



Anaphoric definite and syntax of demonstrative*

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Kim, Kyumin. 2024. Anaphoric definite and syntax of demonstrative. *Linguistic Research* 41(3): 547-569. In languages with an article such as in English, anaphoric definiteness is expressed by an article. However, in an article-less language like Korean, demonstratives indicate anaphoric definiteness. Although there are substantial number of studies on the semantics or pragmatics of anaphoric demonstratives, a syntactic analysis of demonstrative as anaphoric definite is scarce. This paper addresses the syntax of demonstrative *ku* in Korean as anaphoric definite by situating it in a cross-linguistic context. It is shown that *ku* is obligatory to indicate anaphoric definite and it does not indicate unique definite, similar to a strong article in German. This paper proposes that the syntactic role of demonstrative *ku* is to make a DP referentially visible by occupying the spec-DP position. Under this view, *ku* is similar to an article in Italian or nP in Icelandic that has to be present for a referential DP, either on D or in Spec-DP respectively. An interesting consequence is that the proposed syntax of *ku* can be implemented to account for a special interaction between number and anaphoric definite, which has been observed in a wide range of languages. In Korean, for example, plural *-tul* is obligatory in an anaphoric context in contrast to an indefinite context. This paper proposes that in an anaphoric context licensed by *ku*, plural *-tul* is a realization of grammatical number such as Num head with binary features [\pm plural] that value uninterpretable number feature on D [*u*Num]. (Chungbuk National University)

Keywords anaphoric definite, demonstrative, referential, number, plural

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1. Introduction

In a natural language, a definite description can be expressed in various ways. For example, in English, a definite description can be expressed via an article ‘the’, demonstrative ‘this/that’, pronouns or proper names. With respect to anaphoric use of a definite, the interpretation of a definite expression depends on an indefinite noun phrase in a previous context (e.g., Schwarz 2009, 2013). To illustrate, consider the data in (1). Example (1a) provides a context for the sentence in (1b). In (1b), the definite nominal ‘the book’ refers back to the indefinite nominal ‘a book’ in (1a) that John bought. The examples in (1) show that in a language such as English, anaphoric definite is indicated by the article ‘the’.

- (1) a. John bought a book and a magazine.
 b. The book was expensive.

A similar example is found in Korean, as shown in (2). Korean is an article-less language, but the demonstrative *ku* ‘that’ has been observed to indicate an anaphoric definite (e.g., Lee 1989, 1994; Chang 2009; Ahn 2017, 2019; Cho 2017; Kang 2021; S. Park 2020, 2024; M. Park 2022; M. Kim 2023). The example in (2a) provides a context for example (2b). In (2b), the nominal *haksayng* ‘student’ is preceded by the demonstrative *ku*; in this case, the definite nominal *ku haksayng* ‘the student’ in (2b) refers back to the indefinite nominal *haksayng han-myeng* ‘one student’ in (2a).

- (2) a. Con-un ecey haksayng han-myeng-hako
 John-TOP yesterday student one-CL-with
 myentam-ul ha-ss-ta.
 meeting-ACC do-PAST-DEC
 ‘John had a meeting with a student yesterday.’
 b. onul-to ku haksayng-hako myentam-ul ha-n-ta.
 today-also DEM student-with meeting-ACC do-PRES-DEC
 ‘Today, John has another meeting with the student. (Kang 2021: 314)

Although the demonstrative *ku* is identified to indicate anaphoric definite, no serious syntactic analysis of *ku* as an anaphoric definite has been proposed. There

are substantial number of studies on the semantics and pragmatics of the demonstrative *ku* in anaphoric or broader contexts (e.g., Ahn 2017, 2019; Kang 2021; M. Park 2022; M. Kim 2023). However, a detailed syntactic study on *ku* in anaphoric contexts is scarce although some proposal have been made (e.g., S. Park 2020). These proposals will be briefly discussed later in section 4.2.

This paper proposes that the syntactic role of the demonstrative *ku* is to make a DP referentially visible, similar to an article in Italian (Longobardi 1994, 2001) or a nominal phrase in Scandinavian languages (Julien 2005). In Scandinavian languages, for example, a nominal phrase has to be present in the specifier of DP in order for the DP to be referential. The demonstrative *ku* will be shown to play a similar role by occupying the specifier of DP. Moreover, the demonstrative *ku* will be identified as indicating anaphoric definite only, not unique definite, similar to a strong article in German (Schwarz 2009, 2013).

The rest of the paper is organized as follows. Section 2 discusses anaphoric and unique definites in a cross-linguistic context. Section 3 shows that the demonstrative *ku* marks anaphoric definite, but not unique definite, and provides a syntactic analysis of *ku* in terms of a feature. Section 4 discusses the consequences of the proposed account of the demonstrative *ku*. In particular, it examines the association between the anaphoric *ku* and number under the proposed view in this paper.

