Review of *Morphosyntactic Categories and the Expression of Possession*

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1 Introduction

The book *Morphosyntactic Categories and the Expression of Possession* collects 11 papers that were originally presented at the workshop *Morphosyntactic Categories and the Expression of Possession*, which took place in Manchester on the 3rd and 4th of April 2009. The theme of the workshop, namely the realization of the concept of *possession* (across languages, with a focus on English) through various morphosyntactic constructions, has long been a challenge to linguistic theories. The papers all investigate aspects of the morphosyntactic marking of possession from the perspective of a variety of linguistic theories. Since in all of the surveyed languages there are different constructions available for realizing possession, particular attention is paid to the distribution of the relevant constructions, using corpus data and statistical analysis.

2 Summary

In the *Introduction*, **Kersti Börjars, David Denison and Alan Scott** set the stage for the volume by touching briefly upon the historical and theoretical implications of the construction that takes centre stage throughout the volume: the English genitive *s*. They also mention its usage in different constructions, all of which to be discussed in the volume (e.g., the group genitive vs. split genitive). They further note that this marker has received much attention in the literature, as it provides a window on a range of issues that influence the way we think about the architecture of grammar. They sketch the development of the marker as well as its theoretical treatments over time — as regards the latter, they draw attention to the literature on clitics vs. phrasal (edge) affixes. Moreover, the introduction mentions that most languages referred to in the volume have more than one way of expressing possession, noting in particular West Flemish and Urdu; here, it becomes clear that while the focus of the book is clearly on English (including its earlier stages), other languages are taken into consideration as well.

The first paper in the volume, by **Cynthia L. Allen**, *Dealing with postmodified possessors in early English — Split and group genitives*, takes a diachronic look at two post-modified possessor constructions in the development of written English: the group genitive construction, as in (1a), on the one hand, and the split genitive construction, as in (1b), on the other hand. Allen states that

in general, postmodified possessors bring about two conflicts with principles of English grammar (and other Germanic languages) — the first principle states that it is the head (i.e., not some complement) of the possessor phrase which should receive the possessive marking, while the second principle states that the possessive marking should be adjacent to the possessum (i.e., at the right edge of the possessor phrase). Group genitives such as (1a) violate the first principle; split genitives such as (1b) violate the second principle.

(1) a. the king of France's daughter
b. the king's daughter of France

Through careful analysis of a host of corpora, Allen documents the rise of the group genitive in the late Middle English period, and further the quite sudden favouring of the group genitive over the split genitive, which took place near the start of the Early Modern English period (but see below for a different angle on the grammatical availability of the split genitive to speakers of English). For the period where both strategies were available (Allen refers to that period as *e2, 1570-1639*), she provides evidence for the claim that the complexity of the involved possessor phrases plays a role: it turns out that the group genitive has always been used predominantly where possessor phrases were maximally simple and involved only the possessor N premodified by a determiner or a possessive and postmodified by the simplest possible PP. The split genitive, on the other hand, was found where possessor phrases had more premodifying material than just a determiner (i.e., titles, adjectives, etc.). Allen plausibly ties this to processing factors: the group genitive was favoured when the possessor was short and simple and thus did not involve much effort to create or parse the resulting structure.

The second paper, *Variation in the form and function of the possessive morpheme in Late Middle and Early Modern English* by **Teo Juvonen**, in a way supplements the preceding paper by Allen as it surveys the use of different strategies in the morphological marking of the possessive in a corpus of about 900.000 words of Late Middle and Early Modern English. The corpus comprises sermons, historical writings and letters. The morphological strategies discussed by Juvonen are: *s*-ending as in (2a), *s*-less ending as in (2b) and separated genitive as in (2c). Unfortunately, the examples in the paper do not include full glosses (i.e., the morphosyntactic glossing as well as the translations are missing); for most of the Early Modern English data this is not a severe shortcoming, but some of the Middle English data are in part hardly intelligible. It is for this reason that the examples below do not contain glosses and translations.

