

# Morphosyntactic Categories and the Expression of Possession

*Edited by*

Kersti Börjars, David Denison  
and Alan Scott

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Kersti Börjars

David Denison

University of Manchester

Alan Scott

University of Nottingham



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## Morphosyntactic Categories and the Expression of Possession

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### **Volume 199**

**Morphosyntactic Categories and the Expression of Possession**  
Edited by Kersti Börjars, David Denison and Alan Scott

# Introduction\*

Kersti Börjars, David Denison & Alan Scott

The papers in this volume deal with the morpho-syntax of possessive markers and the distribution of phrases expressing possession in a range of languages, but the English possessive 's takes centre stage. In terms of attention received per character, the English possessive is probably one of the most intensively studied elements in the linguistic literature. This is because it provides a window on a range of issues that have a direct impact on assumptions about the architecture of grammar. A study of the possessive 's leads to questions about the relation between morphology and syntax and how these interrelate with phonology, it bears on assumptions about historical change, on the interaction between semantic and structural constraints on a construction and on the interaction between syntax and information structure.<sup>1</sup> In almost every single one of these areas, the behaviour of possessive 's has led to discussion and disagreement in the literature. The articles in this volume illustrate this breadth of issues raised by the behaviour of the English possessive 's and the variation in analysis of that behaviour. It is also interesting that corresponding elements in other languages give rise to similar issues. In the case of Germanic languages (see Haegeman this volume and Koptjeskaja-Tamm this volume) that may not be surprising, but there are also parallels with similar constructions in a range of other languages, as illustrated by Bögel and Butt (this volume) and O'Connor, Maling and Skarabela (this volume).

Historically, the possessive has developed from an ending which formed part of a full-blown case system. The Old English genitive contrasted with nominative, accusative and dative, and as a case form it not only appeared in adnominal possessors but also marked noun phrases governed by certain verbs and prepositions. Furthermore -(e)s was only one of the endings marking the genitive case. The properties and distribution

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\* This volume contains a selection of papers originally presented at the workshop *Morphosyntactic categories and the expression of possession* held in Manchester on 3 & 4 April 2009. The workshop was organised as part of the Arts and Humanities Research Council-funded project *Germanic possessive -s: an empirical, historical and theoretical study* which was carried out at the University of Manchester between September 2006 and August 2009.

1. Throughout this introduction, we use CONSTRUCTION in the non-technical traditional sense, not in the sense of Construction Grammar.

of Present-Day English possessive 's are complex, but so is the history of its development from the original case marking, and a number of the articles in this volume take a historical perspective (in particular Allen and Juvonen, this volume). The Germanic languages vary in the way in which the genitive marker has developed. Icelandic maintains a case system similar to that of earlier stages of Germanic, the Mainland Scandinavian languages have undergone a change similar to that of English, whereas Dutch and German have developed a similar element, but with a much more limited distribution. Haegeman (this volume) provides a detailed examination of a variety of Dutch spoken in West Flanders which has developed two separate expressions of possession, neither of which derives from the original genitive.

Considering the formal properties of the Present-Day English possessive 's (and by extension of the Mainland Scandinavian languages), the possessive has traditionally been described as a clitic, that is as an essentially syntactic element which shares some properties with morphological elements. In the theoretical literature, it has been analysed as a syntactically independent element, usually found under the D node (e.g. Abney 1987), but one which differs from a word in that it lacks independence and hence needs a host. The connection to this phonological host is generally assumed to be less integrated for a clitic like possessive 's than it is for a morphological affix (see for instance the influential criteria put forward by Zwicky & Pullum 1983). Any analysis of possessive 's will then have to deal with this dual behaviour. In this volume, Anderson and Hudson illustrate the range of ways in which this can be done.

