

Cognitive Indexical Usage of Demonstrative *Ku* in Korean and a Split DP Analysis

Min-Joo Kim
Texas Tech University

1. Introduction

Recent typological research has shown that when two lexical N modifiers co-occur modifying the same nominal, the heavier one occurs more in the periphery of the DP than the lighter one does; that is, a ‘heavy N modifier > light N modifier’ surface order obtains, where ‘>’ means ‘structurally higher’ (see Cinque 2010 and the references there).

In general, this adjective ordering restriction (AOR) holds for Korean. This can be seen by comparing (1a) and (1b): (1b) is judged bad and this follows from said AOR since here, a lighter N modifier, i.e., an adjective phrase (AP), occurs preceding a heavier one, i.e., a relative clause (RC). (Here and below, *e* represents the gap inside a RC and the subscripts indicates co-indexation.)

- (1) a. $\sqrt{[RC \quad e_i \quad \text{mincwucwuuy-lul} \quad \text{thanapha-}\emptyset\text{-n,}$
 [[$\quad \quad \quad$ democracy-Acc $\quad \quad \quad$ oppress-Prf]-Rel,
 [AP $\quad \text{tokcaycek}$] $\quad \quad \quad$ kwuncwu_i]
 [$\quad \quad \quad$ tyrannical] $\quad \quad \quad$ monarch]
 ‘a/the tyrannical monarch who oppressed democracy’
 (RC > AP)
- b. *[AP $\quad \text{tokcaycek}$], [RC $\quad e_i \quad \text{mincwucwuuy-lul}$
 [[$\quad \quad \quad$ tyrannical] [$\quad \quad \quad$ democracy-Acc
 thanapha- \emptyset -n, $\quad \quad \quad$ kwuncwu_i]
 oppress-Prf]-Rel, $\quad \quad \quad$ monarch]
 Intended: ‘a/the tyrannical monarch who oppressed democracy’
 (AP > RC)

Interestingly, however, this generalization does not hold when an adnominal AP co-occurs with the distal demonstrative (DEM) *ku* ‘the/that’. For example, in (2), both ‘RC > AP’ and ‘AP > RC’ orders are judged grammatical and the crucial difference between (1b) and (2b) is that the latter contains the DEM *ku*, which occurs immediately preceding the AP.

- (2) a. $\sqrt{[RC \quad e_i \quad \text{mincwucwuuy-lul} \quad \text{thanapha-}\emptyset\text{-n,}$
 [[$\quad \quad \text{democracy-Acc} \quad \quad \text{oppress-Prf} \text{-Rel,}$
 [**ku** **tokcaycek**] $\quad \quad \text{kwuncwu}_i$]
 [that tyrannical] $\quad \quad \text{monarch}$]
 ‘that tyrannical monarch who oppressed democracy’
 (RC > DEM > AP)
- b. $\sqrt{[ku \quad \text{tokcaycek}, [RC \quad e_i \quad \text{mincwucwuuy-lul}$
 [that tyrannical] [$\quad \quad \text{democracy-Acc}$
 thanapha- \emptyset]-n, $\quad \quad \text{kwuncwu}_i$]
 oppress-Prf]-Rel, $\quad \quad \text{monarch}$]
 ‘that tyrannical monarch who oppressed democracy’
 (DEM > AP > RC)

The goodness of data like (2b) raises the question of what role (if any) the DEM *ku* may play in linearizing N modifiers in the left periphery of a DP. The goal of this paper is to provide an answer for this hitherto unaddressed question in the literature.

I show that the *ku* that occurs in syntactic environments like (2) is not a run-of-the-mill DEM, and I explain its behavior by treating it as what I call ‘a cognitive indexical DEM’ (CogDem). The upshot of the analysis will be that a CogDem selects for an AP and locates the property denoted by its complement in the mental domain of the speaker. To implement this idea within a generative framework, I propose a tripartite Split-DP analysis which builds on Laenzlinger’s (2005) analysis of French AOR. In so doing, I offer a Rizzian (Rizzi 1997) cartographic analysis which captures the relative surface ordering between N dependents in Korean without violating the universal AOR introduced above.

2. The cognitive indexical properties of *ku*

The DEM *ku* ‘the/that’ in Korean is typically used to point to things that are distant from the speaker but close to the hearer (if they are away from both the speaker and the hearer, *ce* is used instead). And it can carry ‘definite and deictic/indexical’, ‘definite and contrastive-focused’, and ‘definite, purely anaphoric, and un-focused’ meanings, as exemplified by (3), (4), and (5), respectively.

- (3) Definite and deictic usage of *ku*:

Context: A and B are looking at someone at a party.

A: **Ce** saram-un nwukwu-i-Ø-ni?
 That person-Top who-Cop-N.Pst-Q.Infrml
 ‘Who is that person over there?’
 B: ***(Ku)** saram-un con-i-Ø-ya.
 That person-Top John-Cop-N.Pst-Decl.Infrml
 ‘That person is John.’

(4) Definite and contrastive-focused usage of *ku*:

Context: A is a sales associate at a bookstore and B is a customer.
 And A is helping B to decide between two books.

A: **I** chayk-kwa **ce** chayk-cwung *pro*
 This book-and that book-between
 etten chayk-ul wonha-Ø-sip-nikka?
 which book-Acc want-N.Pst- Hon-Q.Hon
 ‘Between this book and that book over there, which one would you like?’

B: ***(Ku)** chayk-i-Ø-yo.
 That book-Cop-N.Pst-Asst.Hon
 ‘That book, please (i.e., the one that is close to you but far away from me)’

(5) Definite but purely anaphoric and unfocused usage of *ku*:

Context: The speaker is telling a story to a child.

