The emergence of group genitives : the emergence of a D system

OSAWA, Fuyo

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Fuyo OSAWA

──────── **Abstract** ────────

The group genitives like *the king of England's hat* are not existent in Old English and this emergence is assumed to be related to the loss of split genitives like (1) observed in earlier English. I propose a new view of this innovation different from the previous studies.

（1） Also he ȝaf hym þe eorles douȝter of Gloucetre to wif
　　　　　　　 the earl's daughter of Gloucester
'Also, he gave him the earl of Gloucester's daughter as his wife (*Trevisa*)

Concerning the postmodified possessors, Allen (2013) claims that there are two principles: (i) the possessor Noun (i.e. the head of the possessor phrase) should get the possessive marking *-es*, and the thematic relation of possession between the possessor and the possessum (i.e. the head of the larger noun phrase) must be expressed and (ii) the possessive marking *-es* should be at the end of the possessor phrase, that is, it is adjacent to the possessum.

The shift from split to group genitives, is that the principle (i) has given way to the principle (ii). The split genitive was sensitive to the principle (i), while the group genitives is subject to the principle (ii). In other words, English grammar first forces English speakers to obey the principle (i), but later English grammar forces the English speakers to follow the principle (ii).

I claim that group genitives appeared after the rise of a DP in English. Old English had no syntactic D system, and then, Old English had no group genitives. Furthermore, in order for group genitives to appear, the liberation of *-es* ending from meaning *possession* is necessary. It means that the genitive case has become a structural case, given structurally, which is not associated with a particular thematic role. This is consistent with the DP hypothesis that genitive case is supposed to be a structural case. The split construction like (1) impedes the reanalysis of *-es* ending since the possessor noun with *-es* is adjacent to the possessum. When *-es* ending was freed from the possessive relation, it was qualified as the functional head. This reanalysis was backed up by the change of case system from a thematically motivated case system proposed by Plank (1983) to a thematically unmotivated one where case is 'uninterpretable' (Chomsky 2008).

0. Introduction

This paper takes up the group genitive constructions and try to answer two questions: ①why

they were absent in Old English and ②why they appeared in the Middle English period.

The group genitives like *the king of England's hat* or *the man next door's car* are interesting constructions in which the genitive *-'s* appears at the end of a noun phrase, i.e. is apparently attached to the last noun of a noun phrse. However, there is no possessive relationship between the last noun and the following noun:

（2）　*England's hat*（*the king of England's hat*）
　　　door's car　　（*the man next door's car*）

The genitive *'s* is apparently separated from the head noun of the preceding noun phrase.

Sometimes, the genitive *-s* is added, not to the noun to which it relates most closely, but rather to whatever word ends a phrase including such a noun.

（3）　a．［Every linguist I know］'s opinion about the English genitive involves functional cate-
　　　　　gories.（Anderson 2013: 194）
　　　b．This is ［the man I saw］'s coat.
　　　c．*This is ［the man's］ I saw coat.

This never happens to plural *-s* affix:

（4）　a．These are the dog-s I saw yesterday.
　　　b．These are *［the dog I saw］-s yesterday.

This construction is not easy to understand if one analyses the *'s* as the possessive marker and then the *'s* should appear on the possessor noun. In fact, as the above examples show, the word which bears the possessive marker *'s* appears to have no possessive relation of possessor to the head Noun, i.e. the 'possessum'.
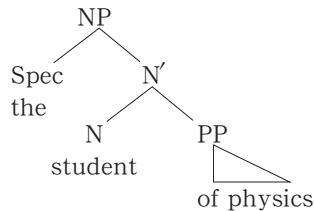
Indeed, the grammatical status of the *'s* in this construction has attracted the attention of many researachers (Janda 1980, Allen 1997 among others). For example, Janda (1980: 245) claims that the NE (i.e. Modern English)-*'s* genitive marker is not a case inflection. If the *-'s* genitive marker is a case inflection, it is expected to occur as a suffix on the head of the noun phrase. However, the Present-day English *-'s* occurs at the end of the entire NP, as we have observed above. As we have shown above, the *-'s* can be attached to the verb.