Though the analysis of clitics as standardly defined is in itself a complex matter for morphosyntactic theory, evidence emerged that the behaviour of the possessive 's is more complex than had been assumed. Zwicky (1987) showed that 's displays a closer attachment to its host than expected of a clitic; it has properties more akin to those of an affix. Hence the simple dichotomy between affix and clitic does not offer a sufficiently subtle classification to accurately describe the behaviour of possessive 's. This has led to an analysis of it as a PHRASAL AFFIX or EDGE AFFIX (see for instance Zwicky 1987; Miller & Halpern 1993; Payne 2009). In some of the literature, these two terms are used interchangeably to indicate that an element positions with respect to a phrase as a clitic would, but it attaches like an affix. In more recent work, a distinction is made between the two, as discussed by Anderson (this volume). Both phrasal affixes and edge affixes are the result of a feature introduced at phrasal level, but they differ in how they find their exponence. On this more subtle view, the phonological material associated with a phrasal affix is the result of an operation on the phrase – it is phrasal morphology in Anderson's terms (2005, this volume), with post-lexical rules being responsible for the final shape of the possessive marker. These elements are the SPECIAL CLITICS of Zwicky (1977). An edge affix, on the other hand, results when a phrasal feature percolates down the right or the left side of the branches of a tree until it reaches a terminal node, a word, where it is realised by ordinary

word-level morphology. Anderson (this volume) argues that possessive 's is a phrasal affix in these terms, whereas Miller & Halpern (1993) and Payne (2009) argue that it is an edge affix. Bögel & Butt (this volume) deal with the Persian and Urdu possession marking *ezafe* construction, which has been analysed as involving the morphological component. They argue that a better analysis treats *ezafe* as a syntactically independent element which gets its non-independent properties through post-lexical prosodic constraints. Though their analysis is couched in a different framework from that assumed by Anderson, the resulting analysis shows similarities with his.

The unorthodox clitic behaviour of the possessive 's in terms of attachment to its host has then been extensively discussed in the literature. However, another property crucial to its analysis as a clitic has not been disputed; its status as a right edge element. However Denison, Scott & Börjars (2010) provided evidence from a spoken corpus that the distribution of possessive 's is not entirely consistent with the placement of a right edge element, be it a clitic, a phrasal affix or an edge affix. Crucial to its description as a clitic is the so-called 'group genitive' construction (Jespersen 1909), in which the possessor is post-modified, so that the possessive 's would be expected to attach straightforwardly on the final word, much like the auxiliary clitic 's (for *is* or *has*) does. However, data analysed by Denison, Scott & Börjars (2010) showed that group genitives are very rare and that speakers employ a number of alternative strategies in order to avoid attaching the possessive 's to an element other than the head. Börjars, Denison, Krajewski & Scott (this volume) analyse the data in more detail and suggest that this can be described as 'structural persistence': the structural behaviour of the element from which the possessive 's developed influences the distribution of the current element (compare Hopper 1991).

One of the alternative constructions that Börjars, Denison, Krajewski & Scott argue provides evidence that speakers avoid the group genitive is the 'split genitive', a construction in which the postmodifier occurs to the right of the possessive 's, thereby allowing the possessive 's to attach to the head noun, as in *the man's car who you were talking to*. Split genitives occur in earlier stages of English but have been assumed to have disappeared by the 17th century. Given their existence in a modern corpus, the question arises whether they in fact did not disappear but just decreased in frequency for a period of time (as the possessive 's itself did, see discussion in Szmrecsanyi, this volume). Allen (this volume) provides a detailed historical corpus analysis of the distribution of possessors with postmodification and concludes that the two constructions are not related, so that the modern split genitive is not a continuation of the older construction.

Historical corpus studies have played an important role with respect to a number of disputed issues relating to the development of the English possessive 's and its Germanic cognates. For English, the role of the so-called *his*-genitive, as in *adam is sune* 'Adam's son', in the development of the modern possessive 's has been a point



of dispute. One line of argument is that the construction involves the possessive pronoun *his*, on a par with the Dutch construction *Adam z'n zoon* 'Adam's son' (literally 'Adam his son'), and that the possessive 's developed from this element. However, Allen (2003) settles this debate by convincingly demonstrating that (*h*)*is* in these English examples is in fact an orthographic variant of 's. Haegeman (this volume) provides a detailed examination of two possessive constructions in West Flemish which are superficially similar both to each other and to the Dutch construction. However, Haegeman's detailed study shows that some of the apparent historical connections are just that: apparent.

