

**On dysfunctional syntactic change in Early Modern English: the case of the 'group genitive' (or why genitives no longer appear with postnominal restrictive adjuncts)**

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**ABSTRACT**

Starting from the failure of possessives and genitives to co-occur with restrictive relative clauses and other post-nominal restrictive adjuncts, the history of various English genitival constructions is first thoroughly examined in as theory-neutral terms as possible and subsequently reinterpreted in the light of current research in 'functional' categories within the Theory of Principles and Parameters. Assuming a [<sub>DP</sub> DP XP] analysis of restrictive adjuncts and a slightly modified version of Abney's DetP-Hypothesis, I argue that the current incompatibility of restrictive adjuncts and prenominal genitives is a consequence of the fact that, buried inside Spec of DP, the identificational features of the genitive fail to percolate up to DP and to c-command the XP adjunct, whereas the possibility of such constructions in Late ME and Early Modern English follows from the fact that possessives and genitives were word-level categories and actually alternated with determiners under D in that period. The roughly contemporary development of an XP-level genitive (the 'group genitive'), however, and the reinterpretation of possessives as DP-level structures made the 'his-genitive' impossible, pushed genitives out of D into Spec of DP and hence eventually prevented their features from reaching DP, blocking all constructions which depend on identification or control by the higher DP node.

## **1. The Problem**

The crucial tenet of linguistic functionalism is that languages change to adapt to the communicative needs of their speakers. That hypothesis predicts that if a language lacks a certain way of saying things which is necessary for efficient communication it will tend to acquire it, provided its system allows it, and conversely, that in no case will it introduce inefficient or redundant constructions, and will tend to eventually drop the ones it may have developed by accident (see Jespersen 1949 and Dik 1986 for authoritative views on the functionalist approach).

Assuming such a conceptual framework, what comes as a surprise is the extinction of ways of saying things that must be considered efficient or even indispensable, unless their disappearance can be explained in terms of global processes leading towards a more efficient overall system, and yet, in certain cases, that is precisely what seems to have happened.

The purpose of this article is to examine what seems to me a clear instance of this in the history of English (and indeed other European languages): the virtual ban the standard dialect now imposes on DP constructions containing prenominal genitives and postnominal restrictive adjuncts, particularly relative clauses, as in (1):

(1) \*This is your book that I borrowed last week

Such a possibility seems to exist, although only marginally, even today, but was fully productive in earlier periods of the history of English. The issue, then, is: why has it become marginal, if not plainly ungrammatical, in Standard English?. One thing is clear: it was by no means redundant, since, obviously, the speaker of (1) may have borrowed several books from somebody on various occasions and it is not hard to imagine circumstances in which it makes a difference to specify which one is being returned. The semantic content of (1), therefore, is perfectly sensible and, indeed, there is hardly any other way of saying the same thing, (2) being perhaps the closest grammatical option available in such a situation:

(2) This is the book of yours that I borrowed last week

That is explicit, but longer, taking three words where in Old and Middle English one would have been enough. Thus, if we measure efficiency, as Jespersen did (cf. Jespersen 1949, 370 *et passim*) ultimately in terms of the tradeoff between the energy spent by the speaker/hearer and the robustness and intelligibility of the messages exchanged, we must conclude that whatever linguistic innovation is responsible for the new state of affairs has rendered the system relatively inefficient, and that unless this loss is balanced by a net gain in simplicity and robustness elsewhere, the phenomenon contradicts Jespersen's (1949, 348-9, *et passim*; 1968, 364; 1918, 302-4, etc.), and indeed almost everybody else's view that changes along the history of English have invariably resulted in net progress for the system.

It must be pointed out, on the other hand, that the prohibition against such postmodifiers holds irrespective of whether the antecedent is the higher DP, as in the example discussed, or just the genitive DP premodifier embedded within it. Notice that in (3), for example, the relative clause is unacceptable no matter whether the antecedent is construed as being *his daughter's son*, *his daughter*, or just *his*, the three theoretically possible antecedents of the equivalent Middle English expression:

(3) \*His daughter's son that lives next door

That fact indicates that the Modern English incompatibility between genitives and restrictive modifiers, whatever its ultimate source may be, cannot be stated as a local prohibition between an antecedent DP and its own relative clause. The relative clause is impossible no matter how deep the antecedent is embedded within the matrix DP. If anything, the degree of embeddedness of the antecedent seems to correlate with a higher degree of unacceptability, as we should expect for independent reasons (Right Roof Constraint), but the crucial fact remains that, even if the antecedent is locally construed under sisterhood, as in the [DP DP+CP] structure (cf. Stockwell et al. 1973, 423-441 for discussion of the main structural analyses proposed for relative clauses), Modern English still disallows it, whereas Old and Middle English speakers had no difficulty in computing such dependencies.

In fact, the issue has much broader implications than the examples adduced so far suggest, for it is not only relative clauses that now are relatively unacceptable with prenominal genitives, but all sorts of restrictive modifiers, cf. (4):

- (4) a. \*My husband's socks in that drawer must be washed  
 b. \*His books available in the seminar are not on loan  
 c. ?Peter's note explaining his resignation was a good idea  
 d. \*Your article published in Linguistics is very good  
 e. \*Our mutual friend to ask for advice on this issue is Tom

The phenomenon, whatever its causes, seems to have affected not only English, but other Indo-European languages as well, as the Spanish near equivalents of (4) in (5) attest:

- (5) a. \*Tus calcetines en ese cajón son para lavar  
 b. \*Sus libros disponibles en el seminario no son para préstamo  
 c. ?Su nota explicando su dimisión no fue una buena idea  
 d. \*Tu artículo publicado en Linguistics es muy bueno  
 e. \*Nuestro amigo a consultar sobre este asunto es Tomás

Left-branching structures like (3) do not occur in Spanish, for independent reasons, so the loss seems smaller in this case than that suffered by Modern English in comparison with Old or Middle English, but nevertheless, if only in a less acute form, there is exactly the same restriction. Notice that (6a), where the relative clause is obviously meant to refer to the possessive, instead of to the matrix DP, is also ill-formed:

- (6) a. \*Me alojaré en su casa que me ha invitado  
 b. Me alojaré en (la) casa del que me ha invitado

It need not be emphasized that, even in Spanish, the cost of disallowing such patterns is considerable. Indeed, the nearest standard Spanish equivalent of what is meant in (6a), for instance, is the substantially longer and rather awkward (7):

(7) ¿Los calcetines tuyos que hay en ese cajón son para lavar

Again, there is nothing semantically wrong with (5a-e), which are perfectly intelligible sentences, but we do not speak like that any more, so the question is why have languages like English or Spanish lost an economic and obviously necessary pattern?

The rest of this article is organized as follows: In section 2, I summarize the main facts concerning the relevant genitive constructions of English and the way they seem to have evolved since Old English times to the present in as theory-neutral terms as possible. Then, in section 3, I offer a tentative diachronic reconstruction of events and an idealized - and necessarily somewhat speculative, but not inaccurate, I hope - functional-diachronic explanation of the phenomenon within the broad framework of Chomsky's Theory of Principles and Parameters.

## 2. The Facts: Genitives along the History of English

*2.1. Old English.* The normal position for genitives in OE was before the noun, but all kinds of genitives occurred postnominally as well until the 13th century, and, according to Mitchell (1985 vol. I, 549), the percentages of postnominal genitives in various OE texts vary between 25% and 40%. Thus, possessives of both the 'inalienable' and the 'alienable' type could easily appear postnominally, as in *wine min Unferth* (in Quirk & Wrenn 1957, 89), *thaet heafod thaes halgan Eadmundes, tha aerestan scipu Deniscra manna, micelne sciphære wicinga* (all in Sweet (rev. Davis) 1953, 61).

The same applies to genitives discharging various argument functions within nominalizations. Visser, in his monumental work (Visser 1963-1973) mentions prenominal subjective genitives like *Prisciane taecinge*, (vol. II, 1066), prenominal objective genitives like *thaes temples getimbrunge*, (vol. II, 1067), postnominal subjective genitives like *tha throwunge haligra martyra*, (vol. II, 1066), postnominal objective genitives such as *raedinga haeligra boca* (vol. II, 1200), etc., and, concerning this type, concludes: "It does not seem to have made any semantical difference whether the noun in the genitive preceded or followed the form in *-ing*" (vol. II, 1165). Mustanoja (Mustanoja 1960, 76ff.), however, states that genitives of personal nouns showed a strong preference for the prenominal position. Sweet & Davis (1953, 59), on the other hand, point out the occasional influence of rhythmic factors in the choice of pre- vs. post-nominal position,

and, indeed, it seems to have been easier to postpone full NPs, i.e., ‘heavy’ genitives, than one-word or pronominal ones (cf. Schlauch 1959, 33; Closs Traugott 1972, 97; Mitchell 1985 vol. I, 551), but, with the possible exception of those of proper nouns (Mitchell, loc. cit.) there does not seem to have been any ban on postponing any type of genitive, for even monosyllabic pronouns appear postponed in certain cases, as in *to onbesceawunge his* (in Visser 1963-1973 vol. II, 1066), or vocatives like *modor min, sunu min* (in Visser op. cit. vol. I, 120).

A significant absence is the so-called ‘elliptical genitive’, as in *We married at St. Paul’s*, which, according to Mitchell (1985, vol. I, 541), “is unknown in OE”, and whose earliest known occurrences, if we believe Mustanoja (1960, 83), are from the 13th century.

On the other hand, a marginal pattern that seems to originate already in OE is the so-called ‘His-genitive’. There are at least two sources for the construction: a) cases in which an NP complement in the dative case is properly followed by another NP complement in the genitive, as in *Her Romane Leone thaem Papan his tungan forcurfon* [*OE Chronicle*, anno 797], and 2) anacolutha, as in *thaer Asia & Europa hiera land-gemircu togaedre licgath*, or, even more clearly, *Affrica & Asia hiera landgemircu onginnath of Alexandria* ([Alfred, *Orosius* 8], quoted in Jespersen 1918, 306). According to most scholars, (cf. Jespersen 1918, 305-7; Mustanoja 1960, 160; Closs Traugott 1972, 125), the main reason for the use of the possessive in such cases is that foreign names like *Papa*, *Asia*, etc., naturally lacked a proper native genitive form, and, significantly, Jespersen (1918, 304) points out the existence of similar constructions in Danish, Swedish, Norwegian and other Germanic dialects. A complementary explanation favoured by Mustanoja, however, is that such genitives illustrate the tendency to express grammatical relations analytically (cf. Mustanoja 1960, 161-2).

In OE there were several prenominal positions, and a distinction must be established between that of genitive nouns and that of possessive adjectives derived from the genitive of personal pronouns (Strang 1970, 303). Possessives generally occurred before numerals and adjectives, i.e., at the front of the NP, although at that time NOT in the position of determiners (cf. Mitchell 1985 vol. I, 51-52). This is obvious from the fact that possessives and demonstratives co-occur, and, what is more, in either order, as the examples in (1) clearly show:

- (1) a. Poss + Dem  
 min se leofosta diacon  
 his sio gode moder  
 thin sio winestre hond  
 ure se Aelmihtiga scyppend

## b. Dem + Poss

seo his gemaene spraece

se heora halga bisceop (all in Mitchell 1985 vol. I, 51-53)

Aelc thara the thas min word gehyrth

eode he in mid ane his preosta (In Mitchell & Robinson 1992, 62)

Exceptionally, we find the pattern Adjective + Possessive + Noun, which survives into ME (cf. Mossé 1952, 123), but the fact that we also find the sequence Adjective + Demonstrative + Noun clearly suggests that these are cases of stylistic inversion and should be disregarded at this point.