Thus, Janda (1980) concludes that *-'s* is not an inflection but some kind of phrase-final parti-cle. This clitic found in the group genitive, however, surely developed somehow from the Old English masculine and neuter genitive inflection *-es,* and this development goes against the dictum, formulated by Givón (1971), that "today's morphology is yesterday's syntax," since this change from inflection to clitic goes against the usual continuum from clitic, i.e. a syntactic element, to inflection, i.e. a morphological element.
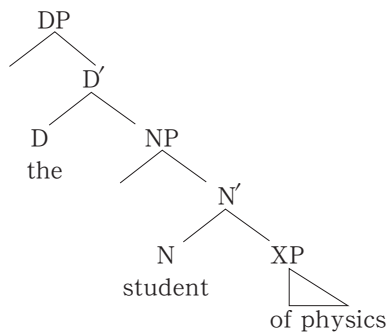
The （part of） solution for this comes from a generative analysis drawing on the DP analysis

（Abney 1987）, which provides a different treatment of this *'s*. That is, this *'s* is a functional head of full phrases, not a Specifier （Abney 1987: 4）.

Here I describe the DP analysis briefly: berfore the DP analysis, a nominal phrase is assumed to be a projection of a noun, i.e. NP. Determiners such as *the* or *a,* are supposed to be in a specifier position.

```
                NP
              /    \
          Spec      N'
          the      /  \
                  N    PP
              student   \____
                      of physics
```
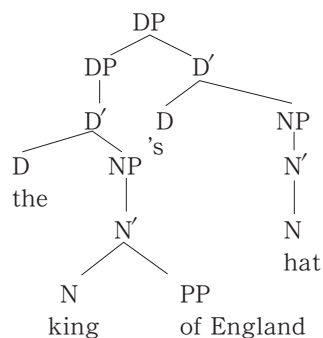
Under the DP analysis, the functional category D is the head of the nominal phrase and the NP is complement of the determiner head. Then, not the noun but the D is the head. Then, the nominal phrase is more appropriately called DP:

```
              DP
             /  \
                 D'
                /  \
               D    NP
              the   /  \
                        N'
                       /  \
                      N    XP
                  student   \____
                           of physics
```

The determiner forms a functional shell around the NP: there is one more projection over the NP.

Under this DP analysis, the construction of the group genitives is described as follows:

（5） the king of England's hat

```
                    DP
                  /    \
               DP        D'
               |        /  \
               D'      D     NP
              /  \    's     |
             D    NP         N'
            the   |          |
                  N'         N
                 /  \       hat
                N    PP
              king  of England
```

It is clear that the genitive marker *-'s* is not an inflection on the last noun, but is attached to the whole DP in the specifier position. The Specifier position can accommodate another maximal projection, and then a different DP can be located there. Then, the clitic *-'s* is a functional D head as well as the article *the* and *a/an* in Present-day English （cf. Quirk et al. 1985: 255）.

　　Interestingly, this group genitive construction is not observed in Old English and the group genitives appeared in the Middle English period. In the following sections, I will take up this emergence in more details and try to answer the two questions raised above.

2.　Old English

The group genitives were not used in Old English and Old English used the following constructions to express the corresponding notion:

（ 6 ）　Ælfred-es sweostor cynning-es

　　　　'King Alfred's sister'　　　　　　　　　　　　　　（AS. Chronicle Parker MS 82.2.888）

In （6）, genitive case is marked on both *Ælfred* and *cynning* and the noun *cynning* is placed behind the head noun *sweostor.* The possessive noun is split around the head noun and then, this is called a split genitive, formulated like （7）:

（ 7 ）　N1-gen. + N-Head + N2-gen.