Historical studies of the changes involved in the development from the genitive *-(e)s* ending to the modern possessive 's have also led to a lively debate about the nature of this development. Under the traditional approach to morphosyntactic categories, there are only two types of bound element, affixes and clitics. The original genitive case ending had the hallmark of an affix, and since the present-day element behaves differently, it must be a clitic, the argument goes. This would be a change from more to less grammatical and hence an example of degrammaticalisation. In fact the English possessive 's has been taken as a paradigm example of degrammaticalisation by many (see Janda 2001; Willis 2007 and many others). The cognate Swedish element has given rise to a similar debate (see Norde 1997, 2001a, 2001b, 2006; Delsing 1999, 2001; Börjars 2003).

Historical studies of possessive 's have revealed interesting variation over time, space and genre. Juvonen (this volume) considers a number of both formal and functional properties of the possessive construction and shows that there is substantial variation in use in the Late Middle and Early Modern period, both with respect to genre and area. In present-day English, the main parameter of variation relates to the use of possessive 's versus the *of* possessive. Based on tests involving native speakers' grammaticality judgements, Rosenbach (2002, 2003, 2005) established the relative importance of different factors in the choice between the two constructions. She tests for animacy and topicality of the possessor and for the degree of prototypicality of the possessive relation and concludes that animacy is the most important factor, followed by topicality, with nature of possessive relation being the least important factor. In a sophisticated statistical analysis of corpus data, Hinrichs & Szmrecsanyi (2007) consider a broad range of potential factors in variation. One conclusion drawn on the basis of their analysis is that the use of the possessive 's construction is spreading at the cost of the *of*-construction and more so in some genres than in others. They argue that this is at least partly due to the fact that the possessive 's construction can be described as a more compact and economic coding option than the *of*-possessive. In this volume, Szmrecsanyi keeps genre constant in a thorough statistical analysis of newspaper texts from the Late Modern English period. He shows that the increase in the use of the 's possessive

has not been linear but has a V-shape, with a slump in the first half of the 19th century, largely due to animacy less strongly favouring the 's possessive, though he shows that it involves a complex interaction of a range of factors.

A variation less studied in the literature is that between the COMPOUND POSSESSIVE (*a Picasso painting*) and the 's possessive. Koptjevskaya-Tamm (this volume) is a notable exception. Given that the compound possessive can be described as formally more compact and economic than the possessive 's, and given Hinrich & Szmrecsanyi's (2007) assumption that the rise of possessive 's is due to its compactness, it would be interesting to see an analysis of the relative frequency of these two constructions. Another less well-studied expression of possession is the focus of Payne (this volume) – a construction he refers to as the OBLIQUE GENITIVE, as in *a friend of the Prime Minister's*. Though it occurs as an alternative to other ways of expressing possession, he argues that it is an independent construction with its own distinctive properties and one of the choices available to speakers.