Yes-nal-yes-nal han yes-nal-ey etten maul-ey
 Old-day-old-day big old-day-Loc some village-Loc
acwu chakha-n sonye-ka han-myeng sal-ko
 very good.heated-UN little.girl-Nom one-CL live-Conn
 iss-ess-eyo.
 exist-Pst-Decl.Hon.

‘Once upon a time, there lived a very good-hearted young girl in some town.’

Enu-nal ***(ku) chakhan** sonye-nun chinkwu cip-ey
 Some-day that good.hearted little.girl-Top friend house-to
 nol-le ka-ss-eyo.

play-Conn go-Pst-Decl.Hon.
 ‘Some day, that good-hearted girl went to a friend’s house to play.’

However, the meaning of *ku* cannot be adequately characterized by using only such labels and there are reasons to think that *ku* performs what I call ‘a cognitive indexical function’ as well. For ease of reference, here and below, I will refer to the *ku* that performs this function as ‘KU’ and the *ku*

that performs other functions as ‘ku’.

One reason to think that *ku* has a life has KU comes from the fact that while an occurrence of *ku* would combine with a predicate-level expression, it modifies an already referring expression which has a [+definite] feature. This is shown in (6)-(7). Notably, in these data, the combination of KU and the AP is construed as contributing an appositive modificational meaning to the DP that they precede, as indicated by the English translations of the (b) examples. In addition, an RC that occurs before it is construed as a supplementary (Sppl) RC, as shown by the (c) examples. (The relevance of this property will become clear in the next section.)

- (6) a. [DP **Chelswu**
[Chelswu]
‘Chelswu’
- b. **ku** [AP **omanpwulsonha-n**] [DP **Chelswu**]
KU [proud.and.rude-UN] [C.]
Intended: ‘that arrogant and rude Chelswu’
- c. [RC **Mina-ka** *e_i* **sakwi-te-]-n,**
[M.-Nom — date-Rtro-]-Rel,
ku [AP **omanpwulsonha-n**] [DP **Chelswu_i**]
KU [proud.and.rude-UN] [Chelswu]
‘that arrogant and rude Chelswu, who Mina used to date’
- (7) a. [DP [RC **Mina-ka** *e_i* **sa-o-Ø]-n** mokkeri_i]
[[M.-Nom — buy-come-Prf]-Rel necklace]
‘the necklace that Mina bought and brought’
- b. **ku** [AP **kappissa-n**],
KU [expensive-UN],
[DP [RC **Mina-ka** *e_i* **sa-o-Ø]-n** mokkeri_i]
[[M.-Nom — buy-come-Prf]-Rel necklace]
‘that expensive necklace that Mina bought and brought’
- c. [RC *pro* *e_i* **puracil-eyse** **mantul-Ø]-n,**
[— — Brazil-in make-Ant-]-Rel,
[**ku** [AP **kappissa-n**]],
[KU [expensive-UN]],
[DP [RC **Mina-ka** *e_i* **sa-o-Ø]-n** mokkeri_i]
[[M.-Nom — buy-come-Prf]-Rel necklace]
‘that expensive necklace that Mina bought and brought, which was made in Brazil’

Another reason to think that KU is a different kind of DEM than those

exemplified in (3)-(5) comes from the fact that it can occur recursively if it is accompanied by an AP, as shown in (8)-(9); more “ordinary” occurrences of *ku* lack such a property though I do not exemplify it here for lack of space.

- (8) a. [ku [AP omanpwulsonha-n]] [DP Chelswu]
 [KU [proud.and.rude-UN]] [C.]
 ‘that arrogant and rude Chelswu’
- b. [ku [AP omanpwulsonha-n]],
 [KU [proud.and.rude-UN]],
 [ku [AP yoksimmahn-un]] [DP Chelswu]
 [KU [greedy-UN]] [C.]
 Intended: ‘that arrogant and rude, and greedy Chelswu’
- c. [ku [AP omanpwulsonha-n]],
 [KU [proud.and.rude-UN]],
 [ku [AP yoksimmahn-un]],
 [KU [greedy-UN]],
 [ku [AP sengcilkoyakha-n]] [DP Chelswu]
 [KU [ill-tempered-UN]] [C.]
 Intended: ‘that arrogant and rude, greedy, and ill-tempered Chelswu’
- (9) a. [ku [AP kappissa-n]],
 [KU [expensive-UN]]
 [DP [RC Mina-ka e_i sa-o-∅]-n, mokkeri_i]
 [[M.-Nom ___ buy-come-Prf]-Rel neckalce]
 ‘the expensive necklace that Mina bought and brought’
- b. [ku [AP kappissa-n]], [ku [AP kwiha-n]],
 [KU [expensive-UN]], [KU [precious-UN]]
 [DP [RC Mina-ka e_i sa-o-∅]-n
 [[M.-Nom ___ buy-come-Prf]-Rel
 mokkeri_i]
 neckalce]
 ‘that expensive, and precious necklace that Mina bought and brought’
- c. [ku [AP kappissa-n]], [ku [AP kwiha-n]],
 [KU [expensive-UN]], [KU [precious-UN]],
 [ku [AP yeppu-n]], [DP [RC Mina-ka e_i]
 [KU [pretty-UN]], [[M.-Nom ___
 sa-o-∅]-n mokkeri_i]
 buy-come-Prf]-Rel neckalce]
 ‘that expensive, precious, and pretty necklace that Mina bought and

brought'

Yet another reason to treat KU distinctly from other occurrences of *ku* is that it requires different kinds of discourse contexts. To see this, compare (3), which contains a deictic occurrence of *ku* and (10), which contains KU: (3B) can be felicitously uttered only when the speaker is looking at or pointing to someone. By contrast, (10) can be felicitously uttered even if the referent of the DP containing it is not perceptible (e.g., visible or palpable) to the speaker, which is made clear by the discourse contextual information provided above it.

