

Reanalysis of the Genitive Case in the History of English

HAMASAKI Koitiro

(Received October 15, 1998)

1. Introduction

An important development in generative grammar over the last ten years has revealed the difference between lexical categories and functional categories on the basis of elucidation of clause structure. Functional categories in noun phrases have also been made fairly clear since the DP hypothesis was put forward in Abney (1987). The theoretical development brought about a new approach to the research into the diachronic change of the English language. The traditional philological study was concerned with the description of synchronic or diachronic linguistic data, while the theoretical linguistics tries to explain the reason why some linguistic change occurred. However, the method of theoretical linguistics sometimes tends to be too theory-oriented on the basis of only the data which support its theoretical ideas, although the theoretical linguistics caused the study of historical changes to be more scientific. So, we should deal with linguistic data more carefully with an interaction between theoretical developments and philological study.

This paper deals with the historical change in the case system of English with special reference to the leveling of genitive case endings. It is generally assumed that linguistic change should be analyzed as grammaticalization or as reanalysis.¹⁾ Then, should we consider the leveling of genitive case endings in the historical change of English either as grammaticalization or as reanalysis?

At first, a degree of terminological classification seems in order, because many scholars have used these terms in a variety of senses. Let us first see 'reanalysis', as in (1):

- (1) Reanalysis: "changes in which genuinely new patterns are created"; "the creation of a new association of form and content rather than the extension of an existing one"

(Kemenade and Vincent (1997: 2))

Recently, such theorists as Traugott and Heine (eds.) (1991), Heine et al. (1991), Hopper and Traugott (1993), Rissanen et al. (eds.) (1997) have tried to explain the

historical language change in terms of 'grammaticalization'. The difference between reanalysis and grammaticalization lies in the relative importance attached to the historical discontinuity. The former necessarily pays attention to the sudden change in the historical language development, while the latter focuses on such a change as part of a larger development.

In this paper, we will provide a theoretical explanation for the leveling of genitive case endings in English on the basis of linguistic data. It will be argued that the functional head K (=Case) of genitive was reanalyzed as another functional head D (=determiner) between Old English and Middle English periods.

The outline of this paper is as follows. In section 2, we will see the differences between lexical categories and functional categories, and it will be shown that the leveling of genitive case endings in the history of English is not related to 'analogy'. In section 3, we will sketch the establishment of the determiner in Old English and other older Germanic languages. In section 4, we will discuss the distinction between genitive and accusative and the rise of the article in the older Germanic languages. Section 5 focuses on the reanalysis of genitive in the history of English. Section 6 presents the concluding remarks.

2. Lexical Categories and Functional Categories

Before discussing the reanalysis of genitive, we will consider the differences between lexical categories and functional categories, because we claim that genitive should belong to a functional category, and that the categorial change is concerned with the reanalysis of a functional head in the course of the historical development of English.

In the principles and parameters approach, the concern of generative linguists has shifted from lexical categories to functional categories since Chomsky (1986), and clause structure has been revealed gradually with the development of X-bar theory. Consequently, the distinction between lexical categories and functional categories came to be recognized, as in (2) and (3):

- (2) **lexical categories (contentive or content words)** "have idiosyncratic descriptive content or sense properties".
- (3) **functional categories (function words or functors)** "serve primarily to carry information about the grammatical properties of expressions within the sentence, for instance information about number, gender, person, case, etc".

(Radford (1997: 45))

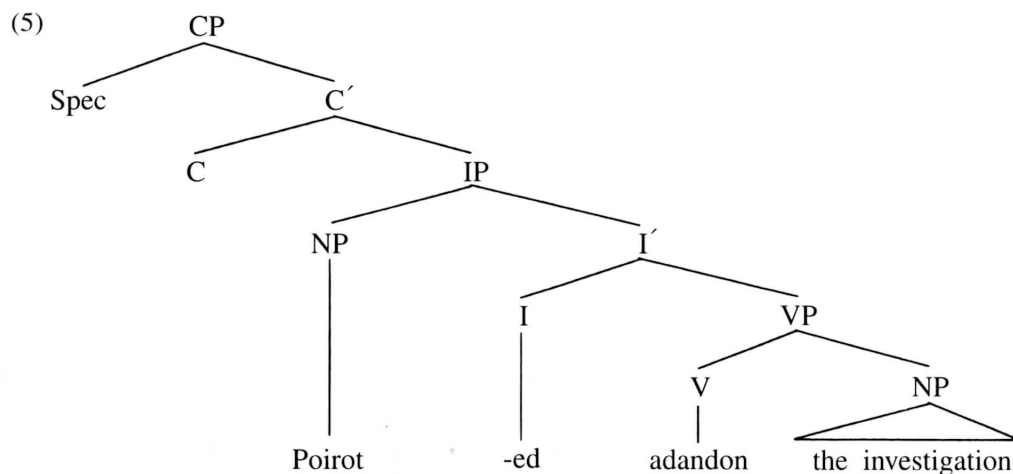
The five categories such as noun, verb, preposition (or postposition), adjective and adverb are called lexical categories which can be found as an independent lexical item in the lexicon. In contrast, functional categories do not carry lexical meaning and appear as a function word or a bound morpheme depending on lexical categories. Let us consider the following examples.