The study of the choice between different ways of expressing possession has formed a key theme in the study of the English possessive 's. It is interesting here to note that most if not all of the languages referred to in this book have more than one way of expressing possession. In some cases, two ways of expressing possession differ in the order of possessor and possessum, as in the two English constructions POSSESSOR'S POSSESSUM versus POSSESSUM *of* POSSESSOR, and the two Urdu constructions described by Bögel & Butt (this volume). West Flemish, as described by Haegeman (this volume), has two alternative constructions, both with the POSSESSOR < POSSESSUM order. O'Connor, Maling & Skarabela (this volume) consider the factors influencing the choice between constructions in a broader typological perspective. They perform a corpus study of American English (through parts of the Brown corpus) with respect to three factors: animacy, weight and topicality (for which they use NP form as a proxy). They find clear statistical correlations between these factors and the choice of expression of possession, and the results correspond to earlier work by Rosenbach (2002) and by Hinrichs & Szmrecsanyi (2007). These statistical correlations lead to important questions for syntactic theory: are these tendencies part of the grammar, or do they belong in some extra-grammatical component that captures language use separately from grammar? One argument that has been used in the literature to argue in favour of stochastic information being included in grammatical knowledge is that captured as 'soft constraints mirror hard constraints' (see Bresnan, Dingare & Manning 2001). If a factor is implicated in a categorical distinction in one language, it must be assumed to be part of the grammar. Then, according to this line of reasoning, it can reasonably be assumed that the same factor is part of the grammar also when it does not have categorical effects but just determines the likelihood of a particular construction being used. By comparing the outcome of their study of an English corpus with the behaviour of possessives in a typologically diverse set

of languages, O'Connor, Maling & Skarabela (this volume) show exactly these effects for the possessive. The factors that lead to preferences in English show categorical effects in other languages. They conclude from this that the statistical preference patterns displayed by English usage need to be represented in a model of grammar. Hudson (this volume) and Börjars, Denison, Krajewski & Scott (this volume) are sympathetic to this approach.

The diversity of approaches and conclusions of the chapters in this volume attest to the productive and inquisitive spirit that characterised the Manchester workshop. This volume can hardly resolve once and for all the debate on the status of the English possessive *-s*; the chapters presented here do, however, represent the current state of the art of research into possession marking in the Germanic languages and beyond.

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# Dealing with postmodified possessors in early English

## Split and group genitives

Cynthia L. Allen

Post-modified possessors have always been problematic in English because with such complex possessors the desire to put a topical possessor before the possessum brings into conflict two principles which English and many other Germanic languages strive to follow, namely that (1) the head of the possessor phrase should get the possessive marking and (2) the marking of the possessor phrase should be adjacent to the possessum, i.e. at the right edge of the possessor phrase. The so-called 'group genitive' found in the phrase *the king of France's daughter* satisfies the second ('right edge') principle but violates the first ('head marking'), while the alternative 'split genitive' *the king's daughter of France* obeys the first principle but destroys the unity of the possessor phrase.

This paper documents the rise of these two constructions in English and the rather abrupt favouring (in writing, at least) of the group over the split genitive near the beginning of the Early Modern English period. It also investigates the role and nature of the complexity of the possessor phrase in the choice between the two constructions in the period (e2, 1570–1639) when both constructions are common in English writings. It is clear that the group genitive has always been favoured when the post-modification was of the simple and easily processed sort found in *the king of France*, while the split genitive was generally used to position the possessor N at the right edge of the possessor phrase when the post-modification was of a more complex sort. However, although there is a strong correlation between the complexity of the possessor phrase and the choice of construction, other factors were clearly at play also and need to be investigated further, as does the relationship between the disfavouring of the split genitive and the availability of an alternative construction in which a complex possessor is post-nominal within a prepositional phrase, e.g. *the daughter of the king of France*.

It is widely assumed that the development from the split genitive to the group genitive in English was a simple matter of the reanalysis of the possessive marker from an inflection to a clitic, but some minor constructions that we find in the period when the group genitive was gaining ground over the split genitive raise difficulties for such an assumption. For example, sometimes the possessive

marker appears both on the possessor N and at the edge of the complex possessor of phrase, e.g. *my lordys of Warwykys shyp* 'my Lord of Warwick's ship', and in other examples a complex possessor phrase is placed before the possessum but only the head is marked, e.g. *my lordes of Suffolk men* 'my Lord of Suffolk's men'. Such examples as well as some other facts seem most consistent with an analysis which treats the possessive marker found in the group genitive in the morphology, rather than in the syntax. Thus the diachronic facts support a sort of analysis which has been proposed for English solely on synchronic facts.