- (10) Context: Today Mina bought and brought some expensive items for the speaker and she left them in the kitchen. The speaker is currently in her bedroom, which is not next to the kitchen, so cannot see the items that Mina brought for her.

√*pro* [DP [ku [AP **kappissa-n**,
 — [[KU [expensive-UN]
 [RC **Mina-ka** *e_i* **sa-o-Ø]-n** **mwulken-tul_i]-ul**
 [M.-Nom — buy-come-Prf]-Rel item-Pl-]-Acc
 eti-ey twue-yahal-kka?
 where-Loc keep-must-Q?
 'Where should I keep those expensive items that Mina bought and brought for me?'

KU also differs from the anaphoric *ku* even though both of them are employed to refer back to an individual that is familiar to the discourse participants: while the anaphoric *ku* need not co-occur with an AP modifier, as indicated by the parentheses around *chakhan* 'good-hearted' in (5), KU requires a property-denoting AP to co-occur with it, as shown in (11).

- (11) Context: The speaker is talking about one particular individual named Chelswu.

a. Na-nun ecey [ku [AP **omanpwulsonha-n**
 I-Top yesterday [KU [proud.and.rude-UN]
Chelswu_i]-wa hamkkey siksa-lul hakeytoy-ess-ta.
 C.]-with together meal-Acc come.to.have-Pst-Decl
 'Yesterday, I happened to dine with that awful arrogant and rude Chelswu_i.'

b. *Na-nun ecey [ku **Chelswu_i]-wa** hamkkey
 I-Top yesterday [KU C.]-with together
 siksa-lul hakeytoy-ess-ta.

meal-Acc come.to.have-Pst-Decl
 Intended: ‘Yesterday, I happened to dine with that Chelswu.’

It should also be noted that the anaphoric *ku* does not carry a strong emotive implicature that KU carries. By way of illustration, the ‘KU+AP’ string in (7b) gives rise to the implicature that the speaker feels strongly about the fact that the necklace that Mina brought her is very expensive. The anaphoric *ku* in (5) does not engender such a meaning even though there is a descriptive AP *chakhan* ‘good.hearted’ co-occurring with it.

KU differs from other usages of *ku* in still other respects: The badness of (11b) already suggests that KU and the AP that occurs adjacent to it form a syntactic unit and their constituency is further evidenced by the fact that deletion or movement operation targets both of them; that is, they have to be deleted together, as exemplified by (12), or move together, as exemplified by (13).

(12) Context: The discourse participants are talking about one particular individual named Chelswu.

- a. Mina-nun ecey [ku [AP omanpwulsonha-n]
 M.-Top yesterday [KU [proud.and.rude-UN]
Chelswu_i]-wa hamkkey kuk.cang-ey ka-ess-ta.
 C.]-with together movie.theater-Acc go-Pst-Decl
 ‘Yesterday, Mina went to the movies with that arrogant and rude Chelswu.’
- b. *Mina-nun ecey [ku **Chelswu_i]-wa**
 M.-Top yesterday [KU C.]-with
 hamkkey kuk.cang-ey ka-ess-ta.
 Together movie.theater-Acc go-Pst-Decl
 Intended: ‘Yesterday, Mina went to the movies with that Chelswu.’
- c. *Mina-nun ecey [[AP omanpwulsonha-n]
 M.-Top yesterday [[proud.and.rude-UN]
Chelswu_i]-wa hamkkey kuk.cang-ey ka-ess-ta.
 C.]-with together movie.theater-Acc go-Pst-Decl
 Intended: ‘Yesterday, Mina went to the movies with arrogant Chelswu.’

- (13) a. [ku [AP omanpwulsonha-n]],
 [KU [proud.and.rude-UN]],
 [ku [AP yoksimmahn-un]],
 [KU [greedy-UN]],
 [ku [AP sengcilkoyakha-n]]

- [KU [ill-tempered-UN]]
 [DP Chelswu]
 [C.]
 ‘that arrogant and rude, greedy, and ill-tempered Chelswu’
- b. ***ku**_i, [ku [AP omanpwulsonha-n]],
 KU, [KU [proud.and.rude-UN]],
 [**t**_i [AP **yoksimmahn-un**]],
 [[greedy-UN]],
 [ku [AP sengcilkoyakha-n]] [DP Chelswu]
 [KU [ill-tempered-UN]] [C.]
 Intended: ‘that arrogant and rude, greedy, and ill-tempered
 Chelswu’
- c. *[AP **yoksimmahn-un**]_i], [ku [AP omanpwulsonha-n]],
 [[greedy-UN]], [KU [proud.and.rude-UN]],
 [**ku** **t**_i],
 [KU],
 [ku [AP sengcilkoyakha-n]] [DP Chelswu]
 [KU [ill-tempered-UN]] [C.]
 Intended: ‘that arrogant and rude, greedy, and ill-tempered
 Chelswu’

In addition, I should point out that there is no pause between KU and the AP that accompanies it, as one can see from re-examining all the relevant data containing a ‘KU + AP’ string presented above. It is also worth noting that if there is any additional N modifier co-occurring with a ‘KU + AP’ string, then, the former must be set apart from the latter by a pause. Taken together, these prosodic facts provide yet additional evidence that KU and the AP that occurs after it form a syntactic unit.