2. Anaphoric definite across languages

Definiteness is viewed to be largely of two types, namely unique and anaphoric definite (e.g., Chang 2009; Schwarz 2009, 2013; Ahn 2017, 2019; Jenks 2018; Kang 2021 among many others). Each of the types is illustrated in English (3). The example in (3a) illustrates the use of the article *the* as denoting uniqueness while the example in (3b) shows the use of the article *the* as denoting familiarity, i.e., anaphoric use (Hawkins 1980, 1991; Kamp 1981; Heim 1982, 1990).

- (3) a. The moon was very bright last night.
 b. John bought [a book]_i and a magazine. [The book]_i was expensive.

In unique definite use (3a), the article *the* on the noun *moon* indicates that there

is a unique referent described by the noun. In anaphoric definite use (3b), the noun *book* in the second clause is anaphoric definite by being marked by *the*: it is mentioned previously in the first clause by the indefinite referent *a book* thereby being familiar and identifiable by the discourse participants. That is, it is the very book that John has bought mentioned in the first clause. As this type of data shows, an anaphoric definite description has a co-referring antecedent unlike a unique definite description.

The data in (3) also shows that English does not morpho-syntactically distinguish the two types of definiteness: both unique and anaphoric definite descriptions are indicated by the article *the*. However, it has been identified that in some languages the two types of definiteness are morpho-syntactically distinguished (Schwarz 2009, 2013; Jenks 2018). For instance, in German, unique and anaphoric definite are indicated by a weak and strong article respectively. The distinction between weak and strong articles can be shown when the article appears with a preposition. The weak article allows contraction but the strong article does not. The example in (4) illustrates unique definite use of a weak article: the article is in the contracted form *zum*, and indicates unique referent *Mond* ‘moon’.

- (4) Armstrong flog als erster zum Mond.
 Amstrong flew as first to-the_{weak} moon
 ‘Armstrong was the first one to fly to the moon.’ (Schwarz 2009: 29)

On the other hand, a strong article indicates anaphoric definite as shown in (5). The example in (5a) provides the context for the example in (5b). In (5b), the nominal *Politiker* ‘politician’ has to be preceded by the strong article *dem*, a non-contracted form, to refer back to the antecedent *Politiker* mentioned in (5a). The presence of the weak article *vom* is ungrammatical as indicated in (5b).

- (5) a. Hans hat einen Schriftsteller und einen Politiker interviewt.
 Hans has a writer and a politician interviewed
 ‘Han interviewed a writer and a politician.’
 b. Er hat #vom / von dem Politiker keine interessanten
 He has from-the_{weak}/ from the_{strong} politician no interesting
 Antworten bekommen.
 answers gotten

‘He didn’t get any interesting answers from the politician.’

(Schwarz 2009: 23)

The weak and strong uses of articles are shown to extend to bridging use (Clark 1975) cross-linguistically (Schwarz 2009, 2013). In bridging use, a potential antecedent is not a direct referent of a definite description, but it has a salient relationship to it. Consider the English data in (6). In (6b), the definite nominal *the author* does not have a direct referent in (6a). However, it is understood as relating to the indefinite *a book* in (6a) such that it is to be the author of the indefinite nominal. The definite *the author* in (6b) and the indefinite *a book* in (6a) are in the relation of a producer and a product. This type of relation is identified as producer relation and this requires anaphoric definite (Schwarz 2013).¹

- (6) a. John bought a book.
b. The author is French.

In other languages where the weak and strong distinction exists such as in German, producer relation requires a strong article; a weak article cannot appear in this context. The German data in (7) illustrates this.

- (7) Das Theaterstück missfiel dem Kritiker so sehr, dass er in
The play displeased the critic so much that he in
seiner Besprechung kein gutes Haar #am/ an dem Autor ließ.
his review no good hair on-the_{weak}/ on the_{strong} author left
‘The play displeased the critic so much that he tore the author to pieces
in this review.’ (Schwarz 2009: 34)

In light of the discussion on the previous literature, English article *the* is morphologically ambiguous between unique (weak) and anaphoric (strong) definite, unlike German. A similar type of weak-strong distinction has been observed in article-less languages such as Mandarin (Jenks 2018). In Mandarin, anaphoric and

¹ A bridging context has another type of relation, namely a part-whole relation which requires a weak article but does not allow a strong article (Schwarz 2013). As the main concern of this paper is an anaphoric definite expressed by a strong article, I do not discuss the detail of a part-whole relation.

unique definite are indicated by different linguistic means. Anaphoric definite is indicated by a demonstrative but unique definite by a bare noun. In the next section, I show that similar to Mandarin but unlike English, Korean unambiguously marks anaphoric definite via the demonstrative *ku*.