（ 8 ）　on þæs　　　　　cyninges　　　　dagum　　　　　Herodes
　　　　In that.Gen.　　king.Gen.　　　day.Dat.pl.　　Herod.Gen.
　　　　'in the days of King Herod' （West Saxon Gospels. MS. A. Matt. 2.1, YCOE）

A more complex construction containing a few modifying phrases in a pre-head position is also observed:

（ 9 ）　Hi　ða　　　becomon　　　to　　　　ðæs　　　　mynstr*es*　　　<u>geate</u>
　　　　they then　arrived　　　　to　　　　that.Gen.　monastery.Gen.　gate
　　　　þæs　　　　halgan　　　weres
　　　　that.Gen.　holy.Gen.　man.Gen.
　　　　'Then they went to the gate of the holy man's monastery'　　（ÆCHomII_11:105.454.2320）

In （9）, the higher (i.e. matrix) head is *geate,* which is modified by another complex nominal phrase *ðæs mynstres-Gen* and *þæs halgan weres.*
　　However, other orders are also available:

（10）　Ælfred-es cynning-es godsunu

　　　　'King Alfred's godson'　　　　　　　　　　　　　（AS. Chronicle Parker MS 82.10.890）

In （10）, two genitive-marked modifying nouns precede a head noun. It is said that the split type construction like （6）and （8）is not so rare (cf. Ekwall 1943: 2).

In later Old English, the above noun phrases such as (6) or (10), through an intermediate stage like (11), developed into the shcema (12):

(11)   Davið kinges kinn   (Ormulum)

(12)   [N1 of N2] -gen.+N-Head

In (12), an *of*-N is placed before a head noun, and the genitive inflection is attached to the last noun of a phrase, which is supposed to be a preceding form of the group genitive construction. This construction first appeared in Chaucer and became common in the 15th century.

(13)   the god of slepes heyr   (Chaucer Book of Duchess: 168)
       'the god of sleep's heir'

As observed in this section, the shift of complex nominal phrases from split genitives to group genitives is very clear in the history of English. What made this shift possible? This shift is assumed to be related to the loss of split genitives like (6). It is widely assumed that the development from the split genitive to the group genitive in English was a simple matter of the reanalysis of the possessive marker (i.e. *-es*) from an inflection to a clitic.

I aruge that the emergence of group genitives should be related to the emergence of a syntactic D system, i.e. a functional category D in the nominal projection. The emergence of group genitive is dependent on the existence of a syntactic determiner system in the nominal phrase. Until the establishment of a syntactic D, the group genitive is not available. I claim that the genitive case ending *-es* played an important role in the rise of a D system and a subsequent appearance of group genitives in English. This view that Old English genitive case ending *-es* played a role in the development of nominal structures in English is not new. The genitive marker, *-es*, in adnominal constructions is the focus of much attention in the historical syntactic studies (cf. Janda 1980, Allen 1997; 2008; 2013, Osawa 2009, Crisma 2012 among others). I propose a new view of this innovation, which is different from the previous studies. In the next sections, I will discuss this point in more details.

3.   The split of noun phrases

In this section, I will raise two more questions: ①why the noun phrase was split or more precisely could be split in Old English ②and why this split disappeared. The examples shown below are from York-Toronto Helsinki Parsed Corpus of Old English Prose (YCOE) and have been cited by many researchers before.