(4) a. Poirot abandoned the investigation.

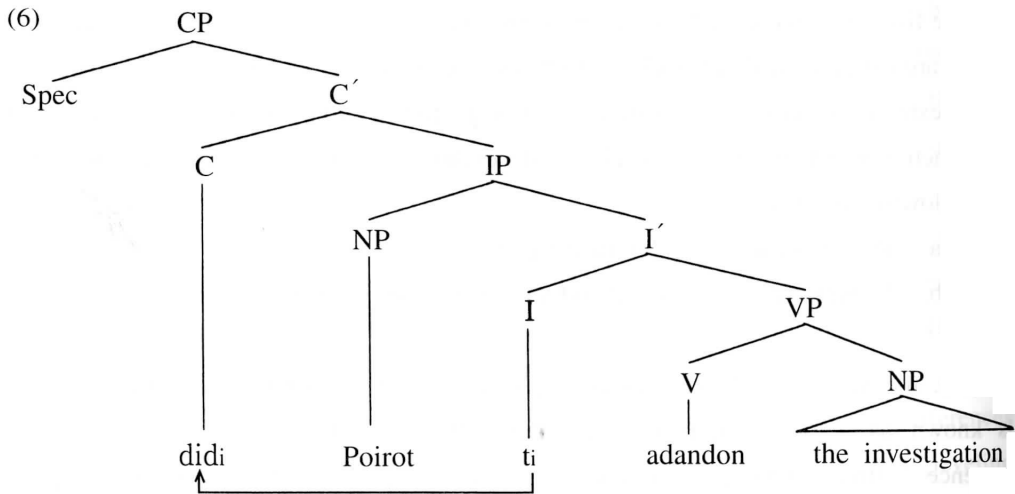
b. I think [that [Poirot abandoned the investigation]].

(Haegeman (1994: 116-17))

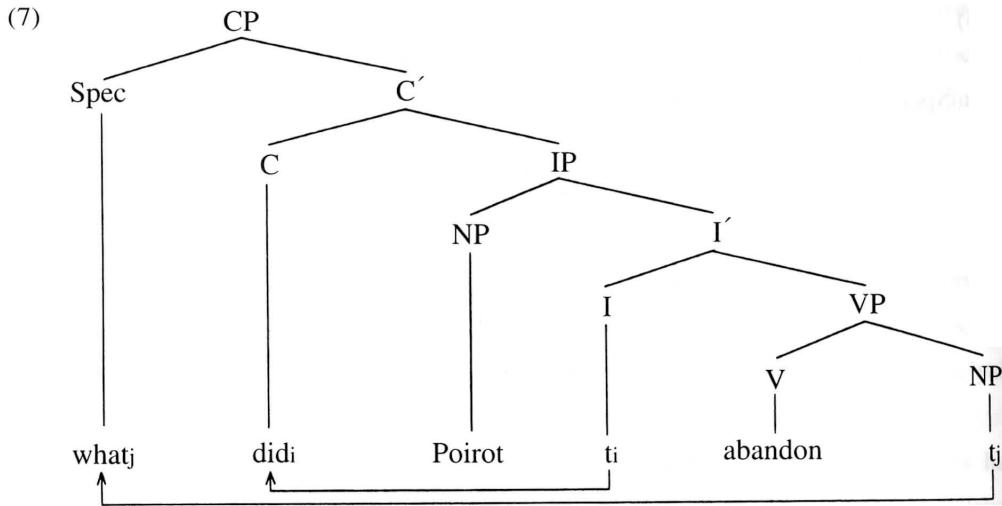
In (4a), the verb *abandoned* can be separated into the content word *abandon*, which is known as a free morpheme, and the suffix *-ed*, which shows the tense of the sentence. Both categories are connected as one element, but sometimes appear in different positions. The underlying structure of the sentence (4a) can be shown roughly as in (5):