3. Analysis of anaphoric definite in Korean

3.1 Demonstrative *ku* as anaphoric definite

This section shows that the demonstrative *ku* indicates anaphoric definite similar to the anaphoric use of English article *the* or a strong article in German. The demonstrative *ku* does not indicate unique definite and it is not ambiguous unlike English *the*.²

In the literature, it has been identified that *ku* is used only for anaphoric definite (e.g., Lee 1989, 1994; Chang 2009; Ahn 2017, 2019; Cho 2017; S. Park, 2020; Kang 2021; M. Park 2022). These studies are mostly concerned with the semantics of *ku*, and no serious syntactic analysis of *ku* has been proposed. I propose that the demonstrative *ku* indicates definite anaphoric meaning building on the data from the previous studies. That *ku* is anaphoric definite will play a crucial role in the syntactic analysis of *ku* proposed in section 3.2.

It was discussed in section 2 that unlike English there are languages that morpho-syntactically distinguish anaphoric and unique definite such as German or Mandarin (Schwarz 2009, 2013; Jenks 2018). Korean typologically belongs to this type of language (e.g., Chang 2009; Ahn 2017; Cho 2017; Kang 2021). For example, in the language, the demonstrative *ku* is used to indicate anaphoric definite but unique definite is indicated by a bare nominal.³ In (8), the bare noun *tal* ‘moon’ indicates unique definite and the presence of the demonstrative *ku* is not allowed.

2 The demonstrative *ku* also has a deictic use (e.g., Kang 2021) similar to the English demonstrative ‘that’, which I do not question in this paper.

3 This is a very simplified view for the purpose of this paper and the data on bare nominals are presented for the comparison with the demonstrative *ku*. For more detail on the uniqueness use of bare nominals, see the aforementioned studies in the text.

- (8) onul (*ku) tal-i ilccik ttu-ess-ta.
 today DEM moon-NOM early rise-PAST-DEC
 ‘The moon has risen early today.’ (Kang 2021: 318)

Unlike a bare nominal, the demonstrative *ku* has to appear in an anaphoric context as illustrated in (9). The example in (9a) provides a context for examples (9b) and (9c). In (9b), the bare noun *haksayng* ‘a student’ cannot refer back to the nominal *haksayng* ‘[a student]_i’ in (9a), as indicated by the ungrammaticality of the same indexation, *haksayng* ‘[a student]_{??i}’. It can indicate a different entity ‘[a student]_j’ from the nominal ‘[a student]_i’ in (9a).⁴ By contrast, the nominal marked by the demonstrative, *ku haksayng* ‘[the student]_i’, in (9c) has to co-refer the antecedent *haksayng* ‘[a student]_i’ in (9a).

- (9) a. Con-un ecey haksayng han-myeng-hako
 John-TOP yesterday student one-CL-with
 myentam-ul ha-ss-ta.
 meeting-ACC do-PAST-DEC
 ‘John had a meeting with [a student]_i yesterday.’
 b. onul-to haksayng-hako myentam-ul ha-n-ta.
 today-also student-with meeting-ACC do-PRES-DEC
 ‘John has another meeting with [a student]_{??i/j} today.’
 c. onul-to ku haksayng-hako myentam-ul ha-n-ta.
 today-also DEM student-with meeting-ACC do-PRES-DEC
 ‘Today, John has another meeting with [the student]_i.’ (Kang 2021: 314)

The following data in (10) further corroborates the anaphoric definite use of the demonstrative *ku*. Under the assumption that the entity ‘president’ is previously mentioned one before the utterance in (10), the demonstrative *ku* is obligatory. Both examples show that the demonstrative *ku* is not allowed in the absence of a co-referring antecedent.

4 In recent literature, it is reported that a bare nominal can indicate anaphoric definiteness (M. Park and Kang 2020; M. Park 2022; Simpson and Wu 2022; M. Kim 2023; S. Park 2023). I do not question how such anaphoric bare nouns can be syntactically analyzed with respect to the current proposal on *ku* and leave this issue for future research.

- (10) a. (*ku) taythonglyeng-i hayngsa hyencang-ul pangmwunhayss-ta.
 DEM president-NOM event venue-ACC visited
 ‘The president visited the event venue.’ (Ahn 2017: 39)
- b. mayhay (*ku) taythongleyng-un kak
 every.year DEM president-TOP each
 si-uy sicang-ul manna-ss-ta.
 city-GEN mayor-ACC meet-PAST-DEC
 ‘Every year, the president met with the mayor of each city.’
 (Kang 2021: 315)

Recall that a strong article, not a weak article, appears in a bridging context; in particular, it appears in producer relation (see section 2). The demonstrative *ku* as anaphoric definite also appears in such relation (e.g. Cho 2017; Kang 2021). In (11), for example, *ku ceca* ‘the author’ does not have a direct referent in the first clause. However, it is understood as the author of the indefinite *sose* ‘a novel’ mentioned in the first clause. In this case, the demonstrative *ku* is allowed to appear.⁵ Note that other demonstratives such as *i* and *ce* which are deictic are not allowed to appear in this type of bridging context.⁶

- (11) nay-ka onul sose-ul han-kwen sa-ss-unutay,
 I-NOM today novel-ACC one-CL buy-PAST-CONJ,
 ku/*i/*ce ceca-nun phulansuin-i-ta
 KU/this/that author-TOP French-be-DEC
 ‘I bought a novel today, and the author is French.’ (Kang 2021: 316)

Building on Korean data such as discussed here, it has been recognized that Korean uses two morpho-syntactic strategies to encode definiteness (e.g., Lee 1989, 1994; Kang 1994; Sohn 2001; Ahn 2017; Cho 2017; Kang 2021). One is indicated by a bare noun and the other is by the demonstrative *ku*. These two are different in that the former

5 Without demonstrative *ku*, the sentence in (11) is grammatical. The main point of this example in Kang (2021) is that the demonstrative *ku* is the only available one among the demonstratives available in the language.