## 1.1 Introduction

Speakers and writers of English have always had more than one possessive construction at their disposal, allowing them to place the possessor phrase either before the possessum or after it. However, both prenominal and postnominal possessor phrases have changed significantly between Old English and Present-Day English. This paper presents the results of an investigation into a particular type of prenominal possessor phrase in the history of English. Specifically, the paper focuses on the treatment of prenominal possessor Ns which are postmodified by prepositional phrases, e.g. *the king of France*. Possessive constructions involving this sort of complex possessor phrase are of particular interest because they bring into conflict two strong principles which have been identified, for example by Börjars (2003), as important in determining where the possessive marker should be placed in the possessor phrase. While Börjars' paper is concerned primarily with Swedish, the principles that she discusses are relevant to English also.

The first principle is that the head of the possessor phrase, i.e. the possessor N, should get the possessive marking. The second is that the possessive marking should come at the end of the possessor phrase, and so as close to the possessum as possible. In the most common sort of possessive phrase, such as *the king's son*, there is no conflict between the two principles because there is no modification of the possessor N *king*, and so the possessive marker is both attached to the possessor N and at the right edge of the possessor phrase. When we replace the possessor phrase *the king* with the more complex possessor phrase *the king of France*, however, matters are not so simple.

The grammar of Present-Day English allows the possessive marker to be placed at the end of the possessor phrases like this, where the possessor N is postmodified and therefore not at the right edge of this phrase. This construction is usually called the 'group genitive', following Jespersen (1894: Chapter 8; 1946: §17). The syntax of the group genitive in Modern English and other languages with a similar construction, such as Swedish, has excited a good deal of interest among linguists. The question of whether the phrase-final possessive marker should be treated as an inflection or a clitic has been the subject of much debate, and the papers in this volume by Anderson and

Börjars, Denison, Krajewski & Scott attest that there is still no consensus on this issue. Since this possessive marker was indisputably a case inflection in Old English, the question of when this marker developed clitic-like properties is one of the central questions which requires a thorough investigation if we are to understand the development of possessive constructions in English. The group genitive is also found in Middle English:<sup>1</sup>

- (1) **but þe kyng of Fraunces men weren i-slawe**  
 'But the king of France's men were slain'  
 (CMPOLYCH, VIII, 349.380)

As is well known, the group genitive was an innovation of Middle English. However, at the time when the group genitive first appeared in English writings, it was considerably less common than an alternative construction which is usually known as the 'split genitive'. In this construction, the possessor phrase was split around the possessum:

- (2) *Also he gaf hym þe earles douzter of Gloucetre to wif,*  
 also he gave him the earl's daughter of Gloucester for wife  
 'also, he gave him the earl of Gloucester's daughter as his wife'  
 (CMPOLYCH, VIII, 87.3556)

Although some examples of the split genitive are found in the late 17th century (Altenberg 1982: 69, Denison & Hogg 2006: 119, Rissanen 1999: 202–3), it is usually assumed that this construction was actually pretty much dead by the end of the 16th century. For example Jespersen (1942: §17.2) notes that Wallis' grammar (1653: 81) mentions only *the king of Spain's court* but not *the king's court of Spain* and says that the group genitive may be considered the settled pattern from the Elizabethan period. Rissanen (1999: 202) considers that the split genitive gives way to the group genitive in the 16th century. Jespersen does note that Ben Jonson's grammar, published posthumously in 1640, mentions that *the Dukes men of Mysia* alternates with *the duke of Mysias men*, but concludes that this statement might just be conservatism on Jonson's part.

However, recent work by Börjars, Denison, Krajewski & Scott (this volume) has shown, that the split genitive is by no means dead in spoken contemporary English. Earlier reports of the demise or nearly complete disappearance of the split genitive by the end of Queen Elizabeth's time appear to have been premature. It is therefore worthwhile to re-examine the history of the split and group genitives in writing, using electronic corpora which were not available until recently. It is the primary goal of this paper to establish the nature and use of the group and split genitives in English writings up to the end of the Early Modern English period, that is, up to around 1700. Both these constructions were available to put the possessor of

1. In the examples in this paper, the possessor phrase will be in bold font. The reference given for an example taken from an electronic corpus is in the form used by that corpus.

a complex possessor phrase, i.e. one in which the possessor was postmodified, in a prenominal position. However, the two constructions differed in their morphosyntactic characteristics, in their frequency of use, and in the factors which favoured one construction over another.