In (5), *abandon* and *-ed* are labeled as different categories, that is, V and I respectively. It is generally assumed that the suffix is lowered to the verb. However, when we change this underlying structure into the yes-no question, the suffix *-ed* leaves the adjacent verb, as in (6):



Likewise the suffix leaves the adjacent verb in Wh-questions, as in (7):



In (7), the suffix also moves into the C position with *do*-support. The same movement occurs in negative sentences too, as in (8):

(8) Poirot did not abandon the investigation.

In (4b), the complementizer *that* functions as a functional category which makes the following clause dependent. It is generally assumed to be base generated under the C node in (5).

Now let us consider the following examples such as (9) and (10).

(9) a. Poirot is a Belgian detective

- b. *Does Poirot be a Belgian detective?
 - c. Is Poirot a Belgian detective?
 - d. *Poirot does not be a Belgian detective.
 - e. Poirot is not a Belgian detective.
- (10) a. Poirot has finished the investigation.
- b. *Does Poirot have finished the investigation?
 - c. Has Poirot finished the investigation?
 - d. *Poirot does not have finished the investigation.
 - e. Poirot has not finished the investigation.

The verbs *be* and *have* also behave like the suffix in (5). The copula *be* has little independent meaning and functions as a linking verb which relates a subject and a predicate. The verbs *be* and *have* also have another function which marks aspect. Thus, they have the same distributional properties as the suffix in (5).

So far, we have seen functional elements found in clauses. Now, we want to consider other functional categories found in noun phrases. The function of functional elements is to relate some functional head to another phrase. Some functional heads, i.e. suffixes, depend on other elements as explained above, and others play their role as an independent element like prepositions. The way of utilizing functional categories varies across languages, as illustrated in the paradigm in (11):

- (11) a. [case DP] Middle Dutch (or any case-inflecting language) (KP)
 b. [ϕ DP] Modern Dutch (or any 'analytic' language)
 c. [P DP] Modern Dutch (or any language with the category P)

(Kemenade and Vincent (1997: 18-19))

Noun phrases in languages which have a rich case system can be treated as KP as in (11a). This type of language is called a synthetic language. The other type of language, i.e. (11b, c), is called an analytic language.

Before we analyze the historical change in functional heads in English, let us return to the differences between lexical categories and functional categories with the help of the discussion in Radford (1997).² First, Radford proposes one test of whether words have descriptive content, that is, to see whether they have antonyms. Lexical categories have their antonyms as in (12). On the contrary, functional categories in (13-14) do not have any antonyms.

- (12) a. N: loss \Leftrightarrow gain
 b. V: rise \Leftrightarrow fall

- c. A: tall ⇔ short
 - d. ADV: early ⇔ late
 - e. P: inside ⇔ outside
- (13) a. **Do** you want **to** smoke?
 b. I said **that** I was tired.
- (14) a. I bought **a** *new battery* from **the** *local garage*
 b. I prefer **this** *painting* to **that** *photo*
 c. **My** *studio apartment* is no bigger than **your** *garage*
 d. **All** *good comedians* tell **some** *bad jokes*

Second, especially the functional elements⁴ named determiners in (14) appear to be similar to adjectives, which clearly have lexical properties, in that they are positioned in front of nouns. However, if we take a closer look at their distributional properties, the difference between these categories will emerge right away. For example, adjectives can be recursively stacked in front of the noun which they modify, while determiners cannot be stacked in this way.

- (15) a. ADJECTIVES : men; *handsome* men; *dark handsome* men; *tall dark handsome* men; *sensitive tall dark handsome* men; *intelligent sensitive tall dark handsome* men, etc.
- b. DETERMINERS: *the* car; **a* my car; **that* the car; **that his the* car; **a that* car, etc.