6 The demonstrative *ku* can also be deictic in which case indicates an entity near an addressee (e.g., Lee 1989, Sohn 2001; Ahn 2017; Cho 2017; Kang 2021 among others). This paper does not question the use of *ku* as a deictic demonstrative.

encodes unique definite but the latter encodes anaphoric definite. In terms of features (e.g., Chang 2009; Cho 2017; Kang 2021), for instance, *ku* may have [+anaphoric] feature unlike English *the* with [\pm anaphoric] feature. The feature [-anaphoric] of English *the* corresponds to unique definite. This type of featural difference may account for the differences between non-ambiguous *ku* and ambiguous English *the*. These studies, however, do not provide an account of how featural properties of *ku* can be syntactically implemented in the structure of a nominal. Adopting a similar featural property of *ku*, in what follows, I propose a syntactic account of anaphoric definite *ku*.

3.2 Featural account for anaphoric definite *ku*

I assume that definiteness can be realized either as unique definite or anaphoric definite in line with the traditional view (e.g., Abney 1987; Longobardi 1994), and that the D(eterminer) head is the locus of definiteness. As such, D has a valued feature [Def]. Building on the fact that definiteness across languages show two types, anaphoric or unique, I propose that D can bear either [Def_{anaphoric}] or [Def_{unique}] feature. With the demonstrative *ku* that is anaphoric, the relevant feature on D is [Def_{anaphoric}].

The proposal in this paper is in line with studies on the definiteness which provides an analysis of definiteness on D in terms of features (e.g., Thorne 1972; Santelmann 1993; Julien 2003, 2005; Kramer 2009; Taghipour 2023). Although details differ, these studies proposed an Agreement (e.g., Chomsky 1995, 2000, 2001) account in the DP domain with respect to definiteness and D. In the analysis of the demonstrative *ku* with respect to the DP domain, this paper also assumes Agreement. Under this view, a probe with an unvalued feature is checked/valued by a goal with the valued counterpart of the probe's feature by agreement.

3.2.1 Anaphoric definite *ku* and referential DP

I propose that anaphoric definite *ku* merges in the specifier of DP as it contributes to the referentiality of the nominal. This proposal mainly builds on the work in Longobardi (1994, 2001) and Julien (2005). In Longobardi (1994, 2001), it is proposed that in Italian D head with a referring expression, such as a proper name or a referring noun, cannot be phonologically empty. By contrast, in a language such as English,

a referential expression can appear with a phonologically empty D. The contrast is illustrated by the Italian examples in (12) and English (13). In Italian (12a), the proper name *Roma* 'Rome' is preceded by the determiner *la*. The absence of the determiner makes the example ungrammatical as shown in (12b). In English (13), on the other hand, the proper noun *Rome* can appear without an overt D.

- (12) a. L' antica Roma (fu distrutta dai barbari).
the ancient Rome was destroyed by.the barbarians
b. *[_{DP} e Antica Roma] (fu distrutta dai barbari).
ancient Rome was destroyed by.the barbarians
(Longobardi 1994: 624)
- (13) [_{DP} e Ancient Rome] was destroyed by the barbarians.

Longobardi (1994, 2001) accounts for the difference in an overt and empty D between Italian and English with respect to referentiality as follows: in Italian referential properties of D are strong being overt but are weak in English being covert. It should be noted that strong in the current discussion refers to as to whether D is overt or not, while a strong article discussed in section 2 indicates an anaphoric use. Referentially strong D is also observed in other languages such as Scandinavian languages (Julien 2005). In these languages, DP projection for referring expressions has to be visible similar to Italian: either D or the specifier of DP has to be occupied with an overt material. In order to satisfy an overt DP condition, D can be directly filled with a lexical item such as a prenominal determiner *det* as shown in Norewegian example (14a).⁷ When a prenominal determiner is not available, a DP can be made visible by its specifier being overt. This is shown in Icelandic example (14b) which is the counterpart of Norwegian example (14a). In (14b), in the non-availability of a prenominal determiner such as *hin*, the nominal phrase *Róm* moves to the specifier of DP (the indication of the trace is added for the ease of exposition).