Full prenominal NP genitives, on the other hand, occurred right before the head noun, after numerals and qualifying adjectives (cf. Mitchell 1985 vol. I, 68), as in (2):

(2) se forecwedena Godes theow

on thaere ilcan Salomonnes bec

se Aelmihtiga Godes sunu (all in Mitchell 1985 vol. I, 556)

However, although possessives and genitives originally had different positions with respect to the head N, even during the OE period their semantic similarity seems to have induced some distributional convergence. Thus, full genitives occasionally occur before quantifiers and qualifiers, too, and, conversely, possessive adjectives may sometimes follow numerals, as in *twegen his halgan* (in Mitchell 1985 vol. I, 69). In view of the present-day rule, it is obvious that eventually most genitives were assimilated to possessives. Not all, though, since we still have the pattern *a shrill child's voice*, *a well-furnished bachelor's flat*, etc. (cf. *infra*).

According to Quirk & Wrenn (1957, 89), “when the noun is already determined by another qualifier, we find the genitive complement following the noun”, but this is obviously a tendency, not a rule, as the examples above show.

On the other hand, contrary to what occurs in contemporary English, in OE, as we saw in (1), there is no question of incompatibility between possessives, or even genitives, and demonstratives in prenominal position, which seems to imply that OE prenominal possessives/genitives lacked the determining function they have in present-day English (cf. Jespersen 1970-4, vol. VII, 312; 1975, 110-111). Certainly, many types of OE genitives were descriptive, or defining, and thus still predominantly adjectival (see Mitchell 1985 vol. I, 542, 49).

It is significant in this respect that genitives (excluding the type *a shrill child's voice*) as well as demonstratives and possessives, occurred from the earliest texts with adjectives carrying weak (= definite) inflections (cf. Mitchell 1985 vol. I, 65 *et passim*, although see

vol. I, 58-59 for some possible exceptions). That points to their common essence, i.e., their being expressions capable of definite reference, but there is no doubt that in OE, as in present-day English (cf. Jespersen 1975, 110-111), the three categories differed both functionally and distributionally in important respects. Demonstratives were clearly definite and did have identifying function already in OE times (cf. Mitchell 1985 vol. I, 65). Most genitives, in their turn, probably were still perceived as attributive, although the properties they expressed (cf. possession, inherent relation to a well-known entity, etc.) were conceptually rather close to identification. Indeed, there was even an established type of identifying genitive which Mitchell - misleadingly, in my view - calls 'appositive', i.e., the type *Romes byrig* (cf. Mitchell 1985 vol. I, 542-3). Finally, already in OE times, possessive adjectives seem to have been half-way between demonstratives and genitives, given their formal, distributional, and semantic properties: they are morphologically genitives and may express possession, and thereby identification, like genitives, but they have pronominal character (Mitchell 1985 vol. I, 121), i.e., lack descriptive nominal content, and thus already occur at the front of the NP, like demonstratives. This hybrid status of possessives, indeed, survived into later periods. Barber (1976, 203ff.), speaking about Early Modern English grammar, calls them 'pronoun-determiners'. Jespersen (1975, 110-111) says that possessives restrict, "though not always to the same extent as the definite article" (p. 110). Yet, as to their definite status, he is quite positive:

*John's son* means his only son or the one we have been speaking about. Similarly, *Dr. Arnold's pupils* means all his pupils or those indicated by the context. If this meaning is not to be implied, the *of*-construction must be used instead of the genitive. . . . (Jespersen 1970-4, vol. VII, 312)

Two facts indicate that this reconstruction is essentially correct: a) that genitives and possessive adjectives show some positional fluctuation, as we saw, and, even more intriguingly, b) that revisers of Alfredian manuscripts should have felt it necessary to occasionally eliminate the demonstrative when a possessive or genitive was present (Mitchell 1985 vol. I, 51-53). Why should revisers feel that both a possessive and a demonstrative at the beginning of the NP was too much? The obvious answer is that, in the late OE period, the Modern English system, where definiteness is associated with a well-defined structural position at the front of the NP, was perhaps already on its way.

Nevertheless, obviously, the present-day situation had not yet been reached. It remains a fact that in OE definiteness was still largely expressed inflectionally on nouns and adjectives. Significantly, there was no definite article yet (cf. Mitchell 1985, vol. I, 131, 133 footnote 87). Thus, demonstratives like *se*, *seo*, *thaet*, if they occurred at all accompanying nouns, tended to be anaphoric or emphatic one way or another (recall that

they often performed functions of Modern English personal pronouns or relatives; cf. Quirk & Wrenn 1957, 72; Mitchell 1985 vol. I, 128-135). According to Quirk & Wrenn (1957, 69) the demonstrative *se, seo, thaet* identifies what is known and expected, whereas the deictic *thes, theos, this* “singles out a part of a series, the whole of which may already be specific”, but, apparently, the full inflections accompanying nouns and adjectives were sufficiently definite to make the use of an article like Modern English *the* redundant in most cases unless something else was meant (cf. Mitchell 1985 vol. I, 134-135).

Correspondingly, strong inflections made indefinites like *an* or *sum* generally unnecessary, to the point that if they occurred they usually acquired stronger meanings than those the Modern English indefinite article would have, i.e., either a numeral, individuating or exclusive interpretation, or other marked meanings (= a certain) (cf. Mitchell 1985, vol. I, 95-98, 209-ff.). In support of this analysis may be adduced that *an* occurred with obviously definite demonstratives and possessives, which would have given rise to a contradictory interpretation of the NP if its meaning had been indefinite. Significantly, when this happens, *an* always follows the demonstrative/possessive and precedes adjectives, as in *se an goda daeg, his anne ancennedan Sunu*, (in Mitchell 1985 vol. I, 61). This is as it should be, for in such contexts *an* requires a numerical, individuating, or exclusive interpretation, i.e., the meanings the numeral *an* would naturally take. Notice that after demonstratives and before adjectives is exactly the position of numerals and other quantifier-like elements.

In fact, even demonstratives could occur postnominally, in the poetry at least (cf. *ethel thysne*, in Mitchell 1985 vol. I, 76; Quirk & Wrenn 1957, 89). Thus, in view of the preceding evidence, it seems likely that the marking of (in)/definiteness was not yet tied to any structurally well-defined position. In other words, contrary to what obtains in Modern English, the first position of OE NPs was not really a determiner position.

When an OE genitive premodifying a noun consisted of a group of words, several different situations arose, with consequences for its position and morphology:

1) If the NP was non-coordinate and ended with its own head N, i.e., if it contained premodifiers but no postmodifiers, the rule was to place it as a continuous chunk before the head noun and with genitive case-marks on all the words capable of bearing them (demonstratives, adjectives, etc.), as in *ealra cristenra manna moder* (in Mitchell 1985 vol. I, 553).

2) If the genitivized NP was coordinate, the tendency was to split the genitive group allowing the first coordinate to precede and carry regular case-marks and the others to follow the head, at first with genitive inflections, and then, in the late OE period, mostly without them, i.e., in the non-oblique case.

3) If the genitive group contained postnuclear modifiers, were they governed complements or adjuncts, or just appositives, the tendency was, once more, to split the genitive

and place these after the head noun, as in *thaes Caeseres wif of Sexlande, on Herodes dagum cyninges* (in Mitchell 1985 vol. I, 557), *of cilda muthe meolcsucendra, Godes sunu thaes lyfgendan* (in Mitchell 1985 vol. I, 75), but the genitive and its appositive could also appear as a continuous prenominal chunk, as in *on Aethelredes cyninges daege* (in Sweet-Davis 1953, 59), *Aelfredes cyninges godsunu* (in Mitchell 1985 vol. I, 557). Again, postnominal appositives initially showed case agreement, but then more often than not failed to do so (Quirk & Wrenn 1957, 74-5).

Examples such as *of cilda muthe meolcsucendra*, incidentally, supply crucial evidence that OE possessive genitives were compatible with other postnominal restrictive modifiers, but not having been able to find a sufficient number of clear examples of postnominal restrictive APs and PPs with prenominal possessives, I must leave this topic to further research.

Genitives of NPs containing clauses are, of course, particularly interesting for our present purposes. In OE, as in contemporary English, (although not in other early dialects of IE, cf. Lehmann 1974, 61ff. for early cases of prenominal relative clauses in Vedic and Hittite), relative clauses systematically appeared postnominally, usually immediately after the NP antecedent, as in (3):

- (3) a. *sumne thara the him aer cuth waes* [Aelfric, *Saints Lives*, 526, 635]  
 b. *ealle the thing the min faeder haefth synt mine* [OEG, Luke I. 19]  
 c. *nyhst thaem tune the se deada man on lith* [Aelfred, *Orosius* 20.33]

However, relative clauses were also extremely frequent in what, from our point of view, would seem to be a 'split' or 'extraposed' construction, as in (4):

- (4) a. *Ic eom angin the sprycth eow* [Byrhtferth, *Manual* 198.8]  
 b. *Sio scir hatte Helgoland the he on bude* [Aelfred, *Orosius* 19.9]

What is crucial for our present purposes, however, is that restrictive relative clauses did occur after NPs containing genitives in BOTH possible configurations, i.e., that in which the antecedent is the matrix NP, as in (5),

- (5) *ealle his weorc the he geworhte* (In Mitchell 1985 vol. I, 541)

and, more interestingly, with just the genitives themselves as antecedents of the relative, in the 'split' genitive constructions of (6):

- (6) a. *for Oswoldes gearnungum the hine aefre wurthode* (In Quirk & Wrenn 1957, 98).

- b. butan thaes mannes gast the on him sylfum byd  
 c. mid thaes abbudes haese the waes thaes mynstres hyrde  
 (Both in Mitchell 1985 vol. II, 180-1)

Indeed, many other ‘heavy’ genitives were so split in OE, even in cases where contemporary English disallows splitting, cf. (7):

- (7) gecorenra manna to thaem ecan life (In Visser, vol. II, 1246)

The tendency to split heavy groups was very strong. Closs Traugott puts it very well:

It has been suggested that these constructions are favoured in OE because complex sentence elements were ordered, within specific limitations, according to their length and functional load, rather than according to their syntactic groupings: the longer and the more complex the construction, the more likely it was to be split and part put at the end of the sentence. The treatment of relative clauses bears out such assumption well. By ME we find far greater tolerance for such stacking of phrases and clauses at the beginning of the sentence; from ME on, ordering is based chiefly on syntactic groupings rather than the size and functional load of a constituent . . . . (cf. Closs Traugott 1972, 97).

Mitchell basically agrees. According to him, OE writers/speakers showed a “dislike of heavy groups” and felt insecure in handling them, perhaps as a consequence of the fact that the language originally was paratactic and the corresponding hypotactic devices were not yet ripe enough by OE times (Mitchell 1985 vol. I, 612, 616, 777-8, etc.).

It must be pointed out, nevertheless, that the traditional terminology ('split genitive') is thoroughly misleading in this case. Indeed, it begs the whole question, because it rests on the unwarranted assumption that genitives and their clausal modifiers formed a single constituent at some point along the process. Of course, it is true that relative clauses often appear adjacent to their NP antecedent, even in the earliest texts, as in (3) above, and that in cases like (7) the 'splitting' observed at surface level may well be the result of a movement process of extraposition, but from a strictly historical point of view there is evidence that in the case of relative clauses the facts may have been quite different. As pointed out by Mitchell himself (Mitchell 1985 vol. II, 182), such discontinuous relative clauses, appositives, etc. probably started as paratactic structures linked to the antecedent by anaphoric particles (cf. Brugmann 1970, 650, 659-664; Aissen 1972, *passim*, and Lehmann 1974, 61ff. on the Proto-Indoeuropean origin of the relative construction).