3. Capturing the properties of KU

3.1. Discourse-semantic basis for its unique properties

I argue that KU stands out among other instantiations of *ku* because of the discourse-semantic function it performs. In addition to its felicity conditional property I have already exemplified with (10) above, the motivation for this idea comes from the observation that it is employed when the speaker wishes to comment on a discourse familiar entity that has a noteworthy property.

More specifically, I propose that its discourse function can be best characterized as follows: It indicates that the degree to which the meaning of its complement AP holds true of the discourse referent at issue is very high

and the speaker can visualize it even though she cannot actually see the discourse referent at the time/location of speech.

To exemplify this idea, let us first reconsider (7b). Here, the RC non-restrictively modifies the referent of the DP (i.e., the items that Mina bought and brought for the speaker) and the presence of KU engenders three implicatures, namely that (i) the items Mary bought and brought to the speaker are highly expensive, not just expensive; (ii) the speaker thinks it is worth noting; and (iii) she can visualize how the items that Mina brought for her are very expensive even though she cannot see them at the time of uttering the sentence.

Let us now reconsider in (12a). This datum contains no RC but the presence of KU brings about similar effects to (7b): it implicates that (i) Chelswu is highly arrogant and rude; (ii) it is deemed noteworthy by the speaker; and (iii) the speaker can picture the way Chelswu is so highly arrogant and rude even though she does not see him at the time of uttering the sentence.

Finally, let us consider the discourses in (14) and (15) below.

- (14) Context: The discourse participants are talking about just one particular individual named Chelswu.

Mina-nun ecey [ku [AP omanpwulsonha-n
M.-Top yesterday [KU [proud.and.rude-UN]
Chelswu_i]-wa hamkkey kuk.cang-ey ka-ess-ta.
C.]-with together movie.theater-Acc go-Pst-Decl
‘Yesterday, Mina went to the movies with that arrogant and rude
Chelswu.’

√Na-nun oay **Mina-nun** **Chelswu-ka**
I-Top why M.-Cont.Top C.-Nom
omanpwulsonha-ta-ko sayngkakha-ci anh-nun-ci
proud.and.rude-Ind-Comp think-Conn not-Rel.Imprf-Conn
cal morukeyess-Ø-ta.
Wellnot.know-N.Pst-Decl
‘I don’t understand why Mina doesn’t think that Chelswu is arrogant
and rude (when everybody else does, including me).’

- (15) Context: The speaker is talking about one particular individual named Chelswu.

Mina-nun ecey [ku [AP omanpwulsonha-n]
M.-Top yesterday [KU [proud.and.rude-UN]
Chelswu_i]-wa hamkkey kuk.cang-ey ka-ess-ta.
C.]-with together movie.theater-Acc go-Pst-Decl

‘Yesterday, Mina went to the movies with that awful Chelswu, who is so arrogant and rude.’

#Kurentey,	na-nun	Chelswu-ka	omanpwulsonha-ta-ko
But,	I-Top	C.-Nom	proud.and-rude-Ind-Comp
sayngkakha-ci		anh-nu-n-ta.	
think-Conn		not-Imprf-N.Pst-Decl	

‘But I don’t think that Chelswu is arrogant and rude.’

The goodness of (14) shows that even when the subject of the sentence is someone other than the speaker, a ‘KU+AP’ string contributes something that can be best analyzed as a commentary remark made by the speaker—that is, in the first sentence of this discourse, the person who thinks that Chelswu is extremely arrogant and rude is the speaker, not Mina, and she can visualize it when she utters the sentence; otherwise, the discourse cannot be coherent. The incoherency of (15) lends further support for this line of analysis, because the only difference between (14) and (15) is that in the latter discourse, the speaker asserts that Chelswu is not full of himself and rude, following exactly the same sentence containing *ku omanpwulsonhan Chelwu*.

In sum, then, there is reason to think that placing a ‘KU+AP’ string in front of a DP is what the speaker may utilize to signal a certain emotive attitude toward a discourse-familiar individual, be it animate or not. Importantly, however, KU is licensed when the individual it helps to comment on is not perceptible to the speaker, as we have observed in the previous section by way of (10), and this suggests that it operates in the mental domain of the speaker. This conclusion leads to the hypothesis that KU locates some property of individuals in the cognitive domain of the speaker and points to the high degree to which that property holds true of some discourse-familiar individual.

Under the proposed way to look at KU, then, KU performs some sort of indexical function but unlike more run-of-the-mill instantiations of *ku*, the domain in which it operates is not physical; it operates in the speaker’s cognitive domain and therefore I call it a ‘cognitive indexical marker’ (for lack of better term).

3.2. Syntactically implementing the ideas

In an attempt to derive the properties of KU introduced above through a formal mechanism, I first propose that the functional projection (FP) that is headed by KU, which I will call ‘CogDemP’ from now on, hosts the feature [+ST_S distant], which is short for ‘spatio-temporally distant from the

speaker (S)', as given in (16).

(16) Internal structure of a CogDemP headed by KU:

[CogDemP [CogDem' [CogDem [+STs DISTANT] KU [AP tokcaycek]]]]

Secondly, to account for the external syntax of KU, I build on Laenzlinger's (2005) Split-DP Hypothesis, according to which the topmost FP that makes up a noun phrase is not a simple DP but a Rizzian (Rizzi 1997) CP-like projection. To be more specific, Laenzlinger holds the view that what we call 'a DP' is comprised of two DP layers, namely, DP_{deixis} (= external) and DP_{determination} (= internal), as sketched in (17), and while DP_{deixis} (= external) is analogous to Rizzi's ForceP (which determines a clause's type), DP_{determination} (= internal) is analogous to his FinP (which presumably determines a clause's [+/- finiteness]). He also suggests that while the internal layer of a DP expresses [+/- definiteness] and/or partitivity, its external layer expresses relevant pragmatic meanings such as referentiality and deixis.