- (14) a. [_{DP} *(det) gaml-e Roma] vart øydelagt
DEF.N.SG old-W Rome became destroyed
av barbar-a-ne.
by barbarian-PL-DEF

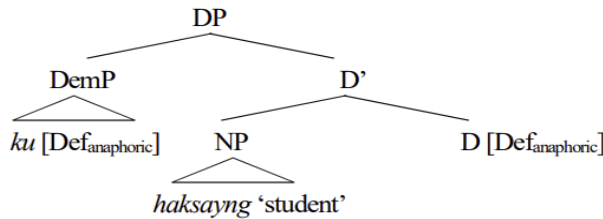
7 In (14a), W refers to weak inflection (Julien 2005).

- ‘Ancient Rome was destroyed by the barbarians.’
- b. [DP Róm ??(hin) forn-a <t_{Róm}>] var
 Rome DEF.M.SG old-W was
 lögð í eyði af barbör-um.
 destroyed by barbarian-DAT.PL
 ‘Ancient Rome was destroyed by barbarians.’ (Julien 2005: 15-16)

These examples together with Italian show that for referentially strong D has to be overt unlike weak D as in English. Moreover, languages vary in what constituent makes DP visible for referentiality, e.g., either a determiner or an NP. They also vary in what position of DP should be overt, either D or the specifier of DP.

An anaphoric nominal with the demonstrative *ku* is referential. As such, an anaphoric nominal with *ku* projects a phonologically strong DP similar to Italian or Scandinavian languages. In particular, I propose that the demonstrative *ku* makes the DP projection strong, i.e., overt, by occupying the specifier of DP, as illustrated in (15). In light of the discussion on strong D languages earlier, D or the specifier of DP must be overt. Korean being an articleless-language, the anaphoric demonstrative *ku* merges in the specifier of DP. I assume that *ku* is a modifier (e.g., Kang 2021; S. Park 2023 among others) and merges in the specifier of DP in line with the previous studies (e.g., Hong 2010; S. Park 2020, 2023 among others) similar to demonstratives in Mandarin that denote anaphoric definite (Jenks 2018).⁸ Furthermore, *ku* is phrasal (Chang 2009), expressed as DemP.

(15)



8 The structural position of the demonstrative *ku* is under debate (e.g., Chang 2009; Hong 2010; S. Park 2020, 2023; Kang 2021); for example, *ku* realizes D (Chang 2009), merges in the specifier of DP (Hong 2010; S. Park 2023), or appears in the specifier of NP (Kang 2021). Given the scope of this paper, I do not further question this issue.

As a modifier, the demonstrative *ku* with [Def_{anaphoric}] feature merges in the specifier of DP projected by the head D with the same feature [Def_{anaphoric}]. Other demonstratives in the language with no [Def_{anaphoric}] feature cannot merge in the specifier of DP due to the mismatch in the type of [Def]. For example, the deictic demonstrative *i* ‘this’ cannot merge in this position, as it indicates a deictic meaning lacking anaphoric [Def_{anaphoric}] feature.⁹

4. Consequences

4.1 Anaphoric definite and number

An anaphoric definite shows a special interaction with number, which has been observed in a wide range of languages such as Persian (Gomeshi 2003), Laki (Taghipour 2021), Western Armenian (Bale and Khanjian 2018), Swedish (Julien 2005), and Korean (C. Kim 2005; S. Park 2020; K. Kim 2023; K. Kim and Park 2024) and so on. As will be shown by data from Laki and Korean below, a linguistic realization of the interaction between anaphoric definite and number appears to vary.

I illustrated how anaphoric definite interacts with number by discussing the data from Laki (Kurdish, southern) in Taghipour (2021). In Laki, an (in)definite morpheme appears on a modifier of the noun, as shown in (16). In (16a), the indefinite suffix *-i* appears on the modifier *širin* ‘sweet’. In (16b), another modifier *kalen* ‘big’ appears, but the indefinite suffix appears on the last modifier *širin* ‘sweet’. As for the plural morpheme *-al*, it appears on the noun regardless of the number of modifiers that follow the noun. In both of the indefinite DPs (16a) and (16b), the plural suffix *-al* appears on the noun *sif* ‘apple’.

⁹ Other demonstratives such as *i* ‘this’ and *ce* ‘that’ are identified as deictic (Ahn 2017, 2019; Kang 2021), not as anaphoric definite. In particular, Ahn (2019) has shown that *i* and *ce* are exophoric unlike *ku*. This means that *i* and *ce* cannot be treated as anaphoric definite like *ku*. See Ahn (2019) for detail how their semantics are different in terms of being exophoric or anaphoric. Relevant to deictic demonstratives, an anonymous reviewer suggested that the demonstrative *i* can be used as anaphoric definite. This type of an instance is not necessarily counter-evidence for the proposed structure in (15), as the demonstrative *i* in its anaphoric use would have anaphoric [Def_{anaphoric}] feature.