Be that as it may, the semantic association of the relative clause with the (determiner

of) the antecedent must have been powerful enough to eventually turn such particles into subordinators, induce a reanalysis of the possibly discontinuous NP...S' combination as a constituent, and gradually enforce adjacency between antecedent and relative. Of course, the fact that the relative clause is now interpreted as an adjunct of the full NP (*pace* Fabb 1990) surely makes it natural to take them both as a single constituent, but this modern view of things may in part have been the outcome of the influence of prescriptive grammarians along the history of English. Mitchell significantly mentions attempts to regularize examples of 'split' genitives such as (4b-c) above and convert them into canonical continuous NP+S' patterns already in OE times (Mitchell 1985 vol. II, 180-1).

2.2. *Middle English.* The state of affairs just described for OE remains apparently unchanged during much of the Early Middle English period, except that after the Norman Conquest the erosion of inflectional marks becomes much faster and more generalized (cf. Mustanoja 1960, 71ff). OE demonstratives suffer sweeping changes as a consequence, and at some point probably cease to be a somewhat peculiar class of adjectives to become specialized determiners associated with a well-defined structural position at the front of the NP, i.e., our D. (cf. Samuels 1972, 157-ff). The exact moment at which demonstratives become articles is a moot point, however, or perhaps rather a terminological issue. (cf. Mustanoja 1960, 230ff). According to this scholar, (*op. cit.*, 233), “the definite article occurs not infrequently with the strong adjective”, so it seems as though the forms of *se seo thaet* that remain in EME have become or are about to become something different from what they were in OE. This conclusion seems even more motivated after the 13th century, when forms in *s-* and then, more gradually, all case and number inflected forms in *th-*, disappear in most dialects, being replaced by the modern invariable form *the* (cf. Mustanoja 1960, 233).

Speculating a bit on this evidence, it seems as if at the beginning of the 13th century the expression of definiteness tends to be associated with either an inherently definite noun (a personal or other proper name) or a separate specialized item, the definite article, but no longer with specially inflected forms of adjectives/substantives as such, a natural consequence of the levelling of inflections. Thus, along the EME period, probably overlapping with the erosion and final dropping of all traces of adjectival inflection, definiteness ceases to be inflectional and becomes segmental. When this happens, the original demonstrative adjective has developed into a specialized definiteness marker (i.e., what we now call a determiner) and is generally felt to be incompatible or redundant with inherently definite nouns, but, of course, there is a lot of fluctuation, as in contemporary English, (see Mustanoja 1960, 234ff. for all the casuistry of uses of the article with different classes of nouns).

As to possessive adjectives, in Early Middle English they still occasionally followed

other adjectives, and for a while continued to be declined as such, i.e., they took final *-e* in the plural (*mine leove süstren*) and showed occasional forms like *mire*, *thire* in the singular genitive and dative, but all this has gone by Chaucer's time (cf. Jespersen 1918, 274), so what might have reminded ME speakers that possessives were adjectives disappears at roughly the same time the adjectival character of demonstratives becomes formally invisible.

The exceptional distribution of possessives after adjectives, as in Mossé's example *mid deore mine sweorde* (cf. Mossé 1952, 123), cannot be accounted for except as a purely stylistic device of no grammatical significance. The pattern survived until the 17th century, though, as Barber's examples from Shakespeare, *deare my Lorde*, *poore our sexe*, etc. illustrate (cf. Barber 1976, 232-3).

As regards nominal genitives, leaving inflectional losses aside, visible changes are very slight until Late ME. In Early ME, possessive genitives still cooccur with demonstratives, articles and various other determiners, and often follow them. In fact, this must have been so for the whole Early ME period, as can be seen from expressions like Usk's in (1) (quoted in Mustanoja 1960, 233):

(1) bitwene tho two Noes children

As regards, their position, they are clearly pre-nominal (cf. Mossé 1952, 123-4; Mustanoja 1960, 74-77), as in OE, but this fact loses all its earlier significance, since postnominal genitives were gradually being replaced by *of*+NP structures, as we shall see below.

The position of genitives with respect to adjectives is less clear, however, and should be correlated with their different functions. As I do not have adequate statistics in this respect, I will assume that the OE situation still holds, but this may not be correct. Perhaps possessive and categorizing genitives already correlated much more neatly with pre- and post-adjectival positions, respectively, as in Modern English.

What is no doubt true is that complex genitival groups continue to appear 'split' as above in the relevant cases throughout the ME period (cf. Jespersen 1918, 283-4 et passim; Mustanoja 1960, 78-79; Closs Traugott 1972, 124, and examples *infra*), so what may be the two most salient syntactic properties of OE genitives remain unaffected in Early ME.

However, there surely were so-to-speak invisible processes under way. According to Mustanoja (1960, 70, 76ff), the use of inflectional genitives in Early ME is much more limited than in OE, there being a tendency to replace postnominal ones with *of*+NP constructions. This occurred during the late 12th and early 13th centuries (cf. Fries 1940, 205; Mustanoja 1960, 74ff.; Mitchell 1985 vol. I, 549). The prenominal genitives of OE,

however, survived in full (cf. Jespersen 1918, 300).

The *of*+NP pattern, although obviously parallel to French and Latin *de*+NP formulae and initially interpreted as a direct influence from French, apparently represents a (minor) alternative available in Late OE, particularly in Aelfric and in the OE Chronicle (cf. Mustanoja 1960, 81), but few would deny that the existence of Latin and French models must have helped it to expand (cf. Schlauch 1959, 32; Mustanoja 1960, 74, 77, 81; Bradley 1968, 39-40; Jespersen 1970-4, v. VII, 309). The fact is that this native tendency made little progress until the 12th, or even the 13th century. According to Fries (1940, 74) and Mustanoja (1960, 75), the first texts where the predominance of the *of*+NP type is absolute are Chaucer's prose writings, so the idea that the native tendency was strongly boosted by the model of French *de*+NP from the 13th century on seems quite plausible. The decisive factor, however, according to Mustanoja (op. cit., 77-78), seems to have been that after the collapse of the inflectional system there was a need for new clear ways to express the semantic relations formerly encoded by postnominal genitives, and the *of*+NP paraphrase was an obvious candidate at hand (cf. also Curme 1931, 75).

At roughly the same time, adjectives and verbs governing genitives decrease in number, most of them now taking accusatives or various prepositional constructions (Mustanoja 1960, 87), but nevertheless ALL types of genitives attested in OE do survive into the Early ME period (cf. Mustanoja 1960, 79-88). Since prenominal ones could not be replaced by prepositional phrases anyway (Left Side Filter, cf. Emonds 1976, 1985), the net result is that they are mostly still with us in the functions (subjective, objective, possessive, descriptive, etc.) they had in OE .

This Early ME scenario changes perceptibly in Late ME, however, specially in Chaucer's times. The most important (visible) changes to report on in this period are, apart from the replacement of all kinds of postnominal inflected genitives by prepositional constructions, a) the appearance of genitives followed by ellipsis of the NP (cf. *Let's meet at Bernie's*), which are unknown in OE (cf. Mitchell 1985 vol. I, 541) and are first attested during the 13th century Mustanoja (1960, 83), although both Schlauch (1959, 52) and Strang (1970, 198) attribute the phenomenon to the 14th century; b) the gradual increase of the 'his-genitive' during the 14th and 15th centuries (cf. Curme 1931, 71-2; Wyld 1936, 314-5; Brook 1958, 150; Mustanoja 1960, 161; Pyles 1964, 196; Jespersen 1970-4, v. VI, 300-302; Closs Traugott 1972, 124-5; Barber 1976, 200-201); and c) the emergence - in Chaucer's poetry, according to Mustanoja (1960, 79) - of the so-called 'group genitive'.

As regards the appearance of the first examples of elliptical genitives (like *St. Martin's* in *we married at St. Martin's*), the significance of this fact varies considerably depending on the theoretical views underlying one's analysis. To a traditional grammarian it probably means no more than that certain restricted nouns found in frequent collocations with the genitives (like *church* in *St. Martin's church*) became redundant in colloquial speech and

started being dropped. On the other hand, to a generative grammarian working within current P&PT it suggests the onset of a deep structural innovation, i.e., that genitives actually became heads of the NPs containing them (cf. Lobeck 1991, 1993 for relevant argumentation). One of the major theses of the present paper is that this did actually occur, but only for a short spell during Late ME and Early Modern English, roughly until 1700.

The 'his-genitive' construction (as in Chaucer's *Here beginneth the man of lawe his tale*) perhaps existed in OE, as we saw above, and apparently continued in use throughout the ME period (cf. Mustanoja 1960, 159-162 for examples from *Orrmulum*, *Lawman*, etc. and Closs Traugott 1972, 124-5), but was rare in the North and infrequent in the country as a whole (Mustanoja 1960, 161). The pattern, however, gained strength from Chaucer's time on, seemed to be a serious competitor for the inflectional genitive until the end of the 17th century, and then rapidly disappeared (cf. references above). The facts, thus, are clear, but as regards their interpretation there is no real consensus. Jespersen tends to emphasize the role the 'his-genitive' may have played in the reanalysis of the -s ending as an 'interposition' (Jespersen 1918, 309-12), and I believe he is right, but others (Wyld 1936, 314-5; Mustanoja 1960, 161; Pyles 1964: 196; Barber 1976, 200-201) rather see the formal coincidence with the inflectional genitive as a factor explaining the success of the 'his-genitive' itself. The reason why I think Jespersen is right is that the alternative hypothesis, of course, hardly explains why the 'his-genitive' disappeared around 1700.

The overall influence of the 'his-genitive' and of the underlying OE constructions in support of the generalized 's genitive and of the 'group genitive' is likely to have been small, however, since 1) the OE inversions Adv + V + NP(dat.) + *his* + N would be extremely rare in colloquial speech anyway; 2) by the side of such happy cases where the corresponding possessive adjective *his* is just about right phonologically speaking, there must have been a lot of counterevidence created by the examples in which the corresponding possessive is plainly wrong, as in *then continued the sailors their tale*, etc.; and 3) the disappearance of unstressed vowels in the 15th century must have destroyed the necessary homonymy anyway.

On the whole, however, I think Jespersen's diagnostic (Jespersen 1918, 312) is right, as usual: the 'his-genitive' could not win in the end, since it was too obviously associated with masculine referents, and where it did occur under weak stress it was bound to converge with the general inflectional forms -(i)s. In Jespersen's words:

To the popular feeling the two genitives were then identical, or nearly so, and as people could not take the fuller form as originating in the shorter one, they would naturally suppose the *s* to be a shortening of *his*. (Jespersen 1918, 310).