(17) Split-DP structure proposed by Laenzlinger (2005):

[DP_{deixis} [D_{deixis} [DP_{determination} [D_{determination} [... [NP]]]]]]]

Making a slight departure from Laenzlinger, however, I propose that a full-fledged DP is comprised of three regions, namely, what I call 'the high field', 'the middle field', and 'the low field', and each region hosts a different set of nominal features, as depicted in (18).

(18) Tripartite split-DP analysis and three fields inside a full-fledged DP:

[DP _{d(eixis)/r(eferential)}	[DP _{q(uant)}	[DP _{p(redicative)}]]]
[+referential; +/-deictic; +/-definite]	[+quant; -referential]	[+predicative]
High Field	Middle Field	Low Field

Drawing on the recent decompositional views widely held in the literature, in particular the ideas promoted by Svenonius (2008), among others, I further hypothesize that all functional categories including articles, DEMs, and quantifiers originate from the Low Field of a DP and what I call the low field contains what Svenonius calls FocP, UnitP, SortP, and √P, which respectively introduce a focused AP, a numeral (NUM), a subsecutive AP, and the head N.¹

I also assume with Svenonius and numerous other authors (e.g., Leu 2008, 2015) that DEMs are phrasal rather although in some languages, they

¹ Svenonius (2008) himself does not adopt a split-DP analysis.

may function as heads, which seems to be the case in French, for example (see Laenzlinger 2005).

Motivation for postulating such a tripartite split-DP structure comes from two sources. One is that nominal meanings can be classified into three sub-types, namely, (i) predicative (i.e., of semantic type $\langle et \rangle$), (ii) quantificational (i.e., of semantic type $\langle\langle et \rangle t \rangle$), and (iii) referential (i.e., of semantic type $\langle e \rangle$), as exemplified in (19)-(21).

(19) Predicative nominal:

- a. John is [**a doctor**].
- b. John and Mary are [**doctors**].

(20) Quantificational nominals:

- a. [**Every doctor (from that hospital)**] came to the party.
- b. [**Most doctors (who work at the hospital)**] came to the party.

(21) Referential nominals:

- a. [**A friend of mine (who works at the ER)**] was wearing a funny hat.
- b. [**The (tall) doctor (who works at the ER)**] was wearing a funny hat.

The other is that the three types of nominals are most likely to differ in syntactic size, with a predicative nominal being the smallest and a referential nominal being the biggest. It is hypothesized that predicative nominals are the smallest in size because they cannot contain quantificational or demonstrative determiners, as shown in (22).

(22) *John and Mary are **two/a few/those** doctors.

Quantificational phrases (QPs) have to be bigger than predicative nominals because they can obviously contain more syntactic components, namely, NUMs or quantifiers. Besides, they can occur in argument positions whereas predicative nominal cannot. However, QPs are not referential. Furthermore, a seemingly quantificational determiner can occur under a possessive (Poss) determiner or a DEM, as shown in (23), and this suggests that quantifiers are located lower than where Poss determiners or DEMs occur inside the DP and therefore QPs are smaller in size than referential nominals.

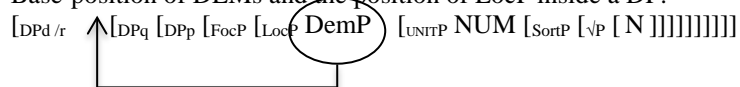
(23) a. You are **my everything**.

b. We need to rely on **those few** examples that John came up with.

Viewed in this way, then, it can be said that QPs occupy what I call the Middle Field of a DP and, by transitivity, predicative nominals occupy the Low Field and referential nominals occupy the High Field.

Turning now to identifying the surface position of DEMs inside a DP: capitalizing on Rijkhoff's (2002) finding that cross-linguistically, nominals display a 'Location > Quantity > Quality' surface order, where DEMs or Poss elements take up the Location slot, I posit that DEMs are base-generated at the Spec of what I call 'Location Phrase' (LocP), which is inside the Low Field. Yet they carry the [+deictic; +referential] features which need to be licensed via Spec-Head agreement and therefore they raise to [Spec, DP_{d/r}] at a later point in the derivation, as depicted in (24). (Here, PL stands for 'plural marking'.)

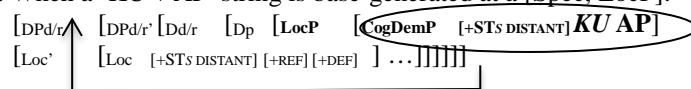
(24) Base-position of DEMs and the position of LocP inside a DP:



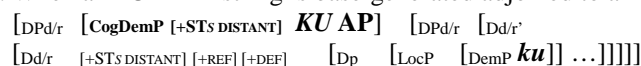
Finally, as the last key component of the present analysis, let me remark that a CogDemP headed by KU may surface at any [Spec, DP_{d/r}] whose head hosts [+referential; +definite; +ST_S distant] features. In addition, being a type of DemP, it may even be base-generated at a [Spec, LocP] and then later move to a [Spec, DP_{d/r}] to license its [+deictic; +referential; +ST_S distant] features, as sketched in (25a). But if the [Spec, LocP] is already occupied by a more "ordinary" DEM including any instantiation of *ku*, then it has to merge at an adjoined [Spec, DP_{d/r}] position that is created on top of the pre-existing DP_{d/r}. To see this, compare (25a) with (25b).

