-b), I speculate that E and a [Spec,E] element cannot be overtly realized at the same time (cf., 49a) because of a sort of "doubly-filled COMP" type of condition (when [Spec,C] is filled with a *wh*-element, C[+*wh*] cannot be overt).²⁹ One might suggest under the EP hypothesis that *kes* ('KES') may be D*. However, this view may not be able to explain why the morpheme *ku* cannot appear with *kes* ('KES'), when it appears before the comma, as shown in (48a). If *kes* ('KES') is considered to be categorially D*, then it may not be easy to explain why D* (= *kes* ('KES')) cannot appear with a [Spec, E] element (= *ku* ('ku')). Note also that from the present perspective, while *kes* ('KES') is E, *kes* ('kes') is N. I thus predict that unlike *kes* ('KES'), *kes* ('kes') can come with the morpheme *ku* as a [Spec, E] element, as shown in (50), and the prediction seems to be borne out, as shown in (51).³⁰

- (50) [_{EP} *ku*, ... [_{NP} *(AP) *kes*] ... 0]]

- (51) [*ku*, Chelswu-ka ecey sa-n kes]-ul com po-ala
 ku, Chelswu-Nom yesterday bought-C kes-Acc please see-Imp
 'Please look at the one Chelswu bought yesterday.'

²⁹ Note that doubly-filled COMP filter effects do not appear universally, as discussed in the literature. Thus, I am not suggesting that the structure in (49a) with *ku* ('ku') is universally unacceptable.

³⁰ As reviewer B notes, one may not detect a (clear) contrast between (48a) and (48b,51), mostly because some proper discourse or pragmatic contexts and/or proper intonation patterns are required with sentences with *ku* ('ku') as a [Spec,E] element. In any case, it seems to me that there is a contrast between (48a) and (48b,51): (48a) is much worse than (48b) and (51).

Finally, let me discuss two further advantages of the present approach. One is that it may give an insight into the question in (52). In Korean, morphemes that can be considered determiners or demonstratives do not appear in the head position (i.e., between N and E), which means that D is never overt in Korean (cf., fn. 15). Thus, one may ask why Korean does not employ overt Ds. Under the present approach, the two cases of nominal expressions in (45a-b) suggest that when E is overt, N should be null, and vice versa, which leads to the empirical generalization in (53a). To explain (53a), the present approach can suggest a principle in (53b), and the principle in (53b), which is obtained under the present approach, can answer the question in (52): In Korean, since either an N or an E can be overtly realized, D can never be overt within a noun phrase.

(52) Why does Korean not employ overt Ds?

(53) a. Both E and N may not be overt at the same time.

b. Only one head can be overt within a nominal expression (= an EP) in Korean.

The other is that the present approach can always predict the categorial status of the morpheme *kes*, based only on its distributional property: If it appears in the context in (12a), it is *kes* ('kes'; N), but if it appears in the context in (12b), it is *kes* ('KES'; E). Consider the data in (54-5), where the morpheme *kes* appears before the *-(u)l* clause. From the present perspective, since the *-(u)l* clauses in brackets in (54) and (55) cannot be considered as modifiers, the morpheme *kes* should be classified as *kes* ('KES') (i.e., E). Note also that in (54-5), the morpheme *kes* triggers a meaning of modality (cf. the bold-lettered parts in (54) and (55)). The present approach can also explain why *kes* ('KES'), but not *kes* ('kes'), triggers different (modality) meanings: Since *kes* ('KES') should come with a null N (cf., (45b)), it follows that the modality meaning (*is going to/will* or *should*) is obtained via the semantics of the null N that appears in the context of (54) or (55). Again, the present approach need not postulate that the morpheme *kes* is lexically ambiguous in many ways, and can explain why the morpheme *kes* ('KES') can trigger various meanings, even if it is a functional category.

(54) [ku-nun koc ttena-l] kes-ita
 he-Top soon leave-C KES-is
 'He {**is going to/will**} leave soon.'

(55) a. [cuksi o-l] kes
 without.a.delay come-C KES
 '(You) **should** come without a delay.' (from H K Ahn (2001))

- b. [phathune-nun yeypu-l] kes
 partners-Top be.pretty-C KES
 'Partners **should** be pretty.'

So far, under the EP hypothesis in (33a-b), I've suggested that *kes* ('KES') is an E, which has no lexical meaning itself, while *kes* ('kes') is a pro-form N (*one*). I've also shown that the present suggestion can properly explain the double-faced properties of *kes* ('KES') (cf., (20) vs. (21,29)): The *kes* ('KES') phrase exhibits properties of nominal expressions, as shown in (20a) (cf., also (27-28)), but the morpheme *kes* ('KES') itself exhibits the properties shown in (21a-b) and (29a-d), which suggest that it should be classified as a non-lexical functional category, unlike the morpheme *kes* ('kes') that should be classified as an N (cf., (6a-e)). I've showed that they are syntactically and semantically dependent for different reasons: *kes* ('KES') cannot appear alone for syntactic reasons (cf., (20b) and (46)) while *kes* ('kes') cannot appear alone for lexical reasons. I've also showed that the meaning of the *kes* ('KES') phrase is determined by the null N, whose meaning is determined contextually, while the meaning of the *kes* ('kes') phrase is determined either by a syntactic antecedent or by a discourse antecedent, since *kes* ('kes') is a pro-form like *one*. Finally, I've discussed some advantages of the present approach to suggest (46) and (53b), answering the question in (52).