The rise of the 'group genitive' has been extensively discussed in the literature, but there

still are important chronological discrepancies as far as I know unsettled. For instance, whereas Mustanoja (1960, 79), and Closs Traugott (1972, 124) find the earliest examples in Chaucer's writings, other scholars like Jespersen manage to find examples of it like *Aefter ure lauerd ihesu cristes tocume*, in the OE Homilies (cf. Jespersen 1918, 277), and in Early ME texts like *Orrmulum*, (cf. *ure Lafferd Christess hird*, quoted in Jespersen 1970-4 vol. VI, 282; Jespersen 1918: 274-7, and see also Pyles 1964, 197). If such examples are significant, the origin of the pattern will have to be pushed backwards two or three hundred years and the explanations offered for the phenomenon revised accordingly. The important fact, however, is that even by Chaucer's time the 'split genitive' remained as the preferred solution (Jespersen 1918, 283; Curme 1931, 80). On the other hand, as regards the period in which the construction clearly gains ground and finally becomes fully established, to the point of virtually excluding 'split genitive' forms, there is no disagreement: Chaucer's time and after the Elizabethan period, respectively (Jespersen 1918, 283-4; 1970-4 vol. VI, 286; Curme 1931, 80).

As regards the causal-functional explanation of the 'group genitive', there is broad agreement in the field, with some minor discrepancies. By far the best discussion, to my knowledge, continues to be Jespersen's in *Chapters on English* and various sections of his *Modern English Grammar* (especially vol. VI, 282-ff.), so I will refer to those works in what follows.

Of particular interest to us, of course, is that in Late ME, as in OE, there are cases like (2), where the 'split' construction consists of a relative clause and its genitive antecedent, i.e., precisely the configuration banned in modern usage:

- (2) a. for his loue that deyde vpon a tree (Chaucer)  
 b. by my fader soule that is deed (Chaucer)

During the Early ME period, however, several forces conspired to make the 'group genitive' emerge. Jespersen, and most scholars after him, tend to emphasize such factors as a) the loss of inflectional affixes - and, consequently, the difficulty or even impossibility of establishing concord between the two sectors of the 'split genitive', b) the generalization of the strong masculine genitive (Jespersen 1918, 297-300) and its reinterpretation as an 'interposition' connecting two phrases, and c) the general clumsiness of the inflectional system in dealing with all sorts of complex syntactic groups in a coherent way and the ensuing tendency to establish a new ordering principle securing a transparent relation between syntactic and semantic units even at the expense of inflectional transparency and of certain communicative/ stylistic effects (Jespersen 1918, 300; 1933, 140-1; Brook 1958, 151; Strang 1970, 205; Closs Traugott 1972, 97, etc.).

On the whole, however, factor a) can hardly be said to explain much, since English

managed to keep its 'split' genitives in use for almost a thousand years after the destruction of its inflections began (recall that, even in the earliest OE texts, many 'split genitives' did not agree at all, as in *to Karles dohtor Francna cining* and the like). Factor b) is likely to have provoked a reanalysis and must have played an important part, perhaps with the help of the 'his-genitive', as Jespersen suggested. As to factor c) the drive for syntax-semantics transparency is a linguistic universal and seems reasonable enough in principle, but it is difficult to evaluate, in view of the pervasive mismatches existing in natural languages. Most scholars endorse it (cf. references above). Curme (1931, 80-81), however, was sceptical about it.

What is beyond doubt, to my mind, is that the inflectional system inherited from Indoeuropean became a source of conflicts as soon as the coherent semantic interpretation of groups had to depend on the adjacency of their constituents instead of on their inherent formal characterization. In this respect, the 'group genitive' strategy, based on the fundamental principle that the *-s* is interposed between the subordinate NP and its governor, represents an important historical episode, as Jespersen perceived very clearly. Yet, from a more abstract perspective, it was just a remedial inflectional device, and, contrary to traditional views on this issue (cf. Bradley 1968, 41; Jespersen 1968, 351-2; Strang 1970, 205, etc.), a bit of a blind alley with a large number of unwanted consequences, as we shall see shortly.

2.3. *Modern English*. The changes occurring between the 15th century and the present in this area of grammar are very slight and, with one exception, can be considered mostly as gradual completion of the processes well under way in Chaucer's times. According to Barber (1976, 234-5), in Early Modern English demonstratives and possessives still cooccur, in that order, as in (1), a pattern that survived, although marginally, into present-day English, as we saw in section 1, and possessives still appear following certain types of adjectives, as in (2), but, significantly, articles and possessives no longer co-occur. Thus, he concludes that, as regards determiners, although a few details differ, the system of Early Modern English was already the one we have nowadays (Barber 1976, 225).

- (1) a. this my vertue  
 b. all those his lands  
 c. that my lord Eliiah
- (2) a. other theyr inferiours  
 b. the same their deuises  
 c. each his needlesse heavings (all in Barber 1976, 234-5)

An important development of this period which did NOT survive the Early Modern English stage is the spread of the ‘*his*-genitive’, a pattern which existed sporadically in OE and ME, as we saw, but which gained ground during the 15th century and remained very popular, in fact as a serious competitor to the inflectional genitive, until the end of the 17th century (cf. Curme 1931: 71-2; Mustanoja 1960: 159-62). Mustanoja and Barber explain this construction as a consequence of several factors: a) the availability of OE patterns of the form NP(Dat./Nom.) + *his* + N; b) the homophony between the reduced form of *his*, i.e., /i)z/, and the apocopated form of the regular genitive inflection *-(i)s*; and c) a tendency dating back to OE to express grammatical relations analytically (Mustanoja 1960, 161-2; Barber 1976, 234-5). Since all of them are equally active before and after the 17th century, the disappearance of the *his*-genitive must follow from some other intervening force, though.

According to Barber, whereas the *his* and *her* forms are found in OE, the form *their* “is not found before the sixteenth century”. If this is correct, a tempting explanation is to say that what made the pattern collapse was the Early Modern English attempt to generalize it beyond its original bounds to cases such as *the soldiers their* pay, etc., where the form *their* bore no phonetic resemblance to the usual genitive. This, however, cannot be the whole explanation, because forms like *hiera* and their descendants did occur in OE and ME (cf. Jespersen 1918, 306). For that reason, Jespersen's explanation above seems to me much more convincing: the pattern existed since OE times and survived or even thrived for as long as it was homophonous with the general form of the genitive. It may even have contributed to the reanalysis of the ‘s’ mark as an interposition, as Jespersen suggests, but, under competition with ‘s’, did not resist analogical extension to non-homophonous forms like *their*, and eventually converged with it (cf. Jespersen 1918, 306-312).

Significantly, as Barber points out (Barber 1976, 200-201), the cases occurring during the 18th century and later correspond to proper names ending in *-s* as in *Hercules his pillars*, *Democritus his Well*, etc. Notice that at that time (cf. Curme 1931, 71), there would be three alternatives in that context, 1) the regular *-s* form (i.e., *Hercules's pillars*), 2) the bare apostrophe (i.e., *Hercules' pillars*), or 3) the *his* form, but they would all be phonetically indistinguishable, a solid ground to expect simplification and survival of the fittest (= the regular ‘s’ form) in this area.

Another, apparently unrelated, phenomenon of this period which, again, did not survive into present-day English is the emergence of NPs whose head is occupied by personal pronouns compatible with modifiers of various sorts, as in (3):

- (3) a. but to the highest him (Spenser)
- b. the cruell'st shee alive (Shakespeare)
- c. the shees of Italy (Shakespeare) etc. (all in Barber 1976, 231-232)

The theoretical importance of these examples stems from the fact that they prove that for a brief spell of time in Early Modern English pronouns were treated as bare nouns, i.e., as items filling just the N slot of NPs, in which case their genitives would also be Ns, instead of full DPs. In section 3 below we shall make crucial use of this little detail to devise an explanation for the loss of the possessive + relative clause pattern.

As to incomplete developments of earlier periods, the obvious case, of course, is the full exploitation of the 'group genitive'. As we said, even in Early Modern English, the then relatively new 'group genitive' coexists with, but by no means supersedes the traditional 'split' construction, which must have remained in use until much later. According to Jespersen, Shakespeare still has *the Archbishop's grace of York*, instead of *the Archbishop of York's grace*, and Ben Jonson admits both. John Wallis, however, accepts only *the King of Spain's Court* (Jespersen, op. cit., 284-285). Thus, on the whole, the modern construction clearly prevails only in the 18th century, but the older one remained in popular use even longer and died hard, or not at all, for Jespersen manages to find cases of this pattern (in literary writings) until the very end of the nineteenth century (cf. Jespersen 1970-4, vol. III, 79).

The 'group genitive' is usually interpreted as an efficient analytic solution to the problems created by the need to express the genitive relation in a generalized form. Bradley (1968, 41) describes it as "a useful addition to the resources of the language, as it is more direct and forcible than the synonymous form with *of*". Strang (1970, 205), in her turn, says that "it reflects and strengthens the sense of the unity of the group", and of course. Jespersen in various passages of his works emphasizes the elegance, generality and perspicuity of the new rule (cf. Jespersen 1918, 296-304; 1968, 351-2; 1933, 140-1; 1970-4 vol. VI, 297-8, etc.). As he puts it (1918, 303), "at last we have one definite ending with one definite function and one definite position".

The fundamental analytic insight in this area of grammar was once more his. In *Chapters on English*, he correctly points out that insofar as we take the 's to be a case affix, so-called 'group genitives' like (3a) below are awkward at best from the morphological point of view, since the genitive does not attach to the noun supposed to act as the semantic head of the first term of the genitive relation, but to one of its complements.

- (3) a. the Queen of England's power  
 b. the Queen's power of England  
 c. the Queen's of England power

On the other hand, the earlier 'split genitive' construction (3b) avoided that

morphological pitfall at the cost of incurring a no less substantial violation of a logical order, i.e., that of sacrificing the integrity of the referential expression *the Queen of England*. As to the third theoretically available option, (3c), it certainly avoids the morphological problem, but at the cost of introducing ambiguity (cf. Curme 1931, 81) and creating as much opacity at the syntax-semantics interface as (3b).

Under traditional views of 's' as a case affix, thus, the 'group genitive' could not be considered a net gain in efficiency. However, in Jespersen's reconstruction, things look quite different: if 's' is not a case mark, but a syntactic affix (an 'interposition', in his terminology), the mismatch between syntax and morphology vanishes, and in that case the 'group genitive' is a net gain, since all it required was reanalysing the genitive affix as a syntactic element. The outcome is a steadfast rule: now the genitive mark systematically appears immediately before the governing noun or, rather, before the governing nominal, since the N may have incorporated modifiers on its left.

Most descriptive English grammarians since have accepted Jespersen's interpretation of the 's' form. To take a fairly recent authoritative example, as Quirk et al. (1985, 328) put it:

The 's ending is not a case ending in the sense which applies to languages such as Latin, Russian and German. It can be more appropriately described as an 'enclitic postposition', i.e., its function is parallel to that of a preposition, except that it is placed after the noun phrase.

The 'group genitive' thus conceived of would be a natural step to take for a language in the process of developing from its earlier synthetic stage to an analytic one, as English is supposed to have been. It must be pointed out, though, that it did not solve all the problems created by the collapse of the inflectional system, and, on the other hand, that the gain in perspicuity the 'group genitive' represents was paid for rather dearly in terms of loss of constructional flexibility with respect to earlier stages of the language. The reason is inherent to the nature of the device employed: simply, the 's' affix must be attached at the end of the NP, but at the same time, being originally a nominal inflection, it cannot be freely added to just any phrase. Consequently, the prenominal phrasal genitive of Modern English has lost many of the possibilities of expansion available under the rather loose 'split genitive' construction of earlier periods.