(25) Internal structure of DPs containing a CogDemP headed by KU:

a. When a 'KU + AP' string is base-generated at a [Spec, LocP]:



b. When a 'KU + AP' string is base-generated adjoined to a DP_{d/r}:



3.3. Deriving the properties of KU from the proposed analysis

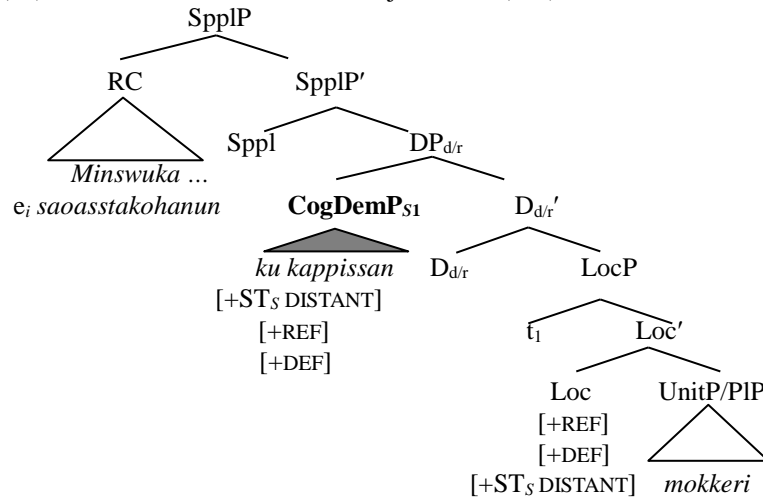
The proposed syntax for a CogDemP lets us immediately capture the distribution of a ‘KU+AP’ string relative to other N modifiers including a Sppl-RC and a non-restrictive RC (NRS-RC).

First of all, it lets us correctly predict that a ‘KU+AP’ string will occur following a Sppl-RC: This is because while a Sppl-RC adds new information not mentioned in the previous sentence and it moreover expresses information that is construed as supplementary to what is expressed by the rest of the sentence, a ‘KU+AP’ string denotes something that was already introduced. Furthermore, it expresses information that is presented as an integral part of the larger message, which is how Huddleston and Pullum (2005: 187) define an integrated N modifier. By way of illustration, the first sentence in (26) can be followed by (26a), which instantiates a ‘Sppl-RC > KU+AP’ order, but not by (26b), which instantiates a ‘KU+AP > Sppl-RC’ order.

- (26) Onul Mina-ka [DP [AP **acwu kappissa-n**] mokkeri]-lul
 Today M.-Nom [[very expensive-UN] necklace]-Acc
pro semwul-lo kacieo-ess-ta.
 — present-as bring-Past-Decl
 ‘Today Mina brought me a very expensive necklace.’
- a. √Kurentey na-nun [DP [Sppl-RC **Minswu-ka puracil-eyse** *e_i*
 But I-Top [[M.-Nom Brazil-at —
sa-oa-ess-ta-ko-ha-]-nun, [ku [AP kappissa-n]]
 buy-Come-Pst-Ind-Com-Quot-]-Rel, [KU [expensive-UN]]
 mokkeri_i]-lul pangkum il-e peri-ess-ta.
 necklace]-Acc just.now lose-Conn have-Pst-Decl
 ‘But I just lost that expensive necklace, which I hear that Minswu
bought and brought for her from Brazil.’ (Sppl-RC > KU+AP)
- b. #Kurentey na-nun [DP [ku [AP kappissa-n]],
 But I-Top [[KU [expensive-UN]],
 [Sppl-RC **Minswu-ka puracil-eyse** *e_i*
 [M.-Nom Brazil-in —
**sa-oa-ess-ta-ko-ha-]-nun mokkeri_i]-lul
 buy-Com-ePst-Ind-Com-Quot-]-Rel necklace]-Acc
 pangkum il-e peri-ess-ta.
 just.now lose-Conn have-Pst-Decl
 Intended: ‘But I just lost that expensive necklace, which I hear that
Minswu bought and brought for her from Brazil.’
 (KU+AP > Sppl-RC)**

Secondly, the proposed analysis lets us derive the correct surface order for a DP that is modified by both a Sppl-RC and a ‘KU + AP’ string. Under the present analysis, CogDemP may surface at the Spec of the pre-existing DP_{d/r}; on the other hand, given its semantics, a Sppl-RC will have to merge outside the DP_{d/r} level. Hence, when a DP is modified by both of them, its structure will look like what is depicted in (27) for (26a): In this structure, in the absence of any other DEM, the CogDemP containing KU and its AP complement merges at [Spec, LocP] first and then raises to [Spec, DP_{d/r}] to license the relevant D features. And this is followed by the merge of the Sppl-RC at the adjoined [Spec, DP_{d/r}].

(27) The internal structure of the object DP in (26a):

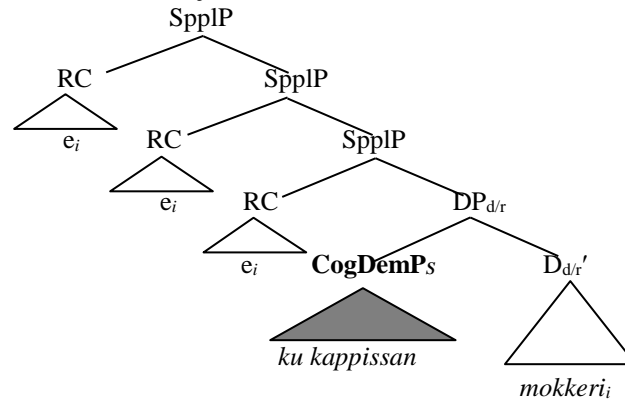


The above structure lets us capture the fact that in (26a), the ‘KU+AP’ string is not followed by a pause. This is so because here, the CogDemP surfaces in a non-adjoined position, unlike the case with a Sppl-RC. Related to this, the proposed analysis correctly also predicts that multiple Sppl-RCs may co-occur with a ‘KU+AP’ string but when they do, they will always surface above it, accompanied by a pause in between them, because Sppl-RCs can be recursively added to a DP via adjunction and yet they have to merge after a ‘KU+AP’ string has already merge. To demonstrate how this is done, consider (28), whose object position contains multiple Sppl-RCs, and (29), which is meant to be its schematic structure.