In old English a nominal expression in the *-es* genitive configuration could be split. However, interestingly, the splitting is obligatory with cases such as (9), but not with appostons like (6), (8) and (14). Crisma (2012) has examined the YCOE and concludes that 314 examples out of 347

appositions are split, while 33 are non-split. Meanwhile, no non-split examples are attested with the（9）type. One more example is given below:

（14）　ðæs　　　　　cyning*es*　　**sweoster**　　　Ecgfrides:　　split genitive（appositives）
　　　　That　　　　king.Gen.　　sister　　　　　E.Gen.
　　　　'king Egfrid's sister'　　　　　　　　　　　　　　　　　　　（ÆCHomII_10:87.212.1831）

This fact is worth while considering and I repeat（9）below as（15）:

（15）　Hi　　ða　　becomon　　　　　to　　　ðæs　　　　　mynstr*es*　　　　**geate**
　　　　they　then　arrived　　　　　to　　　that.Gen.　　monastery.Gen.　gate
　　　　þæs　　　　halgan　　　weres
　　　　that.Gen.　holy.Gen.　man.Gen.
　　　　'Then they went to that gate of that holy man's monastery'（ÆCHomII_11:105.454.2320）
　　　＝　'that gate of that holy man's monastery'

　　　Let's examine the split construction closely. The split genitives are schematized as follows:

（16）　ðæs mynstres.Gen ＋ geate（＝Head）＋ ðæs halgan.Gen. weres.Gen.
　　　＝　［that monastery's］［gate］［that holy man's］

　　┌─────────────┬──────┬───────────────┐
　　│ That monastery's │ gate │ of that holy man's │
　　└─────────────┴──────┴───────────────┘

　　　'they arrived at the gate of that holy man's monastery'

In this nominal phrase, the higher（i.e. matrix）head is *geate,* which is modified by nominal phrases *ðæs mynstres-Gen,* and *þæs halgan weres.* Both Noun1 *mynstre* and Noun 2 *were* are marked for genitive case. The modifying noun phrase *that holy man's monastery* in Modern English is separated into two parts, and *that holy man's* is extraposed after the main head noun *gate*:

（17）　［［that holy man]'s monastery]'s gate　［　　　　　］
　　　　　　　　　extrapossed
　　　　'that gate of that holy man's monastery'

In this construction, which Allen（2013: 6）names "two possessive relations" and Crisma（2012: 208）names "genitives recursively modifying the *s*-genitive, the splitting is obligatory.
　　　Why should the possessor phrase or the modifying phrase be split around the head noun of the whole noiminal phrase（i.e. a bigger phrase）? The issue of this post-modification has excited a great interest among the historical researhcers.
　　　Why should *ðæs halgan-Gen. weres-Gen＝the holy man* be moved after the head noun and why

did *the ðæs mynstres-Gen＝monastery's* remain as it was, i.e. just before the head noun *geate*? Does this mean something important?

I argue that this fact means something important. The noun *monastery's* must be placed adjacent to the head noun *geate,* in order to express the possessive relation between the possessor and the possessum, or rather, because there is a strong thematic relation of possession between the possessor noun and the possessum noun, these two nominals must be placed adjacently. That is, the strong thematic relation between the possessor noun and the possessum noun requires them to be placed adjacent, but not vice versa. This means that the *-es* ending functioned as a case ending conveying the meaning of a possession.

Another phrase *þæs halgan weres* had to be separated from the *mynstre,* since the adjacency of *mynstre* and *geate* is the first priority. There is a difference in priority, since the *geate* is the complement of the predicate verb *becomon* and the relation between the *gate* and the *monastery* is closer than the relation between the *monastery* and the *holy man.*

(14) ðæs   cyning**es**   **sweoster**   Ecgfrides: split genitive （appositives）
      That   king.Gen.   sister   E.Gen.
      'king Egfrid's sister'   （ÆCHomII_10:87.212.1831）

In the case of appositions like (14), the *cyning* is Ecgfrid, and 'the king's sister' means the same as 'Egfrid's sister'. There is no difference in priority. Then, splitting is not obligatory.