For this reason, the triumph of the 'group genitive' over the 'split' one had something Pyrrhic about it. Far from being a clean and definitive victory, it constitutes a mere episode in a process that may eventually lead to the triumph of the competitor of both of them, i.e., the postnominal *of*+NP construction. Lacking the necessary productivity to accommodate the full expansion potential of DPs, it is a matter of time that it be replaced

by something else. Indeed, it is the tension motivated by the 'group genitive' solution in various departments of English grammar that has inspired the present paper.

Generally speaking, problems emerge whenever the NP is 'heavy' or complex in various ways (cf. Jespersen 1968, 351-2; 1933: 143; 1970-4 v. VII, 317, etc.) and it is Jespersen, again, that has identified and described most of the trouble spots exhaustively (cf. above all 1918; 1970-4 v. VI, 283-ff.; v. VII, 313-30), so I will refer to his work in the following summary.

For instance, the 'group genitive' does not really work for indefinite DPs (*a bachelor's flat* is interpreted as *a + [bachelor's flat]*, i.e., as a 'compound', not as the flat owned by an unspecified bachelor), it is impossible with DPs whose head is a pronoun with a peculiar genitive of its own, (i.e., there are no 'group genitives' like *\*you two's*, *\*you both's*, *\*one/some/all of you's*, *\*we students's*), cannot be freely used with DPs ending in an adjective (cf. *\*The ladies present's attire*), does not really apply to coordinate series (cf. *\*Rita and Mary's husbands*), nor to DPs containing appositions (cf. *\*at Smith, the bookseller in Trinity Street's*), nor to cases requiring multiple embedding of genitives, which are generally replaced with embedded *of*+NP phrases (cf. the awkwardness of *?Her Majesty's yacht Britannia's captain's daughter's wedding*). On the other hand, the 's construction is a source of ambiguity in certain cases, as in the well-known catch-phrase *The son of Pharaoh's daughter is the daughter of Pharaoh's son*, but, more importantly, the 'group genitive' causes trouble whenever the DP contains long prepositional phrases and, above all, relative clauses, i.e., precisely the items that systematically appeared in postnominal position in OE, ME, and Early Modern English producing so-called 'split genitives'.

The exact nature and force of the constraints has never been properly clarified, to my knowledge, and grammarians, no less than native informants, seem to fluctuate considerably in their judgements. According to Jespersen (1918, 296), Sweet accepts *the man I saw yesterday's son* and *the man I saw yesterday at the theatre's father* as correct, but Jespersen himself says that such constructions are generally avoided in the literary standard, although frequent in colloquial and dialectal speech (cf. Jespersen 1970-4, vol. VI, 293). Bradley (1968, 41) also speaks of expressions such as *That was the man I met at Birmingham's idea* as "grotesque extremes" occasionally indulged in in colloquial speech. Pyles describes constructions like *the little boy that lives down the street's dog*, or *the woman I live next door to's husband* as "of frequent occurrence" in everyday speech, although he admits that "There are comparatively few literary examples of clauses so treated" (Pyles 1964, 197-8).

In the last decades, the situation does not seem to have changed at all. According to Quirk et al. (1985), (4a) "might pass muster", but expressions like (4b-d) are dubious and perhaps acceptable only in colloquial usage, and those in (4e-f) completely unacceptable:

- (4) a. The man in the car's ears (p. 1345)  
 b. ?The lady I met in the shop's hat (p. 1282)  
 c. ?a man I know's car (p. 1345)  
 d. ?a man I met in the army's daughter (p. 323)  
 e. \*His daughter's and his German friend's arrival (p. 1282)  
 f. \*His daughter's, a student of German, arrival (p. 1282)

Consequently, they add (ibid.) “In normal use, especially in writing, such genitives would be replaced by *of*-constructions”, i.e., the triumph of the 'group genitive' has indeed been a Pyrrhic victory.

The alternative OE and ME construction based on splitting the genitive remained in use, though, if only marginally, until the end of the nineteenth century. The examples in Barber (1976, 221-222) are less interesting for our purposes, because the clauses are non-restrictive, but Jespersen is able to produce examples like those in (5) below, with restrictive relative clauses, which show that the ban on such constructions, if it exists, must be a very recent phenomenon, perhaps a twentieth century one.

- (5) a. for taking ones part that is out of favour (Shakespeare)  
 b. this face must grace his bed that conquers Asia (Marlowe)  
 c. His high will whom we resist (Milton)  
 d. this lady's hand whom I now offer you (Goldsmith)  
 e. their names who rear'd him (Byron)  
 f. his letters who was his lover yesterday (Thackeray)  
 g. in his soul who wrought it (Wilde)  
 (All in Jespersen 1970-4, vol. III, 79)

Thus, the situation obtaining in this area of grammar in contemporary Standard English, on the whole, can be summarized as follows:

a) With a couple of minor exceptions to be discussed below (cf. *this your first day with us, John's bachelor's flat*), prenominal genitives, possessives, articles and demonstratives, among several other determiners, have become incompatible, (cf. *\*the his bicycle, \*his the bicycle, \*John's that bicycle, \*that John's bicycle*, etc.).

b) Following Late ME practice, genitives are forbidden in post-nominal position (cf. *\*a paper John's*).

c) The '*his*-genitive' has disappeared from the standard.

d) Contrary to Shakespeare's practice, pronouns can no longer function as heads of the NP if they are accompanied by premodifiers (cf. *\*the fairest she of England*).

e) The 'group genitive', with the limitations just discussed, is now the universal rule for complex prenominal genitival NPs. Otherwise, the *of*+NP pattern must be used, for 'split genitives' have been systematically ousted.

f) As a consequence, prenominal genitival DPs suffer important restrictions in their expansion possibilities that did not exist in earlier stages of English.

g) As a so far little understood by-product of the situation in this area of English grammar, possessives and genitives can no longer cooccur with restrictive modifiers.

In the latter two respects, at least, the evolution of the language during the last thousand years or so can arguably be considered as a net REGRESS, contrary to such optimistic pronouncements as Bradley (1968, 41), Jespersen (1968, 351-2, 364; 1949, 348-9, 357) etc.

In general, the set of problems involved has not received the consideration it deserves from contemporary grammarians, but the nature of some of the innovations characteristic of Modern Standard English with respect to OE and ME has been somewhat clarified by recent work. Thus, some contemporary scholars - Lyons (1986) for one - believe that the present incompatibility between genitives and determiners can be explained as the result of a shift of values in a parameter of UG defining languages with 'adjectival genitives' (AG-languages) vs. languages with 'determiner genitives' (DG-languages). According to this hypothesis, Old and Middle English genitives were basically adjectival in character (this point, incidentally, is made in Jespersen 1975, 110-111), although at some later stage they acquired determiner status, so Modern English would already belong to the DG-type. Plank 1992, however, has pointed out that the basic facts may not be as neat and clear-cut as presented by Lyons, but he grants that, if conceived of as an opposition of degree instead of one of kind, Lyons's distinction might well be relevant. That, together with the assumption that the position at the front of the DP is reserved for a specialized determiner paradigm, would account for the anomaly of Modern English combinations containing demonstratives plus possessives or genitives.

It must be pointed out, though, that the earlier use of the genitive as an adjectival modifier is still detectable in contemporary Standard English in such examples as (6a-b) and that, in certain dialects, article and genitive still co-occur in the construction of (6c):

- (6) a. In this your first day with us, we would like to give you a treat  
 b. John's (fashionable) bachelor's flat  
 c. The Mary's shoe that I lost (cf. Stockwell et al. 1973, 709)

Although cases like (6a) are perhaps appositional, or too restricted to be significant, (6b) is a productive pattern and cannot be disregarded. Notice the cooccurrence of the two genitives, the first identificational, the second some kind of subclassifier, and their relative

position with respect to ordinary adjectives like *fashionable*. As the related experimental example (7a) shows, the two genitives are non-interchangeable, and (7b-e) jointly prove that the identificational genitive must occupy the position alternatively filled by determiners, in which case it is incompatible with a second identificational genitive, whereas either an identificational genitive or another determiner cooccurs with a following subclassifying genitive without difficulty:

- (7) a. \*Bachelor's fashionable John's flat  
 b. \*Fashionable John's bachelor's flat  
 c. \*That John's fashionable bachelor's flat  
 d. \*John's that fashionable bachelor's flat  
 e. That/a/John's fashionable bachelor's flat

According to Jespersen (1933, 143-4; 1970-4 vol. VII, 319), Lees 1960, and most scholars since, genitives like 'bachelor's' must be interpreted as compounds. Jespersen says, in support of this view, that in some cases the genitive and its governor are written as one word (cf. 'statesman') and Lees adds phonological evidence. This may well be the correct approach. It certainly offers a simple explanation of the ordering facts.

Significantly, what we no longer have is a possessive or genitive (of any kind), nor any sort of adjective, preceding a determiner, as was the case in the Old and Early Middle English examples of (8):

- (8) a. ure se Aelmihtiga scyppend (cf. \*our the almighty creator)  
 b. min sio gode moder (cf. \*my the good mother)  
 c. aet aethelen anre chirche (cf. \*at noble a church)  
 d. mid deore mine sweorde (cf. \*with dear my sword)  
 e. mid sele than kinge (cf. \*with holy the king)

In view of such examples, we might pre-theoretically hypothesize that, ignoring the phenomena derived from the erosion of inflectional endings and the disappearance of postnominal inflectional genitives, the basic structure of the NP may have remained relatively stable since Proto-germanic times. The one big change would be the emergence of a special paradigm of 'determiners' and the grammaticalization of the first position in the NP as the D slot reserved for them, resulting in a recategorization of NP as DP, as Fukui & Speas 1986 and Abney 1987 maintain.

As to the prenominal genitives and possessives that existed in OE, roughly depending on whether they were pre- or post-adjectival they underwent two different developments. Pre-adjectival genitives, mainly those of nouns denoting animate / human entities, which

already in OE were frequently used identificationally in the absence of determiners, have become even more determiner-like, and positionally restricted, to the point of actual incompatibility with strict determiners. On the other hand, OE prenominal, but post-adjectival, genitives, i.e., those with a generic, descriptive, or classifying meaning, have either disappeared, replaced by PP adjuncts, or become even more adjectival ('auxiliary nouns', to use Abney's phrase, cf. Abney 1987) and closer to the status of first terms of noun compounds, as Jespersen pointed out, or actually given rise to [N+N] compounds.

Something like that may well have happened, but the strange thing about it is that possessives and genitives have apparently outdone articles and demonstratives by a long stretch, for one of the consequences of the process is that, nowadays, whereas determiners, even very explicit ones like the demonstratives, allow their NP to be further specified by postnominal restrictive modifiers, including restrictive relative clauses, possessives and genitives generally reject them, as we saw in section 1 above.

This is exactly the opposite of what we would expect. If we believe Jespersen (Jespersen 1975, 110) "An adjunct consisting of a genitive or a possessive pronoun always restricts, though not always to the same extent as the definite article". On the other hand, if we admit Quirk & Wrenn's (1957, 69) characterization of deictics as determiners that further specify elements of a series that may already be quite definite, genitives should end up being much LESS specific than deictics. Indeed, what could be more 'identifying' than a deictic?. And yet, as we saw in section 1, articles and demonstratives are perfectly happy to take restrictive relative clauses and all sorts of restrictive modifiers. From a semantic point of view, therefore, the behaviour of possessives and genitives is just incomprehensible.