- (16) a. *sif-al širin-i*
 apple-PL sweet-INDEF
 ‘some sweet apples’
- b. *sif-al kalen širin-i*
 apple-PL big sweet-INDEF
 ‘some sweet big apples’ (Taghipour 2021: 562)

In an anaphoric definite DP with a modifier, on the other hand, plural has to appear on the last modifier regardless of the number of modifiers. In (17a), for instance, the plural suffix *-el* appears on the modifier *širin* ‘sweet’. In (17b) with two modifiers, the suffix appears on the last modifier *širin* ‘sweet’, not on the preceding modifier *kalen* ‘big’. Note that in both definite DPs (17) the plural suffix *-el* appears next to the definite suffix *-a* on the last modifier, unlike the plural suffix in the indefinite nominals in (16). Descriptively, Laki has double definite marking: in (17), the definite suffix *-a* appears on both the noun and the last modifier. It should be noted that the definite marker *-a* on the noun appears only when the noun is modified and is proposed to be a non-D element (Taghipour 2021) (see footnote 10 for relevant discussion), which will not be the concern of this paper. Also, note that double definite marking such as shown in (17) is possible only in anaphoric definite contexts (Taghipour 2021).

- (17) a. *sif-a širin-el-a*
 apple-DEF sweet-PL-DEF
 ‘the sweet apples’
- b. *sif-a kalen širin-el-a*
 apple-DEF big sweet-PL-DEF
 ‘the sweet big apples’ (Taghipour 2021: 562)

The comparison of the data in (16) and (17) shows that anaphoric definites interact with number marking. In particular, in an anaphoric definite DP such as in (17), the plural suffix *-el* appears adjacent to the definite suffix *-a* unlike in an indefinite DP such as in (16). A similar observation has been made for languages like other Kurdish dialects (Sorani and Kermanshahi Kurdish) (Taghipour 2021), Swedish (Julien 2005), and Persian (Gomeshi 2003).

Building on this type of strong association between number and anaphoric definiteness observed cross-linguistically, previous studies proposed featural analyses (e.g., Julien 2005; Taghipour 2021). For example, in Taghipour (2021), the association between number and anaphoric definiteness is implemented in terms of feature. It is proposed that the association between anaphoric definite and plural can be viewed as agreement between D and Num in terms of strong [*uNum*] feature. As schematically illustrated in (18), the plural suffix *-el* instantiates the Num head, and D head is realized with the definite suffix *-a*.¹⁰ Num undergoes head movement to D as shown in (19), and it forms a complex head with the D.¹¹ An adjective in anaphoric DP as a modifier is an adjunct, not a head (Taghipour 2021). As such, an adjective in anaphoric DP cannot block the movement of noun to a higher position such as D or Spec, DP. In both (18) and (19), thus, the adjectives do not block the movement of Num to D.¹²

(18) [DP [NumP [NumP [NP N] Num] AP] D [DEF_{anaphoric}] [*uNum*]]
sif -el širin -a

(19) [DP [NumP [NumP [NP N] <Num>] AP] [_D Num-D [DEF_{anaphoric}] [*tNum*]]]
sif širin -el-a

(Adapted from Taghipour 2021: 565)

4.2 Anaphoric definite *ku* and plural *-tul*

This section shows how the proposed account on demonstrative *ku* as anaphoric definite in section 3 can be implemented to account for the interaction between anaphoric definite *ku* and plural *-tul*.¹³ Like Laki data discussed in the previous section,

¹⁰ The definite maker on the noun as in (17b) is the result of the agreement between D [Def] and N [*uDef*]. See Taghipour (2021) for detail and Julien (2005) for a similar view for Swedish. The definite marker on the noun is not presented in the structure in (18), as this is not relevant to the current discussion. What is important to the current discussion is fact that the plural suffix has to appear on the last modifier adjacent to the final definite suffix that realizes the D head.

¹¹ According to Taghipour (2021), this movement is motivated by the strong number feature on D, [*uNum*]. The strong feature can account for the language specific fact that at PF the suffixes that realize Num and D heads are fused and realized as one single head (Taghipour 2021), which will not be further discussed for the purpose of the paper.

¹² It is not clear whether the adjectives in the Laki have a fixed order.

¹³ An anonymous reviewer raises a question of how *ku* interacts with a quantifier, in particular

Korean shows a similar type of interaction between anaphoric definiteness and number. To illustrate, consider the following data in (20). The example in (20a) provides a context for the data in (20b). In (20b), the nominal with the anaphoric demonstrative *ku haksayng-tul* ‘those students’ refers to the antecedent *haksayng sey meyeng* ‘three students’ in (20a). Importantly, the noun with the anaphoric demonstrative *ku* must have the plural suffix *-tul* when its antecedent is plural.¹⁴

- (20) a. na-nun ecey haksayng sey myeng-ul mannassta.
 I-TOP yesterday student three Cl-ACC met
 ‘I met three students yesterday.’
 b. na-nun ku haksayng*(-tul)-ul chingchanhayssta
 I-TOP DEM student-Pl-ACC praise
 ‘I praised those students.’ (S. Park 2020: 180)

This is in contrast to a bare noun in indefinite contexts in the language. As shown in (21a), a bare noun can indicate either a singular or plural meaning (e.g., Lee 1989, 2000; Kang 1994; K. Kim and Melchin 2018a, b). In particular, the bare noun *haksayng* can indicate a plural meaning without the plural morpheme *-tul*. As in (21b), the plural *-tul* can appear to indicate a plural meaning, but its presence is optional, as the data in (21a) suggests.