Allen (2013) does not accept the reanalysis theory which has been introduced in the previous setion, and explains the reason of splitting as a way of resolving the conflict between the two principles (Allen 2013: 1) which English and other Germanic languages strive to follow. Allen (2013: 1,2,6) claims that the complex noun phrases involving the posseossor and the possessum meet two requirements, i.e. two principles: the first Principle (i) that the possessor Noun (i.e. the head of the possessor phrase) should get the possessive marking, and that the thematic relation of possession between the possessor and the possessum (i.e. the head of a larger noun phrase) must be expressed and the second Principle (ii) that the marking of the possessive phrase should be at the end of the possessor phrase, that is, it should be adjacent to the possessum (Allen 2013: 1)

These two principles are easily met in the simple example such as 'the king's son'. Since there is no modification of the possessor N (i.e. *king*), there is no conflict between the two principles. The possessor noun *king* gets the possessive marking *-es,* and *-es* marking is placed at the end of the possessor phrase and then it is adjacent to the possessum noun *son.* However, in more complex noun phrases like the so-called 'group genitive' *the king of France's daughter* satisfies the second ('right edge') principle but violates the first ('head marking'), while the alternative 'split genitive' *the king's daughter of France* obeys the first principle but destroys the unity of the possessor phrase.

Although I agree with Allen on putting an emphasis on the thematic relation between the possessor and the possessum, I propose a different analysis of how this thematic rlation affects

the syntactic change. I claim that the group genitives were made possible when the *-es* ending lost its thematic role of possession, or more appropriately, when the *-es* ending could accommodate a variey of meanings. The status of *-es* changed into a more functional one. The thematic relation between the possessor and the possessum impedes the reanalysis of the nominal construction. This analysis is consistent with the case theory in the Minimalist approach that case feature is uninterpretable (cf. Chomsky 2008).

Allen (2013) claims that what happened was the abrupt favouring of the group over the split genitive near the beginning of the Early Modern English period (Allen 2013: 1).] The reason of favouring of the group genitive is, according to Allen (2013: 32), that 'when the possessor was fairly short and simple but the possesssum was complex enough to make splitting awkward, while the business of the split genitive was to postpose part of an unwieldy possessor phrase while keeping the possessor in prenominal position.'

4.　The principle (i) and its defeat by the principle (ii)

In the previous section, we have observed the split genitives and the reason of their splitting in Old English. In this section, we will examine why this splitting disappeared and, instead, group genitives appeared.

If we put Allen's (2013) two principles in a chronological line of a wider perspective, we understand what happened, i.e. the shift from split to group genitives, is that the principle (i) has given way to the principle (ii). The split genitive was sensitive to the principle (i), while the group genitive is subject to the principle (ii). In other words, English grammar first forces English speakers to obey the principle (i), but later English grammar forces the English speakers to follow the principle (ii). This must be explained.

The second principle (ii) states that the possessive marking should come at the end of the possessor phrase (Allen 2013: 1). This principle sometimes requires the genitive *-es* ending to be separated from the possessor noun, if there are some other modificational ellements within a possessor phrase. Consequently, the *-es* ending was attached to the thematically unrelated element. Look at the examples in (2). What does this mean? What made this possible?

The important thing is that the principle (i) is much more important than the principle (ii) in Old English. This is because Old English is lexical-thematic, which means that all constituents in a given language belong to lexical categories (i.e. NP, VP, AP), and all sister constituents are thematically inter-related. Functional categories such as DP, CP, or TP do not exist or develop only limitedly in such a language. One instantiation of this nature is a morpho-semantic case system.

In Old English, unlike Present-day English, morphological case was assigned to a thematically related NP. Morphological case was closely related to the thematic roles of nouns. In Present-day English the thematic role of subject of the verb like *undergo* meaning 'to bear', 'to suffer', is not Agent, but Patient. Still, the subject of the verb *undergo* can be assigned nominative case. Like this, there is no motivated relation between thematic roles and syntactic cases in