Unfortunately, this is an area of grammar in which there is substantial indeterminacy. Not all restrictive postmodifiers seem equally incompatible with prenominal genitives, as the examples of (9), mostly extracted from various sections of Quirk et al. 1985, show:

- (9)
- a. Her father's house in London is out for sale
  - b. Their own failure in Vietnam was difficult to accept
  - c. Your driving to New York in your condition (op. cit.,1064)
  - d. Her phenomenal success in Australia (op. cit.,1398)
  - e. A friend's arrival which had been expected for several weeks (op. cit. 1281)
  - f. Her daughter who is so beautiful (op. cit., 1323)
  - g. ?His resignation on account of a bribery scandal (op. cit., 1286)
  - h. ?Their arrival for a month
  - i. ?Their behaviour with courtesy
  - j. \*Their action in a nasty manner
  - k. \*Their contribution out of kindness (op. cit., 1290)

1. \*The man's ears in the deckchair (op. cit., 1298)

As the marks \*, ? next to the examples in (9) indicate, acceptability varies considerably in such cases, but judgments do not seem to obey any recognizable syntactic or semantic principle. To my surprise, Quirk et al. 1985 accept (9e) and even (9f), which sound to my foreigner's ear really bad, particularly the latter. My guess is that, in spite of the punctuation, the interpretation is non-restrictive in those cases.

A major shortcoming of Quirk et al. 1985, of course, is that they speak of 'complements' without acknowledging the difference between arguments and adjuncts. That distinction is surely significant, though, since genitives are not only possible, but very common, with complements discharging subcategorized arguments of the head noun, as the examples in (10) make clear:

- (10) a. The Pope's arrival at the airport attracted crowds of people  
 b. Pollock's analysis of the clause does not convince me  
 c. The Government's decision to stop industrial action is unpopular  
 d. John's conversation with his son lasted almost two hours  
 e. Their resemblance to their father is astonishing

However, in cases such as (9a-d) it is out of the question to analyse the PPs as anything other than adjuncts, so it seems as though possessives and full DP genitives still allow restrictive modifiers in certain poorly understood circumstances. That in no respect rests relevance to the restrictions that we pointed out in section 1, specially in what concerns the combination of a possessive or genitive and a restrictive relative clause, clearly a Modern English development that must be accounted for.

Since the restriction applies to adjuncts, but not to arguments, we might hypothesize that the kind of identification provided by a Modern English possessive or genitive is similar to that brought about by the use of proper names, which also generally reject postnominal restrictive modifiers (cf. \**Henry who wrote this paper*). Speculating a bit on this point, we might assume, for example, that proper names like *John* and genitives imply a sort of absolute, although pragmatically context-bound, identification of the referent, whereas articles and demonstratives would also be identificational, but syncategorematically so, i.e. relative to contextually perceptible properties which might be made explicit or not depending on the pragmatics of the situation.

I suspect that that kind of semanticist explanation, plus, perhaps, informal suggestions such as Quirk et al.'s that examples like (91) are avoided mostly for the grotesque misunderstandings they occasionally produce, or generalities vaguely referring to double specification, potential ambiguity and the like, represent fairly well what most

grammarians would have to say on this issue, but, of course, if it all boils down to a matter of redundancy of the referential constraints imposed by genitives and restrictive adjuncts, it would make better sense if not only postnominal, but also prenominal ones were disallowed with genitives. That is obviously not the case, as the examples in (11) remind us:

- (11) a. Peter's brand new Macintosh Duo is a fantastic solution  
 b. The chairman's rather boring report was received coolly  
 c. Chomsky's recently published work barely touches on such issues

As regards relative clauses, and, needless to say, cases equivalent to Chaucer's *for his loue that deyde vpon a tree* and the like, Modern English strongly disallows them, cf. (12) and (13):

- (12) a. \*Your umbrella that I borrowed yesterday  
 b. \*His book that he published in 1981
- (13) a. \*Their attitude that/who can do something about it is all important  
 b. \*the girl's car that/who was kidnapped was found two days later  
 c. \*His reputation that you danced with is pretty bad these days  
 d. \*The boy's house who invited you is two miles down the road

Such facts were my starting point in section 1 above. As stated there, to my knowledge, the disappearance of such constructions has never been satisfactorily explained. As to examples like (13), Curme (1931, 231a) mentions the fact that “in poetry” and “in older English” the antecedent of the relative may be in a possessive adjective, and adds: “which is explained by the fact that the possessive adjective was originally a personal pronoun in the genitive and still always represents a definite person”, (cf. also Brook 1958, 151). That seems to imply that such constructions disappeared because the genitive of the personal pronoun lost its former pronominal character and became a mere possessive adjective, but neither of them explains what it is that was lost. Certainly, it cannot have been referential capacity, for possessives continue to be referential expressions, but if it was not that, then what? Be it what it may, that theory, of course, does not explain the incompatibility between relative clauses and full DP genitives unless these too have lost some mysterious and so far unidentified force, a completely unwarranted assumption. The question, anyway, is not why the construction occurred when it did, which is obvious, but why it no longer occurs.

The fact that the cooccurrence of genitives and relative clauses corresponds to at least

two different cases (there may be more, in fact, since the antecedent may be even more deeply embedded within a recursive prenominal genitive, as in our concocted example in section 1 (3) above) suggests the possibility that such OE and ME constructions disappeared from Standard English because they could be a source of ambiguity. Indeed, whenever there was more than one NP that, given its lexical features, could be construed as the antecedent of the relative, the OE-ME construction was a source of potential structural and semantic ambiguity, but all things considered, such cases could only very rarely have impaired communication. According to Mitchell (1985 vol. II, 180-1), in general, either the potential ambiguity did not matter much, or, if it did, lexical information available in the context sufficed to filter out unintended interpretations.

Jespersen nevertheless suggests, by way of functional explanation, that “If a relative clause is added to a genitive with its primary, it may sometimes be doubtful which word it refers to, and therefore an *of*-phrase is preferred”. Unfortunately, it is not a matter of stylistic preference, but a categorical impossibility of construing in any other way.

On the other hand, Jespersen's attempted explanation predicts that in the absence of ambiguity it should be possible to add the relative clause, and yet none of the starkly ungrammatical examples above is even remotely ambiguous. If avoidance of potential ambiguity had been the driving force, we should expect a systematic difference in acceptability between ambiguous and unambiguous cases in the modern period, and no such difference occurs: all are equally unacceptable. Moreover, that such clauses are ungrammatical even if their only possible antecedent is the matrix DP already constitutes proof positive that ambiguity has nothing to do with the question at issue and makes it sensible to assume that some other factor intervened.

Additional evidence in support of this assumption comes from the fact that genitives, as we saw in section 1 example (4), reject not only relative clauses, but all sorts of postmodifiers. Needless to say, if the ‘subject’ of the postmodifying predicate is the genitive itself, as in (14), the result is equally ungrammatical:

- (14) a. \*the professor's portfolio responsible for that document  
 b. \*the girl's voice next to me  
 c. \*the students' records interested in this fellowship  
 d. \*the student's room smoking those awful cigars  
 e. \*the professor's signature who supervised my dissertation

Of course, we might assume an interpretation strategy based on strict adjacency between the restrictive modifier and its antecedent in order to exclude such examples, but that approach would be dubious at best, for non-adjacency is extremely common in many English constructions even nowadays (Topicalization, WH-Movement, Comparatives,

Extraposition, etc.) and in no way interferes with intelligibility.

In sum, whatever is ultimately responsible for the ill-formedness of cases like (12-14) it surely has nothing to do with ambiguity, stylistic preferences, or 'semantics' in the pre-theoretical sense of the term, for such expressions are semantically well-formed and generally unambiguous. Indeed, it is enough to replace the genitive with an equivalent *of*+DP phrase to obtain totally correct expressions, cf. (15):

- (15) a. The portfolio of the professor responsible for that document  
 b. The voice of the girl next to me  
 c. The records of the students interested in that fellowship.  
 d. The arrival of the guy who had invited Ann, etc.

That points to a more abstract structural factor as the cause of the change under discussion, but, to my knowledge, nobody so far has provided a suitable explanation (see González Escribano 1994 for a formal explanation in P&P terms and a review of the modern linguistic literature on genitives and relative clauses).

My focus in this paper, however, is on 'material' (i.e., functional-teleological or causal) explanation, and, given the chronology of the phenomena, the origin of the present-day situation must be something that occurred around Chaucer's time or somewhat later. My suggestion is that the trigger was essentially the development of the 'group genitive', but my explanation presupposes a full 'causal' reconstruction of events in this domain and a richer and more explicit theoretical framework than that of the traditional accounts so far referred to. In section 3, therefore, I will re-examine the whole course of events from the perspective of Chomsky's Theory of Principles and Parameters. Nevertheless, the extra theoretical assumptions needed to explain the facts are minimal, so, to make my proposal intelligible to a broader audience, in this article I will limit myself to introducing certain bits of P&PT machinery here and there as required, referring the interested reader to González Escribano 1994 for justification of the [DP XP] analysis and further formal details.

### **3. An Idealized Rational Reconstruction of the Facts within P&P Theory**

In view of the preceding account, a not implausible, although admittedly speculative, theoretical reconstruction of the processes leading from Proto-Germanic to the present-day situation in this area of English grammar might run as follows.

The kind of reference meant for NPs must be adequately signalled. Assuming that much, NPs must be specified at least for [ $\pm$ definiteness] (roughly = formally marked by affixes or otherwise depending on whether the object referred to is assumed by the speaker

to be identifiable to the hearer or not). In Earliest English, it seems as if [ $\pm$ definiteness] was expressed inflectionally on (pro)nouns and adjectives in the form of a strong vs. a weak declension. At that stage, no segmental articles were required, and none existed (cf. the comparable stage of development illustrated by Classical Latin). Demonstratives accompanying nouns were fully adjectival at that stage, just as genitives were, and if used at all they must have been interpreted as emphatic or anaphoric items.

If it was necessary to further specify the reference of either the full NP or a genitive NP inside it, an appositional clause was used after the NP, with the agreement features on an anaphoric demonstrative serving to refer the clause back to its proper antecedent. Thus, the basic pattern must have been (Adj.) + (Gen.) + N, (Clause), although 'heavy' genitives were allowed postnominally, too. If some of the genitives had identifying force, this was an indirect consequence of the fact that, naturally, the nouns in the genitive involved could themselves be definite and refer to identifiable objects associated with the referent of the higher NP, not because the genitives themselves were already filling a neatly defined determiner position/function in it, i.e., no D was available at this stage.

When nominal inflections became phonologically weaker, especially in the weak declension of adjectives, demonstrative adjectives like Earliest OE *se*, *seo*, *thaet* that preserved distinctions fairly well began to serve as a compensatory analytic device, just as it occurred with pronouns in other areas of grammar (cf. the pattern *he slew him Holofernus*'). By this stage, the basic NP patterns may have been a) (Adj.) + (Gen.) + N (for NPs interpreted as [-Def]), and b) (Det + Adj.) + (Gen.) + N (for NPs interpreted as [+Def]), both possibly followed by 'heavy' genitives and appositional or explanatory clauses.

Still in very early OE, demonstratives cease to be a sort of morphological appendix of weak adjectives and are used to determine the reference of nouns even when no adjective is present. Similarly, indefinite *an*, *sum*, would help the hearer determine the reference of indefinite NPs. These constructions, however, may have been felt to be emphatic or otherwise marked due to the deictic force of the demonstratives and the inherent quantifying nature of *an* and *sum*. At this stage, perhaps it was literally impossible to express [ $\pm$ definiteness] without incorporating unwanted nuances of a deictic/emphatic or quantificational nature.