Furthermore, although both determiners and adjectives can be used together to modify a noun, determiners always have to precede adjectives, as in (16):

- (16) a. **my** *nice new* clothes (**determiner** + *adjective* + *adjective* + noun)
 b. **nice* **my** *new* clothes (*adjective* + **determiner** + *adjective* + noun)
 c. **nice new* **my** clothes (*adjective* + *adjective* + **determiner** + noun)

((12-16): Radford (1997: 45-46))

In this section, we have seen the differences in distribution between lexical categories and functional categories. This discussion leads to the analysis of the historical change in D-systems in Old English and other old Germanic languages in the following section.

3. The D-Systems in OE and other old Germanic Languages

We are now in a position to tackle with the problem of how we should regard the historical change in the case system of English. As a point of departure, we want to follow the discussion in Philippi (1997) about the emergence of the article in the

Germanic languages.

It is shown that old Germanic languages such as Gothic(Got), Old High German(OHG), Old Saxon(OS) and Old English(OE) do not have a definite or an indefinite article, as exemplified in (17):

- (17) a. *ip sa inngaggands þairh daur hairdeis ist lambe* Got (J.X.2)
 but who goes through *the door* is a shepherd for *the sheep*
 b. *uuantra giboran ist man in mittilgart* OHG (Taitan.174.5)
 because (it) was born *a man* in *the world*
 c. *stonc ða æfter stane stearcheort onfand feondes fotlast* OE (Beo.2288)
 jumped then behind *the stone the stouthearted*, found *enemy's footstep*
 d. *ef eo man mid sulicun dadun dodes gesculdien* OS (Heliand.5244)
 if sometimes *a man* with such actions deserves *(the) death*

Although no article can be seen in those languages, we can find demonstratives, which are used in a similar way to the article of the modern Germanic languages, as in (18):

- (18) a. *jah andhafjands sa hundafaps qap* Got (M.VIII.8)
 and answering *the captain* said
 b. *so er bifora wardh chichundit dhuruh dhen forasagun* OHG (Isidor.28.5.6)
 so he before was foreseen by *the prophets*
 c. *that all thia eliledun man iro vothil suohtin* OS (Heliand.345)
 that *all the strange men* their home looked-for
 d. *Men ne cunnon secgan to soðe ... hwa þam hlæste onfeng* OE (Beo.50)
 people cannot say for sure who *the cargo* received

In addition, indefinite pronouns and numerals are used in an article-like manner in all these languages, as in (19):

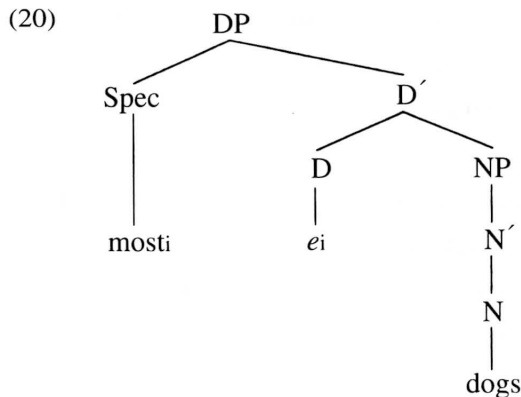
- (19) a. *ni magt ain tagl hveit aiþþau swart gataujan* Got (M.V.36)
 not can-you *a/one hair* white of black dye
 b. *inti findet ira eina eselin gebuntana* OHG (Taitan.116.1)
 and you will find *a donkey* tied up
 c. *legda im ena boc in an barm* OS (Heliand.232)
 layed him *a book* in (the) bottom
 d. *ða bar sum wudewe hire suna lic to bebyrgenne* OE (ÆHom.i.66.15)
 then bore *a/some widow* her son to be buried

((17-19): Philippi (1997: 62-63))

According to Philippi (1997), the demonstrative pronoun was formerly used as a purely emphatic element and was reanalyzed as the new definiteness marker later. He argues that the reason why old Germanic languages which did not have any article came to have articles is the change of ways of referentiality marking. He claims that indefinite (or weak) NP was marked genitive, whereas a definite (or strong) NP was marked accusative. In other words, the contrast of case marking was a way of referentiality in earlier days, but the article came to act as a reference marker for the NP as the case system declined. In the next section, we will examine the difference in function between genitive and accusative.