Present-day English. There may be a many-to-many relationship between structural cases and thematic roles. Whatever its thematic role is, Agent, Patient, or Experiencer, nominative case can be assigned to the subject. However, in a lexical-thematic language like Old English, although ideally, morphological case was assigned to a thematically related NP. Then, the NP with the semantic role of Experiencer tended to be realized as the dative NP object, rather than as the nominative subject. Plank (1983) also proposes that there are correlations between choice of case and semantic role. He has studied verbs which allow a choice of case in object NPs and argues that the choice is motivated rather than arbitrary. For example, dative marking of object NPs tends to signal a relatively low degree of opposedness between the referents of object and subject NPs (i.e. the subject-object relationship is not adversative), accusative case marking signals relatively high opposedness (i.e. the subject-object relationship is not co-operative) correlated with patient function for the object, while genitive marking tends to encode circumstantial roles rather than full participants. It is well known that noun phrases involving *of* only for case reasons were not much observed in Old English. There was a correlation between a theta role and morphological case in Old English. Nouns can become arguments by theta role assignment only, and theta roles are expressed in the form of morphological case: morphological case marking is sufficient for a NP to be an argument.

In Old English, a functional category D is absent, that is, it has only NPs. Two demonstratives *se* (*seo/þæt*), *þes* (*þis/þeos*) cannot be a functional D. They are not obligatory and the demonstratives are not dependent on other elements, and they are used as independent elements. Furthermore, the absence of a D-system is supported by the syntactic evidence, i.e. the lack of anaphor binding in Old English. In Old English, personal pronouns were used as anaphors and then, the meaning of the sentence "He killed him" was indeterminate whether the object referred to the subject or not. Since a D-system is the locus of binding properties of nominals and pronouns, this absence will follow easily if we assume the lack of a D-system in Old English.

A functional D has emerged later, and the emergence of a D-system has brought about the change from NPs to DPs in English. The emergence of group genitives is among them.

Under the above-mentioned thematically motivated case system, if the *-es* ending is a case inflection, it is impossible for *-es* to be attached to a thematically unrelated element. If it is possible, this means that *-es* is not a case inflection any more. This was made possible because the *-es* was grammaticalized and was in the process of becoming a functional category D. If the *-es* is not a case inflection, there is no thematic restriction between *-es* and its host. If the thematic restriction is active, the principle (ii) is not activated.

Consider the example (15), which is subject to the principle (i) that the possessor gets the possessive marking *-es,* but violates the principle (ii) that *-es* should come at the 'right edge'. First, the possessor *monastery* must get the possessor marking *-es,* since the *-es* is a case inflection and should be attached to a thematically related NP, as discussed above. Next, why was the phrase *that holy man* placed at the end of the phrase? The word order of (15) is determined, depending on the closeness of a modifying element to the head noun and its semantic importance. Here there are two possessive relations; *that monastery's gate,* and *that holy man's monastery.* In

this sentence, the higher (matrix) head noun is *gate,* which is a complement of the predicate verb. Then, the first phrase *that monastery's gate* should be given priority, since it includes the higher head noun *gate.* The second phrase *that holy man's monastery* is only indirectly related to the head noun *gate* through the noun *monastery* of the first phrase. Like this, in a lexical-thematic language, thematic relations play a role in deciding a syntactic structure.

Why did the principle (i) give way to the principle (ii) in English? What triggered this is the demise of case morphology, or, the demise of thematically motivated case system mentioned above. The leveling of inflectional endings had already begun in late Old English, and by the early Middle English period many Old English inflectional distinctions were lost. Morphological case could not perform the tasks which it took care of before. The thematically motivated case system decayed and, subsequently a functional D-system has developed to do the same job in English. The demise of morphological case already progressed to a considerable extent during the Middle English period. The definite article *the* may be established around 1400.