Genitives would be modifiers expressing arguments or adjuncts of N and would appear either prenominally, their canonical position in a head-final language, or, in the many cases in which they might be interpreted as appositive or contained 'heavy' constituents, postnominally, but, at any rate, closer to the head N than strictly adjectival modifiers. This may be a consequence of the fact that Case marking required adjacency of the complement to its governor (cf. Ohkado 1990), but may also derive from the equally general principle that many genitives (subjective, objective,...) encoded arguments of the head N, and

arguments are always projected closer to the head than adjuncts (cf. González Escribano 1993 for details concerning the relevant notions of 'government', 'projection', 'maximal projection', etc., presupposed in this account).

Other components of the system (postposition of heavy elements, use of correlated appositional or explanatory clauses, etc.) remain unchanged. This state of affairs holds during the rest of the OE period.

A proper determiner system develops only during the Early ME period as a consequence of the collapse of the inflectional system, i.e., roughly, demonstratives take care of the strictly deictic uses [+specific, ±proximate], numerals and quantifiers retain the quantificational ones, *sum* specialises as an indefinite determiner in a marked use (= a certain), *an* weakens phonologically to *a*, loses its strictly numerical implications and specialises as an indefinite singular determiner, and a new invariable form *the* becomes available as a definite determiner unmarked for number, with [±specificity] potential, but without deictic force. Genitives, in their turn, continue to be (mostly prenominal) modifiers of N, but many of them start being replaced by *of*+NP constructions.

The changes at this stage are more transcendental than meets the eye, though, for in compensation for the collapse of inflectional marks, the structure of the NP suffers the first, and probably the only, important modification in its history, i.e., instead of the synthetic inflections on its various components, the full NP develops a new 'functional' category Det which is immediately construed as the governor of the NP and therefore precedes it, just as V or P come to systematically precede their objects as part of the general OV > VO change (cf. Stowell 1981 and particularly Abney 1987 on functional categories).

By the 13th century, in the related area of sentence grammar, the preverbal position is grammaticalized as the site of the subject, the VO order is firmly on its way, and many of the originally inflectional pre-head subordinates of nouns, verbs and adjectives tend to be replaced by post-head prepositional phrases. This makes postnominal genitives rare or even impossible and gradually forces their complete replacement by prepositional phrases. As appositive/explanatory clauses had always been postnominal, the right side of the head N becomes a site for PPs and clauses (or, perhaps more accurately, for clausal XPs, since not only CPs, but also clausal NPs, APs, PPs, and VPs can also be found in this area).

The left side of N, on the contrary, is at this stage the site of word-level modifiers (cf. Emonds 1985), i.e., first terms of compounds, word-level genitives, unmodified adjectives, quantifiers or numerals, and determiners. Of course, that is a very heterogeneous list and to fully describe the different types of construction involved is beyond the scope of this paper, but a few remarks are surely in order: 1) first terms of compounds are the result of a lexical process of incorporation (cf. Baker 1988); 2) genitives represent two cases, a) a parallel process of morphological ('morphological' insofar as the 's' inflection remains as

such) incorporation into a complex nominal designator (cf. the type *bachelor's flat*), and b) argument-satisfaction; 3) prenominal adjectives, on the other hand, result from a productive process of 'syntactic' (= post-lexical) incorporation yielding complex nominals; and 4) quantifiers/numerals and determiners occur in head positions governing NP, i.e., Q and D, respectively (cf. Abney 1987 and Lobeck 1991, 1993).

The inflectional genitive, thus, survives as an exclusively prenominal phenomenon, but still allows for all its initial meanings (subjective, objective, possessive, descriptive, identificational,...), although in several of them it faces competition from the new *of*+DP pattern. The different character of the two constructions, however, explains the distribution of each as soon as we take into account the internal structure of the DP: if the DP is just an N, its genitival form will be inflectional and prenominal; if the DP is complex, on the other hand, a P+DP construction will be used instead. Although the OE possibility of splitting the genitive continues to be available, the postnominal part no longer had genitival inflections and, since the new P+NP forms did not even require splitting, it was natural that they should soon prevail in these cases.

Among the determiners, the new definite article *the* has no deictic force, as we said, and at the same time is lexically too weak as an expression of definite reference. However, precisely at this stage (recall the OV > VO change is well under way by the 13th century), the increasing abundance of posthead complements allows various originally appositive or explanatory phrases (the restrictive ones) to be reanalyzed as SUBORDINATE complements. In such cases the relative clause becomes a displaced 'functional complement' (Abney 1987) of the determiner *the* and compensates for its lexical weakness.

Finally, as genitives were still neatly separate from determiners, at this stage we do find BOTH articles/demonstratives AND genitives, and both can be followed by relative clauses and possibly other restrictive phrases.

The inflectional genitive had always had too many functions, however, and from the earliest OE times various factors seem to have conspired to find neat formal and structural differential properties for them. Most of the qualifying genitives, for example, competed with the rule forming compounds, and were indeed eventually replaced by them. While they survived, they appeared after adjectives, and just before the noun, in the pattern we still see in Modern English *bachelor's flat*, *men's underwear*, etc., but most combinations of such genitives plus the head noun have since been replaced by compounds. The other types of inflectional genitive (subjective, objective, possessive) available in the earliest OE remained in ME, but only in pre-adjectival position, and naturally restricted to DPs that could become logical 'subjects' (usually Agents or Experiencers, thus animate or human), rather less often, logical 'objects' (usually Themes), or Possessors (human beings). On the whole, then, from the earliest OE and along the ME period, pre-adjectival genitives became strongly associated with semantic functions characteristically discharged by

human beings (Agent, Experiencer, and Possessor) and generally encoded as most prominent arguments of relational Ns, where 'most prominent', according to the Uniformity of Theta Assignment Hypothesis and the Thematic Hierarchy (cf. Baker 1988, Speas 1990, González Escribano 1993) equals higher on the tree in structural terms, i.e., Spec position.

Of course, since, say, an action or an experience can only have a particular agent, or experiencer, and things have individual owners, mentioning the agent/experiencer/owner is as efficient a way to identify the action/experience/thing as any. That explains the automatic overlap of the thematic and the identificational uses of the genitive. It was natural, therefore, that genitives should always have competed with demonstratives - and eventually with determiners - to a certain extent. The functions concerned, though, are logically different, i.e., an agent may perform many actions, a possessor may own several entities, etc. that may have to be identified by a specific determiner. Therefore, we should be allowed to say such things as *this your intervention*, vs. *that your intervention*, *this your son* vs. *that your son*, etc. In many cases, however, no such contrast will be relevant and we should accordingly expect the genitive to often serve as the only explicit identifier of the DP. In that capacity, genitives (and even more so possessives, since they derive from pronouns denoting human beings) and determiners understandably became alternative ways to achieve identification. Thus, a DP with a definite interpretation converted into a genitive specifying another DP would induce a definite interpretation of the matrix DP and one marked as indefinite would make the higher DP indefinite as well.

Inflectional genitives, however, were at this stage word-level constructions (=  $X^0$ , in standard X-bar terms) and, ignoring Jespersen's early examples of 'group genitive' above, could not in pre-Chaucerian times affect complex nominals, so restrictions were to be expected here, but just as sometime during the 13th century the article came to govern a discontinuous restrictive relative clause specifying its reference, even in OE a prenominal noun in the genitive could also be expanded by a postnominal relative clause or by prepositional phrases of a restrictive kind, in a discontinuous type of construction, and indeed we find such 'split' patterns until well into the Modern English period, as we saw.

After English develops a specific category D at the front of the NP and the NP itself is reanalyzed as a functional complement of the new category, inflectional genitives with identifying functions became potential fillers of D in alternation with demonstratives and articles. There are two separate phenomena that offer independent support for this conclusion: a) Significantly, the earliest examples of elliptical genitives (cf. *we married at St. Peters*) date from the thirteenth century, according to Mustanoja, and from the fourteenth, according to other authors, as we saw above. If we take ellipsis to be the surface form of an empty category, as is standardly done within the P&PT framework (cf. Lobeck 1991, 1993), and, according to the Empty Category Principle, we assume that ECs

must be lexically governed, genitives must have become lexical governors (= D heads of their NPs) by that time; that automatically accounts for the pre-adjectival position of identifying genitives in Late ME and Modern English and for the incompatibility between genitives and articles or demonstratives; b) In Early Modern English we find personal pronouns occupying strictly the head N slot of NPs, as in Shakespeare's example *the shees of Italy*, etc. Now, that implies that personal pronouns were still felt as X<sup>0</sup>s, but not as XPs, contrary to what occurs in present-day English.

Notice, on the other hand, that personal pronouns have an obvious deictic component that associates them with determiners. Barber's term 'determiner-pronouns', therefore, is entirely appropriate, and indeed, Jackendoff 1977 and Abney 1987, among others, have analyzed sequences like *we young people* as strings of the form Det + N(P). Thus, once the D category is available, we expect possessives to be able to occupy it whenever there is no explicit determiner. Ordinary nouns and full NPs in the genitive case, on the contrary, would not be expected to occupy D.

Yet, in OE and EMidE genitives of proper nouns did perform identificational functions now typical of D, as we said. Therefore, if such genitive Ns were to function as suppliers of identificational features for the higher NP (now DP) in the absence of determiners, a) genitives should find some way into D or, at any rate, into the DP layer, since D and DP must agree, and b) the inflectional genitive would first have to be allowed to affect DPs that were themselves fully referential. In due historical perspective, this implied either the possibility of agreement with a post-nominal phrase (= 'split genitive'), as in OE and early ME, or that of full expansion on the right side of the genitivized N by means of PPs and clauses (= 'group genitive'), as in Late ME and Modern English. But this, of course, was definitionally incompatible with the status of the genitive marker as an INFLECTIONAL affix. Therefore, the *-s* affix had to be reinterpreted as a syntactic affix appended to full DPs, instead of as an inflectional mark on the head N, as Jespersen says. Consequently, at the end of the ME period *'s* becomes an 'interposition' and we find 'group genitives' like *the king of England's daughter* gradually replacing the earlier pattern *the king's daughter of England*.

That solved part b) of the problem, but not part a), since a full genitive DP would not, of course, be allowed into the D slot. Hence the association of the identificational genitive with the specialized identificational position D had to be effected some other way, perhaps by reanalyzing *'s* itself as a Determiner (Fukui & Speas 1986). That was counterintuitive, though, as *'s*, even if, by then, it was functioning as something different, as Jespersen claims, was still obviously associated in the popular mind with the genitive inflection of earlier periods, so the only remaining structural possibility was for the 'group genitive' to be associated with Spec of DP, leaving D empty at surface level. That, of course, would be compatible with generating *'s* in D, since, being a clitic, it would necessarily have to jump

onto the DP in Spec of DP anyway. And this is what finally happened in Modern English.

Late ME and Early Modern English explored other alternatives to solve the b) part of the problem, though, among them the pattern *the wife of Bath her tale*, which, as we saw above, became very popular between the 14th and the 17th centuries. In the present framework, that pattern naturally corresponds to the case in which *her* is filling D and the full DP *the wife of Bath* is occupying the Spec of (the higher) DP. This strategy, of course, did not succeed, as we saw in section 2, but the reason why the 'his-genitive' disappeared remains in part an unsolved mystery. Of course, there is Jespersen's explanation above, essentially based on the idea that it could not compete in generality with the 's interposition, but on the other hand 's in its turn could not really be extended to all NP expansions, as Jespersen showed, so some other intervening factor must have tipped the scales to the group genitive's advantage.