(28) $\sqrt{\text{Na-nun}}$ [DP [Sppl-RC **cinan-cwu-ey** **Minswu-ka**
 I-Top [[last-week-Loc M.-Nom
puracil-eyse e_i **sa-oa-ess-ta-ko-ha-]-nun,**
 Brazil-in ___ buy-Come-Pst-Ind-Com-Quot-]-Rel,
 [Sppl-RC **ecey** **Mina-ka** *pro* e_i
 [yesterday M.-Nom ___ ___
kacieta-cwu-Ø]-n, [Sppl-RC **nay-ka** **phyenso-ey** e_i
 bring-give-Prf]-Rel, [I-Nom ordinary.time-Loc ___ ___
nemwunato **kac-ko** **sip-ess-te-]-n,**
 too.much possess-Conn want-Ant-Rtr-]-Rel
[ku [AP kappissa-n]] mokkeri]-lul onul il-e
 [KU [expensive-UN]] necklace]-Acc today lose-Conn
 peri-ess-ta.
 have-Pst-Decl

‘Today, I lost that expensive necklace, which I heard that Minswu bought and brought for Mina from Brazil last week, which she brought to me yesterday, which I had been really wanting to have for such a long time.’ (Sppl-RC > Sppl-RC > Sppl-RC > KU+AP > N)

(29) Structure of the object DP in (28):



Under the present analysis, data containing a NRS-RC and a ‘KU+AP’ string can also be readily handled. To see this, consider (30). In this discourse, the first sentence can be followed by either the (a) or the (b) sentence, unlike the case with (26), and on our analysis this is expected for the following reasons: a NRS-RC appositively modifies an already established discourse referent and it expresses information that is presented

as an integral part of the larger message, so it targets any [Spec, a DP_{d/r}] position. Similarly, a CogDemP may occur at the Spec of any DP_{d/r}, but it can also be base-generated at [Spec, LocP] if that position is available. Given this, (30a) obtains if the NRS-RC merges at the pre-existing [Spec, DP_{d/r}] and thereby “pronounce” the DP_{d/r} and a CogDemP adjoins at the one-notch higher [Spec, DP_{d/r}]; if, on the other hand, the CogDemP is base-generated at [Spec, LocP], raising to the root [Spec, DP_{d/r}], and the NRS-RC merges at an adjoined [Spec, DP_{d/r}], then, we obtain the surface order instantiated by (30b).

- (30) Onul Mina-ka [DP [AP **acwu kappissa-n**] mokkeri]-lul
 Today M.-Nom [[very expensive-UN] necklace]-Acc
pro semwul-lo kaci-e o-ess-ta.
 ___ present-as bring-Conn come-Past-Decl
 ‘Today Mina brought me a very expensive necklace.’
- a. √Kurentey na-nun [DP [**ku** [AP **kappissa-n**]],
 But I-Top [[KU [expensive-UN]],
 [NRS-RC **Mina-ka** *e_i* **kaciao-∅-]-n**
 [M.-Nom ___ bring-Prf]-Rel
 mokkeri_i]-lul pangkum il-e peri-ess-ta.
 necklace]-Acc just.now lose-Conn have-Pst-Decl
 ‘But I just lost that expensive necklace that Mina brought for me.’
 (KU+AP > NRS-RC)
- b. √Kurentey na-nun [DP [NRS-RC **Mina-ka** *e_i* **kaciao-∅-]-n**,
 But I-Top [[M.-Nom ___ brought-Prf]-Rel
 [**ku** [AP **kappissa-n**]] mokkeri_i]-lul
 [KU [expensive-UN]] necklace]-Acc
 pangkum il-e peri-ess-ta.
 just.now lose-Conn have-Pst-Decl
 ‘But I just lost that expensive necklace that Mina brought for me.’
 (NRS-RC > KU+AP)

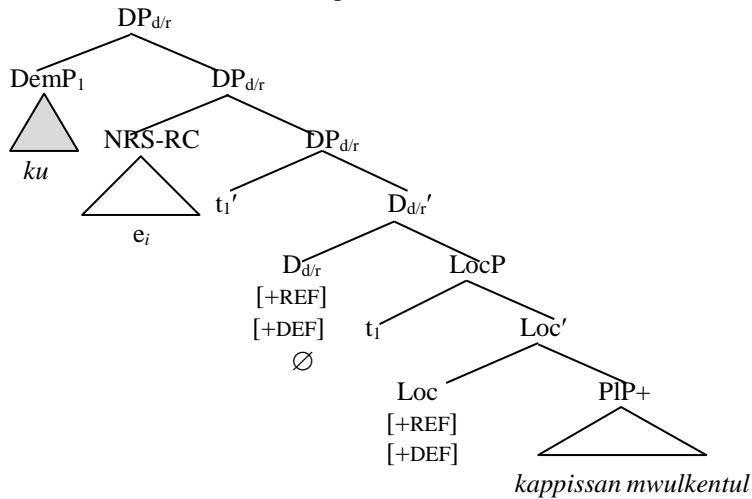
A still another welcome result of the proposed analysis that is worth mentioning is that it lets us differentiate between an anaphoric *ku* and KU. To see this, consider the pair of DPs in (31): these two DPs do not mean the same, as indicated by the English translations and here again, commas play an important role.