The paper is structured as follows. In the remainder of this introductory section, I introduce the corpora used in this investigation. Section 2 discusses the situation in Old English. Since the group genitive is not yet found in that period, this section is devoted to various constructions which have been called ‘split genitives.’ Section 3 outlines the introduction of the group genitive in Middle English. Section 4 is devoted to a detailed examination of the characteristics and frequency of use of the group and split genitives in subperiods of Middle and Early Modern English. Special attention is devoted to the marking used in these genitives, as other interesting patterns are found besides the prototypical group and split genitives which have been mentioned above. Section 5 looks at some factors which influenced the choice of the group or split genitive, and the findings of the investigation are summarized in Section 6.

1.1.1 The corpora

The data presented in this paper come from searches of syntactically parsed electronic corpora which distinguish the historical periods used by the original Helsinki corpus (Rissanen & Ihalainen 1991), namely m1–m4 for Middle English and e1–e3 for Early Modern English. Middle English data for all periods come from Kroch & Taylor’s (1999) *Penn-Helsinki Parsed Corpus of Middle English* (second edition), henceforth PPCME2. For the m3 and m4 periods we also have some letters which are included in the *Parsed Corpus of Early English Correspondence* or PCEEC (Taylor, Nurmi, Warner, Pintzuk & Nevalainen 2006). For all Early Modern English periods, we have a large corpus of letters in this corpus as well as more material in the Penn Corpora (Penn1, Penn2) and the parsed version of the Early Modern English contents of the Helsinki Corpus. There is some overlap between the PCEEC and the Penn Corpora, so I have excluded the overlapping Penn Corpora files from my searches. The corpora used for the various periods are set out in Table 1, which indicates the number of words in each corpus.

Table 1. Middle English and Early Modern English corpora and periods

Period	Date	Corpora	Words
M1	1150–1250	PPCME2	195,494
M2	1250–1350	PPCME2	93,999
M3	1350–1419	(combined)	405,499
		PCEEC	19,505
		PPCME2	385,994

(Continued)



Table 1. (Continued)

Period	Date	Corpora	Words
M4	1420–1499	(combined)	624,433
		PCEEC	364,317
		PPCME2	260,116
E1	1500–1569	(combined)	853,926
		PCEEC	309,220
		Penn1	182,188
		Penn2	176,322
		Helsinki	186,196
E2	1570–1639	(combined)	1,526,824
		PCEEC	910,675
		Penn1	209,108
		Penn2	220,666
		Helsinki	186,375
E3	1640–1710 <sup>1</sup>	(combined)	1,108,223
		PCEEC	555,415
		Penn1	193,893
		Penn2	181,457
		Helsinki	177,458

<sup>1</sup> E3 officially ends at 1710, but both the Helsinki Corpus and the Penn supplements contain a small number of texts from the 1710s.

## 1.2 Old English

Possessor phrases in the genitive case could occur either directly before or directly after the possessum in Old English. In either position, all modifiers of the possessor N were also marked for genitive case. The postnominal genitives died out in the Early Middle English period and will not be considered in this paper, but some interesting differences with the prenominal genitives are discussed in Allen (2008: Chapter 3). In the prenominal genitive, the head of the possessor phrase always got genitive marking and was furthermore always at the right edge of that phrase.

### 1.2.1 Split genitives in Old English

It is natural to assume that the split genitive of Middle English is the continuation of a similar construction in Old English. That is, we might assume that we would find Old English examples like *ðæs cyninges sunu frances*, which would be parallel to *the king's son of France* with two important differences. First, genitive case is marked not only