Indeed, so it was: in my view the decisive factor was the reanalysis of *his*, *her*, etc., as full DPs (notice that we no longer can say such things as *\*the shees of England*). If this hypothesis is correct, therefore, the 'his-genitive' disappeared roughly at the same time Shakespeare's pattern *the shees of Italy* did, and for the same reason: the pronouns could no longer be interpreted as X<sup>0</sup>s. That left the 'group genitive' alone on the field.

The 'group genitive' surely broadened the expansion potential of prenominal genitive DPs as the Early Modern English period advanced, but certain types of expansions, notably those involving clauses (cf. *?the man we met yesterday's son*), have remained awkward or plainly unacceptable to the present day. This was only one of the problems. Let's now see what else followed from the 'triumph' of the 'group genitive'.

One of the consequences, of course, assuming the 's originated under D, was that possessives and genitives became incompatible with articles and demonstratives. Their thematic and identificational functions were logically different, though, and had to be kept separate in certain cases but, of course, the structural assimilation of possessives and determiners as alternative fillers of D disallowed their cooccurrence. It was to be expected, therefore, that determiners and possessives would be structurally differentiated again.

This happened during the Modern English period and it was the determiner that retained its slot forcing the possessive (now a DP, cf. above) to move elsewhere, either into Spec of DP, with the full nominal (= DP) genitives, or to the back of the DP (as in the pattern *a friend of mine*), but the two cases are different, for whereas postnominal genitives and possessives were base-generated after the N and remained compatible with a prenominal determiner, genitives and possessives in Spec of DP, being the result of movement (of 's and of the possessive, respectively) from D, of course, did not, as in either case D would stay occupied by a trace. Hence, neither a possessive nor a genitive in Spec of DP can nowadays cooccur with an article in D.

This structural re-differentiation of the two functions at some point during the Modern

English period was at a cost, though, i.e., for some reason which we shall turn to directly the possibility of expansion of the possessive /genitive by postnominal modifiers that existed in OE, ME and even Early Modern English, was lost, so now we cannot say such things as *\*his car that owns this house is parked at the front*. But that is not the whole story: even more disastrously, all DPs containing genitive specifiers were disabled to take relative clauses and other postnominal restrictive adjuncts. Thus, we can no longer say such things as *\*Your book that I borrowed last week*, *\*Your book available in the bookshop*, or *\*Your raincoat in the back seat*, either.

As we saw in section 1, there is no semantic difficulty whatsoever in such cases, and the problem does not arise with proper determiners, so something structural happened to possessives and genitives between Shakespeare's time and ours, but what?

I think what we have said so far, together with general principles of P&PT like 'percolation' and those of 'control theory' and a [<sub>DP</sub> DP XP] analysis of postmodification (cf. González Escribano 1994 for the technical details) can easily lead us to an explanation for even that recalcitrant fact:

1) Whereas in late ME and Early Modern English possessives briefly became genuine structural alternatives to determiners and came to occupy D, allowing their identificational features to show on the DP node and c-command the relative pronouns and empty categories characteristic of postnominal modifiers, in Late Modern English possessives were reanalyzed as DPs and shifted into a position adjacent to D, namely Spec of DP, from which the identificational features they contribute cannot percolate up to the DP node and thus cannot c-command the relative (or PRO).

2) By a different mechanism, as we saw, (the development of the 'group genitive') full DPs discharging the 'subject' arguments of Ns also ended in Spec of DP for reasons deriving from Case theory (cf. Abney 1987) and therefore unable to make their identificational features percolate into the higher DP. Hence, full genitives can no longer license relative clauses or postmodifiers containing PRO any more than possessives can.

3) Articles and demonstratives, on the contrary, remained in D ever since that category emerged. Consequently, the usual percolation conventions allow their identificational features to show on DP and from there to identify / control the relative pronoun or the PRO, as the case may be, licensing such restrictive postmodifiers.

4) Cases like *this your first day with us* and the like follow automatically if we assume that possessives are inherently Case-marked and need not rise into Spec of DP. Notice that full DP genitives like *John*, or *my friend*, are impossible in that pattern, cf. *\*This John's first day with us*.

There remains an important question, of course: Why are possessives and full DP genitives possible with prenominal modifiers and impossible with most postnominal ones? Fortunately, in this account there is a straightforward answer:

5) Prenominal restrictive modifiers are structurally different from postnominal ones in two important respects, a) the former belong under NP and are c-commanded by Spec of DP, whereas the latter belong to the DP tier and are not, and b) the former do not have clausal structure and do not contain PRO (cf. Abney 1987, Hornstein & Lightfoot 1987 and González Escribano 1994 for a fully explicit proposal). Thus, there is no empty category to be identified in those cases.

6) The very last question is: why are SOME postnominal adjuncts, like that in *His house in Bedford Square* or those in (9) above, possible with possessives and genitives? The answer, I believe, ultimately comes from Rothstein's (1988) distinction between attributive and restrictive modifiers: attributive postmodifiers are symmetrical with prenominal adjuncts and belong inside the NP. They may or may not be clausal, (hence, they may or may not contain PRO, that is an empirical question) but at any rate, since D is occupied by a trace of 's, their PROs at any rate, being under NP, would remain c-commanded by the trace and would thereby be identifiable. On the contrary, restrictive adjuncts are purely identificational and belong to the DP tier. Hence, as soon as 's jumps onto Spec of DP its identificational features have no way to reach the higher DP and cannot c-command the XP adjunct, leaving relatives and such PROs without a suitable antecedent.

## References

- Abney, Steven P. 1987. *The English Noun Phrase in its Sentential Aspect*. Ph. D. diss. MIT.
- Aissen, Judith. 1972. "Where do Relative Clauses Come from?" In John P. Kimball, ed., *Syntax and Semantics 1*. New York: Seminar Press. 187-198.
- Baker, Mark. 1988. *Incorporation*. Chicago: The University of Chicago Press.
- Barber, Charles. 1976. *Early Modern English*. London: A. Deutsch.
- Bradley, Henry (rev. Simeon Potter) 1968(1904). *The Making of English*. London: Macmillan.
- Brook, George L. 1958. *A History of the English Language*. London: A. Deutsch.
- Brugmann, Karl. 1970 (1904). *Kurze vergleichende Grammatik der Indogermanischen Sprachen*. Berlin: Walter de Gruyter.
- Closs Traugott, Elizabeth. 1972. *The History of English Syntax*. New York: Holt, Rinehart & Winston.
- Curme, George O. 1933. *Syntax*. Boston: D. C. Heath & Co.
- Dik, Simon C. 1986. "On the Notion Functional Explanation". *Belgian Journal of Linguistics* 1: 11-52 [=Working Papers in Functional Grammar No. 11].
- Emonds, Joseph. 1976. *A Transformational Approach to English Syntax*. New York: Academic Press.

- \_\_\_\_\_. 1985. *A Unified Theory of Syntactic Categories*. Dordrecht: Foris.
- Fabb, Nigel. 1990. "The Difference between English Restrictive and Non-restrictive Relative Clauses". *Journal of Linguistics* 26/1: 57-78.
- Fries, Charles C. 1940. "On the Development of the Structural Use of Word Order in Modern English". *Language* 16: 199-208.
- Fukui, Naomi & Margaret Speas. 1986. "Specifiers and Projections". *MIT Working Papers in Linguistics* 8: 128-172.
- González Escribano, José Luis. 1993. "Natural Language Syntax: Transparency and Binary Branching". In *Fifti:n, Proceedings of the XV AEDEAN Conference*. Logroño. 325-344.
- \_\_\_\_\_. 1994. "On Genitives and Post-nominal Restrictive Adjuncts". Ms. submitted to *Linguistics*.
- Hornstein, Norbert & David Lightfoot. 1987. "Predication and PRO". *Language* 63: 23-52.
- Jackendoff, Ray S. 1977. *X-bar Syntax. A Study of Phrase Structure*. Cambridge, Mass.: MIT Press.
- Jespersen, Otto. 1970-4 (1909-49). *Modern English Grammar on Historical Principles*. London: Allen & Unwin.
- \_\_\_\_\_. 1918. "Chapters on English". In *Selected Writings of Otto Jespersen*. London: Allen & Unwin. 154-312.
- \_\_\_\_\_. 1968 (1922). *Language*. London: Allen & Unwin.
- \_\_\_\_\_. 1975 (1924). *Philosophy of Language*. London: Allen & Unwin.
- \_\_\_\_\_. 1933. *Essentials of English Grammar*. London: Allen & Unwin.
- \_\_\_\_\_. 1949. "Efficiency in Linguistic Change". In *Selected Writings of Otto Jespersen*. London: Allen & Unwin Ltd./Tokyo: Senjo Publishing, no date of publication. 346-426.
- Lehmann, Winfred P. 1974. *Proto-Indo-European Syntax*. Austin: The University of Texas Press.
- Lobeck, Ann. 1991. "Phrase Structure of Ellipsis in English". In Susan D. Rothstein, ed., *Perspectives on Phrase Structure*. New York: Academic Press. 81-103.
- \_\_\_\_\_. 1993. "Strong Agreement and Identification: Evidence from Ellipsis in English". *Linguistics* 31/5: 777-811.
- Lyons, Christopher. 1986. "The Syntax of English Genitive Constructions". *Journal of Linguistics* 22: 123-143.
- Mitchell, Bruce 1985. *Old English Syntax*. Oxford: Clarendon P.
- \_\_\_\_\_. & F. C. Robinson 1992. *A Guide to Old English*. Oxford: Blackwell.
- Mossé, Fernand. 1952. *Handbook of Middle English*. Baltimore: Johns Hopkins Press.
- Mustanoja, Tauno F. 1960. *A Middle English Syntax. Part I. Parts of Speech*. Helsinki: Société Néophilologique.
- Ohkado, Masayuki. 1990. "Transitive Adjectives and the Theory of Case". *Lingua* 81: 241-264.
- Plank, Frans. 1992. "Possessives and the Distinction between Determiners and Modifiers with Special Reference to German". *Journal of Linguistics* 28: 453-468.

- Pyles, Thomas 1964. *The Origins and Development of the English Language*. New York: Harcourt, Brace, Jovanovich.
- Quirk, Randolph, et al. 1985. *A Comprehensive Grammar of the English Language*. London: Longman.
- Quirk, Randolph & C. L. Wrenn. 1957. *An Old English Grammar*. London: Methuen.
- Rothstein, Susan D. 1988. "Conservativity and the Syntax of Determiners". *Linguistics* 26: 999-1019.
- Samuels, M. L. 1972. *Linguistic Evolution. With Special Reference to English*. Cambridge: Cambridge University Press.
- Schlauch, Margaret. 1959. *The English Language in Modern Times*. London: Oxford University Press.
- Speas, Margaret J. 1990. *Phrase Structure in Natural Language*. Dordrecht: Kluwer.
- Stockwell, Robert P., Paul M. Schachter & Barbara Hall Partee. 1973. *The Major Syntactic Structures of English*. New York: Holt.
- Stowell, Timothy. 1981. *Origins of Phrase Structure*. Ph. D. diss. MIT.
- Strang, Barbara M. H. 1970. *A History of English*. London: Methuen.
- Sweet, Henry (rev. Norman Davis). 1953. *Sweet's Anglo-Saxon Primer*. Oxford: Clarendon Press.
- Visser, F. Th. 1963-1973. *An Historical Syntax of the English Language*. Leiden: Brill.
- Wyld, Henry C. 1936. *A History of Modern Colloquial English*. Oxford: Blackwell.