- (31) a. √**ku**, [RC Mina-ka *e_i* sa-o-∅]-n,
 Dem [M.-Nom ___ buy-bring-Prf]-Rel
 [AP **kappissa-n**] mwulken-tul_i

- [expensive-UN] item-Pl
 ‘the/those expensive things that Mina bought and brought’
 (DEM > RC > AP)
- b. √**ku** [AP **kappissa-n**],
 [RC Mina-ka *e_i* sa-o-∅]-n mwulken-tul_i
 ‘those expensive things that Mina bought and brought’
 (DEM > AP > RC)

In view of the analysis proposed here, (31a) contains an anaphoric *ku* and (31b) contains KU. This is because KU cannot raise out of its projection, leaving its AP complement behind, whereas an anaphoric *ku* can as it does not form a single FP with the AP that occurs immediately after it. In terms of meaning, (31b) implicates that the speaker feels strongly about the fact that the items under discussion are very expensive but (31a) does not; in fact, Korean speakers intuit that in (31a), the *ku* is associated with the NRS-RC and its occurrence in DP-initial position somehow emphasizes that the property denoted by the RC holds true of the referent of the DP. Given this, while (31b) is derived by having a CogDemP merge at the Spec of the LocP and then raise to the Spec of the pre-existing DP_{d/r}, as shown in (32b), (31a) is derived by having a DemP headed by *ku* merge at [Spec, LocP] first; stop by the Spec of the lowest DP_{d/r} next; and then scramble to the Spec of the highest DP_{d/r}, which is created via adjunction, as depicted in (32).

(32) Derivation of (31a): ‘Anaphoric *ku* > NRS-RC > N’ surface order



Notably, the resulting structure in (32) correctly captures the fact that there is an obligatory pause after the *ku* in (31a), whereas there is none after KU in (31b), because in (31a), the two modifiers are assumed form an adjunction structure in their surface positions.

4. Conclusion

In this paper, I have pointed out a hitherto unnoticed phenomenon in the literature, which apparently incurs a violation of the universally attested AOR of ‘heavy N modifier > light N modifier > N’ in Korean, and I have offered a possible account of it by presenting a tripartite Split-DP analysis.

In light of the proposed analysis, the apparent violations of said AOR is due to the cognitive indexical function that the DEM KU performs and therefore Korean is a well-behaving language in view of the weight-based universal constraint. In order to formally derive the unique properties of KU, I have proposed that it is base-generated under the head position of what I call a CogDemP with the [+ST_S distant] feature built in it, and it selects for a property-denoting AP. I have also submitted that a CogDemP may enter the DP structure by adjoining to a DP_{dir} or by merging at [Spec, LocP].

Positing a CogDem as a subtype of DEM sheds some new light on the syntax and semantics of DEMs across languages. To take the Slovenian DEM *ta* for example, given its co-occurrence with another DEM as exemplified in (33) and its properties reported (Marušič and Žaucer 2007), it is highly likely to be another instance of a CogDem rather than as a plain DEM (Marušič and Žaucer 2007) or an article (Leu 2008, 2015), unlike what has been claimed in the literature.

- (33) Prinesi mi **tistele** [**ta** **zelene**] hlace.
bring me those [TA green] pants
‘Bring me those green pants.’
(Marušič and Žaucer 2007: ex. (25a); emphasis mine)

The analysis promoted here also provides a formal way to capture the affective meaning of English *that*: according to Acton and Potts (2014), English speakers use *that* to foster a sense of ‘shared perspective and common ground with other discourse participants’, as exemplified in (34).

- (34) Context: During a fund-raising season, a radio program host is talking to the listeners.
Please pick up **that** phone and call us right now.

Yet the fact that such a usage of *that* is licensed (only) when its referent is not visible to the speaker suggests that it may have a life as a CogDem as well as a purely deictic DEM or anaphoric DEM.

Given this, what is proposed here will have bearings on the syntax, semantics and pragmatics of DEMs and the polydefiniteness phenomena found in languages like Slovenian and Greek, not to mention on the DP internal structure and cross-linguistic variation on AOR, all of which have received much attention in the recent generative linguistics literature.

References:

- Acton, Eric and Christopher Potts. 2014. That straight talk: Sarah Palin and the sociolinguistics of demonstratives. *Journal of Sociolinguistics* 18:3-31.
- Cinque, Guglielmo. 2010. *The Syntax of Adjectives. A Comparative Study*. Cambridge, Mass.: MIT Press.
- Huddleston, Rodney and Geoffrey K. Pullum. 2005. *A Student's Introduction to English Grammar*. New York: Cambridge University Press.
- Laenzlinger, Christopher. 2005. French adjective ordering: Perspective on DP-internal types. *Lingua* 115:625-689.
- Leu, Thomas. 2008. The internal syntax of determiners. Doctoral Dissertation, NYU.
- Leu, Thomas. 2015. *The Architecture of Determiners*. New York: Oxford University Press.
- Marušič, Franc, and Rok Žaucer. 2007. On the adjectival definite article in Slovenian. *Pismo* 5:102-124.
- Rijkhoff, Jan. 2002. *The Noun Phrase*. Oxford, UK: Oxford University Press.
- Svenonius, Peter. 2008. The position of adjectives and other phrasal modifiers in the decomposition of DP. In *Adjectives and Adverbs: Syntax, Semantics, and Discourse*. ed. by Kennedy, Chris and Louise McNally, 16-42. New York: Oxford University Press.