4. Genitive vs. Accusative: Weak/Strong Distinction in Referentiality

In this section, we will see the difference in function between genitive and accusative, i.e. weak/strong distinction in referentiality. The DP hypothesis, which was first proposed in Abney (1987) and developed later by many theorists (cf. Fukui (1986), Fukui and Speas (1985), Stowell (1989), Ritter (1991), Giorgi and Longobardi (1991)), assumes that NPs are maximal projections of a functional head D, where D⁰ is the position in which the referential interpretation of the NP is determined. Since strong determiners such as the definite article are considered to occupy the functional head, it is generated under the D node. In contrast, weak determiners seem to occur in the specifier position of DP, since they function in a similar way to operators. Thus, an NP like *most dogs* can be analyzed as in (20):



Therefore, the weak/strong distinction is reflected in the positions where they appear. The distinction in syntactic behavior between weak and strong NPs is confirmed in the examples such as (21-22):

- (21) a. There is/there are a/some/many/few/three dog/dogs in the garden
 b. *There is/there are the/all/most/both/every dog/dogs in the garden
- (22) a. Some/many linguists are lazybones = Some/many lazybones are linguists
 b. *Most/all linguists are lazybones ≠ Most/all lazybones are linguists

((20-22): Philippi (1997: 66-67))

So we can conclude that the weak/strong distinction in referentiality should be represented syntactically.

Now we return to the case distinction in old Germanic languages. Let us take a look at the following examples in (23) and (24):

- (23) a. hvas haldþ aweþi jah miluks þis aweþjis ni matjai Got (K.IX.7)
 who tends a flock and does not milk (GEN) of the flock drink
- b. skancta sinan fianton bitteres lides OHG (Ludwigsl. II .53-4)
 (he) poured out to his enemies a bitter drink(GEN)
- c. an is handun dragan hluterer waters OS (Heliand.4536)
 on his hands carry clear water(GEN)
- (24) a. jah insandida ina haiþjos seinazos haldan sweina Got (L.XV.15)
 and (he) sent him out to his field to look after (the) pigs(ACC)
- b. Inti dir gibu sluzzila himilo riches OHG (Taitan.90.3)
 and to you I give (the) key(ACC) of the kingdom of heaven
- c. gisahun then mahtigan, godes angil chuman OS (Heliand.394-5)
 (they) saw (the) mighty(ACC) god's angel(ACC) come

(Philippi (1997: 65))

In (23), indefinite (or weak) NPs are marked genitive, while in (24) definite (or strong) NPs are marked accusative.

There exists another evidence which supports this line of argument. It is a well-known fact that in German the ordering of adverbials and arguments is free. Thus, the object NP may precede or follow the sentential adverb. However, existential NPs seem to be barred from scrambling, as illustrated in (25):

- (25) a. daß die Polizei gestern zwei *Linguisten* festgenommen hat
 that the police yesterday two linguists arrested has
- b. daß die Polizei *zwei* Linguisten gestern festgenommen hat
 that the police two linguists yesterday arrested has
- c. *daß die Polizei Linguisten gestern festgenommen hat
 that the police linguists yesterday arrested has

(Philippi (1997: 70))

If this line of argument is on the right track, we expect genitive NPs to be potentially predicative as well in the older Germanic languages. This is true as in (26):

- (26) a. *ibai jah þu þize siponje is þis mans* Got (Ulfilas)
 whether also you (of) those disciples(GEN) are of this man
- b. *thu bist rehto in wara thesses mannes fuara* OHG (Otfrid.IV.18.14)
 you are surely in truth of this man and adherent(GEN)
- c. *si uaren is hiiuiscas* OS (Heliand.365)
 they were of his family(GEN)

There is still another evidence which supports the idea that the weak/strong distinction in referentiality is reflected in the case system. It was suggested recently that genitive NP only occurs in its base-generated position as the most direct argument of the verb, as in (27):

- (27) a. *(inti sliumo liof ein fon in intfagana spunga)*
 and quickly ran one of them taking a sponge (and)
fulta; sia ezziches ti OHG (Tatian.208.3)
 filled it with vinegar(GEN)
- b. *that he thene siakon man sundeono tomean weldi* OS (Heliand.2319.20)
 that he the sick man (the/his) sins(GEN) remit wanted

On the other hand, accusative NP can be realized in other positions after the process of scrambling, as in (28):

- (28) a. *vato mis ana fotuns meinans not gaft* Got (L.VII.44)
 water(ACC) I(DAT) for feet my not gave(2.PL)
- b. *ni uuelda an is kindiski is craft mikil mannun marean* OS (Heliand.840-1)
 not wanted in his childhood his strength big (the) people show