I claim that the group genitives were made possible when the *-es* ending lost its thematic function and changed into a functional category D, as touched on above. At this point, my analysis diverges from Allen's (2013) one. She also claims that the possessive relation is very important both in split genitives and group genitives. However, she argues that this thematic relation of possession has been strengthened in the Middle English period, since there are two possessive relations in the Middle English split genitives; the prenominal material bears the thematic relation of possessor to the head N (the possessum), while the postnominal material in turn bears a thematic relation to the prenominal possessor (Allen 2013: 6). Look at the example (15). Accoding to Allen (2013), these two possessive relations are not observed in Old English. Then, the examples like (15) are supposed to be exceptional. That is, the thematic relation between the extraposed material and the head noun of the possessor phrase has been added in Middle English. Then, Allen (2013) claims that the Middle Englsih split genitive is not the continuation of a similar construction in Old English (2013: 5) and claims that the split genitive is characteristic of Middle English. Then, something like a shift from split to group genitives is not intended in her analysis.

Allen (2013) claims that both constructions (i.e. split and group) are common in English and what happened was the abrupt favouring of the group over the split genitive near the beginning of the Early Modern English period (Allen 2013: 1). The reason of favouring of the group genitive is, according to Allen (2013: 32), that 'when the possessor was fairly short and simple but the possesssum was complex enough to make splitting awkward, while the business of the split genitive was to postpose part of an unwieldy possessor phrase while keeping the possessor in prenominal position.' However, in *the king of England's hat',* the possessum *hat* does not seem to be complex at all.

In my analysis, what happened was not a matter of choice between two different styles, but more decisive reason is behind this change, as we have discussed above.

I claim that the *-es* ending of the Old English genitive is the source of the Present-Day English D head *-'s.* Furthermore, I propose that the Old English genitive case ending *-es* made the

most important contribution to the emergence of a D system (cf. Osawa 2003, 2007, Allen 2008; 2013, Crisma 2012).

In Present-day English, case is supposed to be insensitive to thematic roles or 'uninterpretable' (Chomsky 2008) if we use the Mnimalist Program term, since case is given structurally. Under the Minimalist approach, case feature of nominals and pronouns are supposed to be uninterpretable, because it does not have much contribution. A change in case forms does not affect the meaning of nominal (pronouns). Look at the following examples:

(18)   a. It is said [they were arrested]

  b. He expected [them to be arrested]

  c. He was shocked at [their being arrested]

For the emergence of group genitives, it is necessary for a genitive case *-es* to become a structural case, which is not associated with a particular thematic role. My analysis of what happened to the split genitives in Old English is consistent with the DP hypothesis under which the genitive case is supposed to be a structural case.

Thus, for group genitives to appear, the demise of the thematically motivated case system and the liberation of *-es* ending from thematic restrictions are prerequisite.

5. Conclusion

In this paper, I have taken up the group genitive constructions and tried to answer two questions: ①why they were absent in Old English and ②why they appeared in the Middle English period. I claim that the group genitives were made possible when the *-es* ending lost its thematic function and changed into a functional category D.

What happened is the change in the case system; that is, the thematically motivated case system gave way to the syntactic case system. Thereafter the *-es* ending did not have to be placed at the end of a noun since it is not an inflectional case ending but structural case, which is checked or assigned its value by a functional D head in the course of the syntactic derivation of Merge. Group genitives were made possible due to this change from a morphological to syntactic system. The difficulty of treating *-'s* in Present-day English is rooted in this diachronic change. This change 'from morphology to syntax' is neither exceptional nor anomalous in the historical domain.

Thus *-es* ending in the complex nominal structure could play a crucial role in the emergence of a functional D. The case ending *-es*, a morphological element, lost its property of case inflection, in the overall demise of morphological case distinction. It has become a phrase-final clitic and as a functional head D, it can provide a new place in the nominal structure. Since this *-es* ending is a phrasal affix, not a case inflection, it accommodates many other elements.

This genitive ending was reanalyzed as a head determiner and the group genitive construction was established as such around the middle of the 15th century. Supposedly, the establishment of group genitive constructions took place after the emergence of a D-system. This explains

the temporal delay of the appearance of group genitive constructions. Thus, we can conclude that group genitive constructions have been made possible due to the emergence of a D-system.

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