- (21) a. na-nun haksayng-ul manassta
 I-TOP student-ACC met

wh-indefinite quantifier such as *nwukwu(-na)* ‘everyone/anyone’. At this moment, it is not clear how the interaction can be characterized, which is beyond the scope of this paper. I will leave this question for future research.

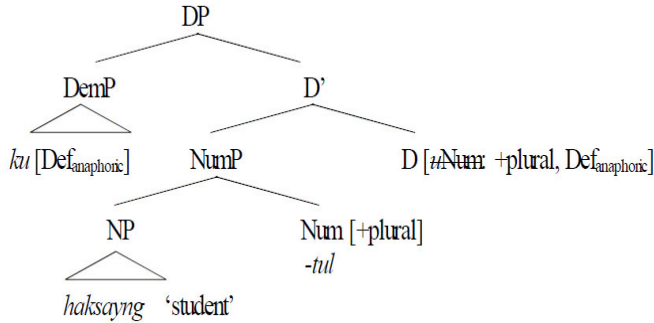
14 The demonstrative *ku* can appear with a numeral classifier phrase, as illustrated in (i). In this type of data, as pointed out by an anonymous reviewer, the plural marker *-tul* is optional. The co-occurrence of plural *-tul* and a numeral classifier phrase has been noted in literature (e.g., C. Kim 2005; K. Kim and Melchin 2018a, b; S. Park 2020, 2022; K. Kim 2023). Although the position of a numeral classifier phrase in the nominal structure is under debate, a common view is that a numeral classifier phrase satisfies plural semantics of Num. Building on this view, I suggest that an uninterpretable number feature on D can be checked when a numeral classifier is present, e.g., in the specifier of NumP (K. Kim 2023).

(i) na-nun ku haksayng(-tul) sey myeng-ul chingchanhayssta
 I-TOP DEM student-(Pl) three CL-ACC praise
 ‘I praised those three students.’

- ‘I met a student/students.’
- b. na-nun haksayng-tul-ul manassta
 I-TOP student-PL-ACC met
 ‘I met students.’

The contrast between anaphoric definite and indefinite with respect to number in Korean is similar to Laki case discussed in the previous section. I propose that the obligatory presence of plural *-tul* in an anaphoric definite context can be implemented by the interaction between anaphoric D and Num in terms of features, similar to the analysis proposed for Laki and in other languages discussed earlier. Num head is the locus of grammatical number such as English plural *-s* (e.g., Ritter 1991), as opposed to an optional plural that cannot realize Num head (Wiltschko 2008; K. Kim and Melchin 2018a, b). Specifically, the interaction can be represented by the features [*u*Num] on D and number features such as [\pm plural] on Num via agreement (Chomsky 1995, 2001). Importantly, this type of agreement between D and Num is only possible in the anaphoric definite context licensed by the demonstrative *ku*, as the contrast between definite (20) and indefinite (21) contexts suggests. Consider the structure illustrated in (22) below. This is the proposed structure of anaphoric DP in section 3.2 with the addition of NumP. The DP in (22) is anaphoric as the presence of *ku* with the feature [$\text{Def}_{\text{anaphoric}}$] that matches with the feature [$\text{Def}_{\text{anaphoric}}$] on D indicates. The uninterpretable feature on D [*u*Num] is checked/valued by the interpretable feature [$+$ plural] on Num in the context of anaphoric definite *ku*. As a result of this agreement, plural *-tul* realizes the Num head. Num being a grammatical number head, the obligatory presence of plural *-tul* in a definite context such as in (20b) is accounted for.

(22)



Furthermore, the proposed account captures the fact that a bare noun in an anaphoric context shows a strict singular interpretation which has been noted in the literature (e.g., C. Kim 2005; Bale and Khanjian 2014; S. Park 2020; K. Kim 2023; K. Kim and Park 2024). The relevant examples are illustrated below in (23). The example in (23a) provides the context for the example in (23b). In (23b), the anaphoric DP *ku haksayng* has a singular interpretation only, by referring to the antecedent *haksayng han myeng* ‘one student’ in (23a). This data is in contrast to a bare noun in indefinite context that shows either singular or plural interpretation (see (21a)).¹⁵