From the data in (27) and (28), we can expect scrambling of genitive object leads to ungrammaticality. This is the case as in (29):

- (29) a. *daß Johann den Freund der Lüge bezichtigte*
 that Johann the friend the lie(GEN) accused
- b. **/?daß Johann der Lüge den Freund bezichtigte*
 that Johann the lie(GEN) the friend accused

((26-29): Philippi (1997: 75, 77))

Consequently, we can conclude that the weak/strong distinction in referentiality was realized as genitive/accusative distinction in the older Germanic languages. With

the leveling of case endings, the article emerged as a referential marker for the NP, and inherited the weak/strong distinction in referentiality.

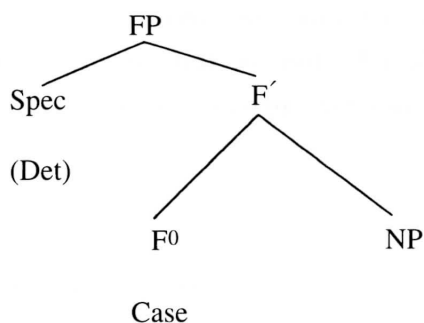
5. The Reanalysis of the Genitive in the History of English

In the previous section, we have seen that the weak/strong distinction in referentiality was represented as genitive and accusative respectively in the older Germanic languages. Then the focus of attention in this section is the historical development of English. The historical change in the referentiality marking in Germanic languages is summarized by Tomaselli (1997: 137) as in (30):

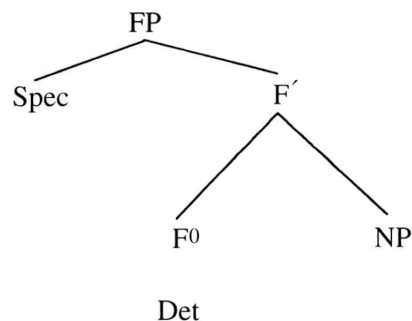
- (30) a. In the older Germanic languages the definite/indefinite distinction relies on case opposition. Genitive case identifies indefinite/predicative (existential) NPs, accusative case identifies definite/referential objects.
- b. In the late MHG and ME periods the verbal genitive decays and is gradually replaced by accusative NP and PP. It is therefore no longer possible to identify the reference of the object NP by different case marking.
- c. The demonstrative, formerly a purely emphatic element severely restricted by context, spreads considerably and is finally reanalysed as the new referential marker for the noun phrase.

It can also be shown graphically as in (31):

- (31) a. Pre-article stage



- b. Modern Germanic languages



((30, 31): Tomaselli (1997: 137))

As shown in (31), a functional head K (=Case) was reanalyzed as another functional head D with the decay of case endings in Germanic languages. If the same process was made in the historical change of English, we have to give an explicit account of the process. Hamasaki (1988, 1993) explains how the DP structure was

established in the history of English. Look at the following structures, as in (32):

(32) a. N₁[Gen] N₂[Gen] H

b. N₁[Gen] H N₂[Gen]

(32') a. *Ælfredes cyninges* godsunu (ChronA 82, 10(890): Ono & Nakao (1980: 292))

b. *Ælfredes sweostor cyninges* (ChronA 82, 2(888): Ono & Nakao (1972: 292))

The structures in (32) represent the group genitive in OE. (32b) was more popular than (32a). At this stage, the case ending of each genitive noun is explicit.

(33) a. N₁[∅] N₂[Gen] H

b. N₁[Gen] H N₂[∅]

(33') a. *Davið kinges* kinn (Orm: Nakao (1972: 221))

b. *þurh Iulianes* heste *þe amperur* (AncrR 4 66a: Nakao (1972: 221))

At the next stage, i.e. in ME, the structures have changed into those in (33). The leveling has started and some case endings were dropped.

(34) N₁[Gen] H of N₂[∅]

(34') *þe kinges* broþer of *france* (Glo Chron: Nakao (1972: 221))

Then, the genitive noun following the head noun has changed from KP to PP.³

(35) [N₁ of N₂] [Gen] H

(35') *the god of sleepes* heyr (Ch BD 168: Nakao (1972: 221))

Finally, the previously genitive marked nouns are put together as a unit to which the genitive case ending was attached. In consequence, the case ending was reanalyzed as a functional head and the DP structure was established.