6. A Summary

In this paper, based on the empirical data, I've shown that the morpheme *kes* in Korean has two different distributional properties, as shown in (12a) and (12b), and suggested that it is actually categorially ambiguous. In the context in (12a), it is a lexical noun (N), while in the context in (12b), it is a functional category, which I call E under the EP hypothesis in Choe (2006, 2007b), which suggests that a full realization of nominal expression is a functional category projection above DP (called EP), and that the functional category projection EP is divided into two: A deictic [Spec,E] element and the complement of E (which is called DP* here). Based on the conclusion in Section 4 that both in Korean and English, the EP hypothesis is empirically supported, I've further suggested that the morpheme *kes* in the context in (12b) (*kes* ('KES')) is a realization of E.³¹ I've shown how the present approach can explain the double-faced properties of *kes* ('KES').

I've also attempted to answer the questions in (56a-b), suggesting that the

³¹ If this is the case, then it provides strong evidence in favor of the EP hypothesis suggested in Choe (2006, 2007b).

syntactic and semantic dependency of the morpheme *kes* should be understood differently, depending on whether it is *kes* ('KES') or *kes* ('kes').

- (56) a. Why are *kes* ('KES') and *kes* ('kes') syntactically dependent so that they may not appear alone?
 b. Why are *kes* ('KES') and *kes* ('kes') semantically defective so that their meanings may be contextually and/or syntactically determined?

Finally, to explain some (language-particular) descriptive facts, I've suggested a principle in (53b) to answer the question in (52), explaining the empirical generalization in (53a).

References

- Abney, Steve. (1987). *The English Noun Phrase in Its Sentential Aspect*. Doctoral dissertation, MIT.
- Ahn, Hyo Kyeong. (2001). *Hyentaykwukeuy Uyconmyengsa Yenkwu* (A study of dependent nouns in Modern Korean). Yeklak, Korea.
- Choe, Hyon Sook. (2006). The syntax of existential *there* and the structure of nominal expressions. Ms., MIT and Yeungnam University.
- Choe, Hyon Sook. (2007a). Korean clausal comparatives as subcomparatives: In comparison with English clausal comparatives. Ms., Yeungnam University.
- Choe, Hyon Sook. (2007b). The EP hypothesis and a splitting approach to existential *there*. Paper read at GLOW in Asia VI (December 29, 2007), Hongkong.
- Choe, Hyon Sook. (In progress). The syntax of impersonal *it* under the EP-splitting approach. Ms., Yeungnam University.
- Choi, Hyun-Bae. (1929/1980). *Wuli Malpon* (The grammar of our language). Cengumsa, Korea.
- Chomsky, Noam. (1995). *The Minimalist Program*. Cambridge, MA.: MIT Press.
- Hong, Yong-Tcheol. (2006). The extended nominal projections in Korean. *Korean Journal of Linguistics* 31.4, 657-684.
- Jespersen, Otto. (1924). *The Philosophy of Grammar*. George Allen and Unwin Ltd.
- Kayne, Richard. (2006). Expletives, datives, and the tension between morphology and syntax. Ms. New York University.
- Kiparsky, Paul and Carol Kiparsky. (1970). Fact. In Manfred Bierwisch and Karl Erich Heidolph, eds., *Progress in Linguistics: A Collection of Papers*, 143-173. The Hague: Mouton.
- Ko, Yeong-Kun. (1970). *Hyentaykwukeuy Cwuncaliphyengsikey Tayhan Yenkwu* (A study on semi-free forms in Modern Korean). *Language Research* 6.1, 17-55.
- Lamontagne, Greg and Lisa deMena Travis. (1986). The case filter and the ECP.

- McGill Working Papers in Linguistics 3.2, 51-73.
- Larson Richard K. and Hiroko Yamakido. (2006). Zazaki "Double Ezafe" as double case-marking. Ms., Stony Brook University and University of Arizona.
- Lee, Jeong-Shik. (2002). Ellipsis in Korean comparatives. *Studies in Modern Generative Grammar* 30, 155-179.
- Pesetsky, David. (1978). Category switching and so-called pronouns. In D. Farkas, et al., eds., *Papers from the 14th Regional Meeting Chicago Linguistic Society*, 350-361.
- Postal, Paul M. (1970). On so-called pronouns in English. In Roderick A. Jacobs and Peter S. Rosenbaum, eds., *Readings in English Transformational Grammar*, 56-82. Ginn and Company.
- Ross. (1967). *Constraints on Variables in Syntax*. Doctoral dissertation. MIT.
- Rothstein, Susan. (1995). Pleonastics and the interpretation of pronouns. *Linguistic Inquiry* 26, 499-529.
- Suh, Cheongsoo. (1994). *Kwuke Mwumpep* (The grammar of the Korean language). The Deep-Rooted Tree Publishing House, Korea.
- Travis, Lisa and Greg Lamontagne. (1992). The case filter and licensing of empty K. *Canadian Journal of Linguistics* 37.2, 157-174.

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