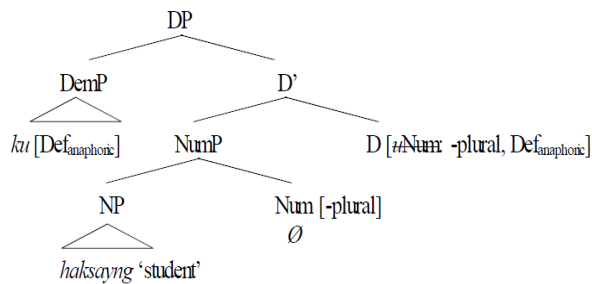
- (23) a. Con-nun ecey haksayng han-myeng-hako
 John-TOP yesterday student one-CL-with
 myentam-ul ha-ss-ta.
 meeting-ACC do-PAST-DEC
 ‘John had a meeting with a student yesterday.’
- b. onul-to ku haksayng-hako myentam-ul ha-n-ta
 today-also DEM student-with meeting-ACC do-PRES-DEC
 ‘Today, John has another meeting with the student.’ (Kang 2021: 314)

The strict singular interpretation such as in (23b) can also be accounted for by

15 As for optional *-tul* in an indefinite context, I assume the structure proposed in K. Kim and Melchin (2018a, b). It is proposed that optional *-tul* is a modifier to an *nP*. Under this view, in the structure of optional *-tul*, NumP that instantiates grammatical number is absent in contrast to the structure of obligatory *-tul* in (22). Thus, the two-way distribution of *-tul* can be accounted for by the presence and absence of grammatical NumP associated with DP via the (un)interpretable number feature.

the proposed agreement relation between D [*uNum*] and Num [\pm plural], as illustrated in (24). In (24), [*uNum*] feature on D is checked and valued as [-plural] by the interpretable feature [-plural] on Num. As a consequence of this agreement, Num is realized as zero morpheme. Just like an anaphoric DP that is plural in (22), the agreement via the feature [-plural] also takes place in the context of anaphoric definite *ku*. As shown in (24), *ku* with the feature [$\text{Def}_{\text{anaphoric}}$] merges in the specifier of anaphoric definite DP that has matching feature [$\text{Def}_{\text{anaphoric}}$].

(24)



In Korean literature, the presence of obligatory plural in an anaphoric definite context such as in (20) has been observed (e.g., Kim 2005; S. Park 2020; K. Kim and Park 2024). A featural analysis of plural *-tul* has been proposed in Kim (2005) but the syntax of *ku* has not been discussed at all. Thus, it remains questionable how the anaphoric *ku* interacts with the proposed featural analysis of *-tul*. The study of K. Kim and Park (2024) addresses different number contrasts in anaphoric definite and indefinite and how the relevant contrast can be accounted for in terms of semantic competition. Importantly, however, their study does not examine the syntax of *ku* and thus the role of *ku* in anaphoric definite contexts is unexplained. There is another study on plural *-tul* in S. Park (2020). She proposed a syntactic analysis of the plural *-tul* in an anaphoric context indicated by the demonstrative *ku*. In her analysis, the demonstrative *ku* is analyzed as a quantity or number expression by first merging in the specifier of NumP and moving to the specifier of DP. In these positions, *ku* is proposed to assign relevant values to both NumP and DP without further detail on what these relevant values are and how they are assigned. Under her analysis, thus, it is unclear what syntactic role *ku* plays as anaphoric definite with respect to

the obligatory number interpretations. S. Park (2020) also proposed that plural *-tul* realizes Num head, and this proposal suggests that *-tul* is a quantity/number expression. Together with her proposal on *ku* as a quantity/number expression, it is not clear how this proposal can account for the association between the anaphoric demonstrative *ku* and the obligatory plural *-tul*.

The current proposal on demonstrative *ku* fares better than the previous analyses in that it provides an account for the distribution of *ku* and its syntax as anaphoric definite. Moreover, the proposed syntax of anaphoric definite *ku* can account for the obligatory distribution of *-tul* in anaphoric definite contexts in contrast to its optional distribution in indefinite contexts.

5. Conclusion

This paper examined the distribution of demonstrative *ku* as anaphoric definite, and proposed a syntactic account of anaphoric definite *ku*. The proposed account is meaningful in that unlike the previous approaches it provides a detailed structural account of demonstrative *ku* as anaphoric definite by situating demonstrative *ku* in a cross-linguistic context. In doing so, it identifies the syntactic role of anaphoric definite *ku* as rendering a DP referentially visible by occupying the specifier of DP.

The proposed syntax of demonstrative *ku* is implemented to account for the obligatory plural *-tul* in an anaphoric definite context in contrast to its optional presence in an indefinite context. In the presence of *ku* in the specifier of DP with D [*u*Num], Num that instantiates grammatical number can capture the obligatory presence of *-tul*. Interestingly, this paper suggests that plural *-tul* in Korean has a dual distribution: obligatory and optional. In each case, plural *-tul* is associated with different type of number, namely grammatical and optional number. The issue of which type of number is right one to characterize plural *-tul* has long been debated in literature (e.g., Lee 2000; K. Kim and Melchin 2018a, b; S. Park 2020, 2022). The consequences of this paper suggest that both obligatory and optional types of plurals belong to Korean, and the syntactic context of (in)definiteness is associated with each type of plurals.

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