As the DP structure was established, in Modern English the form in (36) began to disappear and the group genitives in (37) became the preferred forms.

(36) the kinges wif of England

(37) a. the wife of [the king of England]

b. [the king of England]'s wife

((36, 37): Görlach (1991: 82))

The establishment of the DP structure causes adjuncts in (38) and rather heavy constituents marked as a whole by the apostrophe in (39) to appear in the DP specifier position.

(38) a. [yesterday]'s lecture

b. [this year]'s sales

(a: Fabb(1984: 85); b: Quirk et al. (1985: 324))

(39) a. [NP the people who live across the road]'s new car

- b. [_{NP} The house of a friend of mine]'s roof blew off.

(Taylor (1996: 111); Halliday (1985: 114))

Furthermore, the DP structure has two positions for arguments of the derived nominal, so that the various patterns are allowed as in (40):

- (40) a. the [appointment of John]
 b. [the committee]'s [appointment of John]
 c. [John]'s [appointment by the committee]
 d. the [appointment of John by the committee]

Incidentally, we can find some ME examples which anticipate the group genitive in Modern English, as in (41):

- (41) a. And berwen boten ure liues, /And mine children and mine wiues
 (Havelok 698-99)

"And save both of our lives, and my children and my wife's (lives)"

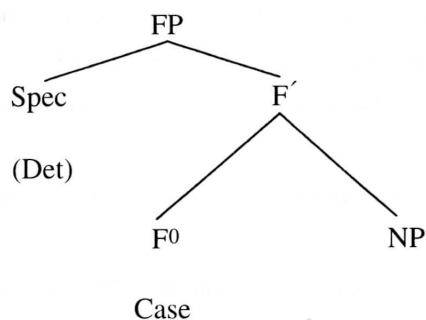
- b. Or elles reue us ure liues/And ure children and ure wiues (Havelok 2591-92)
 "Or else deprive us of our lives and our children and our wives' (lives)"

6. Conclusion

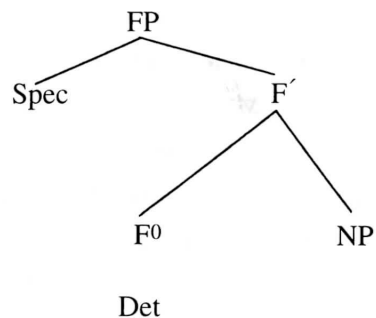
As we have seen, it can be concluded that the historical change in the case system of English is reanalysis of genitive as another functional head D. It does not involve categorial change; i.e. from a lexical category to a functional (grammatical) category. Therefore, the change cannot be seen as grammaticalization. It should be treated as reanalysis of a functional category as another functional category.⁴

In summary, it can be shown graphically that the genitive case in OE, which had the function of a referential marker for the NP, was reanalyzed as a functional head D, as in (42):

- (42) a. Old English



- b. Middle English



Notes

- 1) Historical linguistic changes are sometimes explained in terms of 'analogy', which involves the redistribution of existing patterns. As the following discussion in the text suggests, however, this possibility might be disregarded for the moment. As for analogy, see Robins (1980: Ch. 7) and Lyons (1968: Ch. 1).
- 2) Further differences between lexical categories and functional categories are discussed in Radford (1997).
- 3) Note the paradigm in (11) which expresses the functional equivalence between case inflections and prepositions.
- 4) The change also cannot be seen as analogy, because it is sufficient to see the example of analogy: that is, the verb *heal* which had an irregular past tense form in OE came to be produced with the regular *-ed* ending as *helped*.

References

- Abney, S. (1986) *The English Noun Phrase in Its Sentential Aspect*. Doctoral dissertation, MIT.
- Baltin, M. R. and A. S. Kroch (eds.) (1989) *Alternative Conceptions of Phrase Structure*. Chicago and London: The University of Chicago Press.
- Chomsky, N. (1986) *Barriers*. Cambridge, Mass.: MIT Press.
- Fabb, N.A.J. (1984) *Syntactic Affixation*. Doctoral dissertation, MIT.
- Fukui, N. (1986) *A Theory of Category Projection and Its Applications*. Doctoral dissertation, MIT.
- Fukui, N. and M. Speas (1985) "Specifiers and Projection," *MIT Working Papers in Linguistics* 8, 128-72.
- Giorgi, A. and G. Longobardi (1991) *The Syntax of Noun Phrases: Configuration, Parameters and Empty Categories*. Cambridge: Cambridge University Press.
- Görlach, M. (1991) *Introduction to Early Modern English*. Cambridge: Cambridge University Press.
- Haegeman, L. (1994) *Introduction to Government and Binding Theory*. 2nd edition. Oxford: Blackwell.
- Halliday, M. A. K. (1985) "It's a fixed word order language is English," *ITL Review of Applied Linguistics* 67-68, 91-116.

- Hamasaki, R. (K.) (1988) "Naze zokkaku-dakega nokotta-noka?" *Studies in Modern English* 4, 1-19.
- Hamasaki, K. (1993) "Eigo-shi-ni-okeru DP-kouzou-no kakuritsu-ni-tsuite" in The Editorial Board of *Studies in Modern English* (eds.) (1993) *Aspects of Modern English*. Tokyo: Eichosha. 213-23.
- Heine, B. (1997) *Possession: Cognitive Sources, Forces, and Grammaticalization*. Cambridge: Cambridge University Press.
- Heine, B., U. Claudi and F. Hünemeyer (1991) *Grammaticalization: A Conceptual Framework*. Chicago and London: The University of Chicago Press.
- Hopper, P. J. and E. C. Traugott (1993) *Grammaticalization*. Cambridge: Cambridge University Press.
- Kayne, R. S. (1994) *The Antisymmetry of Syntax*. Cambridge, Mass.: MIT Press.
- Kemenade, A. van and N. Vincent (1997) "Introduction: Parameters and Morphosyntactic Change," in A. van Kemenade and N. Vincent (eds.) (1997), 1-25.
- Kemenade, A. van and N. Vincent (eds.) (1997) *Parameters of Morphosyntactic Change*. Cambridge: Cambridge University Press.
- Lightfoot, D. W. (1979) *Principles of Diachronic Syntax*. Cambridge: Cambridge University Press.
- Lightfoot, D. W. (1991) *How to Set Parameters: Arguments from Language Change*. Cambridge, Mass.: MIT Press.
- Lyons, J. (1968) *Introduction to Theoretical Linguistics*. Cambridge: Cambridge University Press.
- Mitchell, B. (1985) *Old English Syntax*. 2 vols. Oxford: Clarendon Press.
- Moessner, L. (1989) *Early Middle English Syntax*. Tübingen: Max Niemeyer.
- Nakao, T. (1972) *Eigo-shi II*. Tokyo: Taishukan.
- Ono, S. and T. Nakao (1980) *Eigo-shi I*. Tokyo: Taishukan.
- Philippi, J. (1997) "The Rise of the Article in the Germanic Languages," in A. van Kemenade and N. Vincent (eds.) (1997), 62-93.
- Quirk, R., S. Greenbaum, G. Leech and J. Svartvik (1985) *A Comprehensive Grammar of the English Language*. London: Longman.
- Radford, A. (1997) *Syntactic Theory and the Structure of English: A Minimalist Approach*. Cambridge: Cambridge University Press.
- Rissanen, M., M. Kytö and K. Heikkonen (eds.) (1997) *Grammaticalization at Work:*

Studies of Long-term Developments in English. Berlin: Mouton de Gruyter.

Ritter, E. (1991) "Two Functional Categories in Noun Phrases: Evidence from Modern Hebrew," in S. D. Rothstein (ed.) (1991), 37-62.

Robins, R. H. (1980) *General Linguistics: An Introductory Survey*. 3rd edition. London: Longman.

Rothstein, S. D. (ed.) (1991) *Syntax and Semantics 25: Perspectives on Phrase Structure: Heads and Licensing*. San Diego: Academic Press.

Stowell, T. (1989) "Subjects, Specifiers, and X-bar Theory," in M. R. Baltin and A. S. Kroch (eds.) (1989), 232-62.

Taylor, J. R. (1996) *Possessives in English: An Exploration in Cognitive Grammar*. Oxford: Clarendon Press.

Tomaselli, A. (1997) "Commentary on Part 1: Aspect, Argument Structure and Case Selection," in A. van Kemenade and N. Vincent (eds.) (1997), 134-46.

Traugott, E. C. and B. Heine (eds.) (1991) *Approaches to Grammaticalization*. 2 vols. Amsterdam: Benjamins.