(2) a. the Kynges brother
b. wyth onye of my maister councell.
c. to yower worly worschyppe and herte ys desyre.

Juvonen also discusses the different morphosyntactic contexts that the genitive occurs in, e.g., specifying genitives as in (2a), descriptive genitives as in (3a), locative genitives as in (3b), among others. He then examines the different text types (sermons, historical writings, letters) with respect to these morphosyntactic contexts and finds that the possessive appears in the same structures as in present-day English; he also notes that the three mentioned genres show significant differences in the distribution and that private letters make the most varied use of the possessive. Naturally, the genres also show differences with respect to the possessor type, which Juvonen classifies into the categories *Human*, *Your*, *King*, *God*, *Collective*, *Animal* and *Inanimate*. The increased use of the categories *Your* in letters and *God* in sermons is expected, for example.

(3) a. an yryn rammys horne
b. shee should com home, eyther hither or to her fathers

The rest of the paper focuses on the different possessive encoding strategies, and how they were used across the different genres. One important finding from this section of the paper forms a counter-argument against the claim that the separated genitive constitutes an intermediate stage between the Old and Middle English inflectional genitive and the present-day possessive. The claim entails that the separated genitive marker is in fact associated with the third person possessive pronoun;

however, as Juvonen shows, most writers used two different words for the separated genitive marker (*ys*) and the third person possessive pronoun (*his*), thus presenting evidence against the original claim. Juvonen also includes a discussion of the placement of the possessive morpheme in complex possessors, which is central in determining its morphosyntax; unfortunately, the discussion suffers from the data sparsity (as complex possessors are infrequent in the material used) and stays inconclusive as individual writers exhibit much variation in the morphological marking of split vs. group genitives. What is affirmed by Juvonen is the fact that the group genitive had become the dominant form by the end of the 15th century (as discussed by Allen); he gives the split genitive example in (4), and mentions that by the latter half of the 17th century there seems to be increasing uncertainty about the status of the *of*-phrase: does it modify the possessor *a Bishops* or the possessum *son*?

(4) it was Gerelius a Bishops son of Suedeland

Based on this observation, Juvonen suggests that the group genitive replaced the split genitive because of grammaticalization and semantic bleaching of the preposition *of*: he claims that this is what caused the *of*-phrase to be linked more closely to its head, thus disabling the split genitive.

The third paper in the collection titled *The great regression* by **Benedikt Szmrecsanyi** again looks at possessive encoding strategies in English, this time focusing on the *s*-genitive/*of*-genitive alternation in Late Modern English news texts as in (5a) vs. (5b). By using the ARCHER corpus (more specifically: the British English news texts section of the ARCHER corpus), the paper first documents the collapse in the frequencies of the *s*-genitive in the early 19th century, and its subsequent recovery. The goal of the paper is to explain the v-shaped pattern in the variability of the strategies by taking into account different conditioning factors.

(5) a. the president's speech
    b. the speech of the president

Szmrecsanyi views any subtle changes in the conditioning factors as evidence of a change in the genitive choice grammar of English. The study thus explores the degree to which syntactic change manifests by changing the weights of the following language-internal factors: genitive relation, possessor animacy, possessor length, possessum length, possessor phonology, possessor givenness, possessor thematicity, lexical density. In addition, three language-external factors are considered: corpus file, ARCHER time slice and year. The considered portion of ARCHER was annotated (in part automatically using Perl scripts, in part manually) for these factors; the paper discusses the factors' relevance in some detail. Some of this annotation is done in a rather simplistic way; e.g., when annotating possessor givenness, the annotation considers a possessor instance as given if the same word had already occurred in a local discourse context of 50 words prior to the instance. This excludes, e.g., synonyms, renaming, etc.

Szmrecsanyi mentions the problem that by only looking at the frequency distributions of said factors, nothing can be said about the actual changes in the genitive grammar of English, since the input frequencies could also have changed; e.g., there are more institutional (i.e., inanimate) possessors in Late Modern English texts than in Early Modern English ones. The study thus explores whether the genitive frequency changes are merely a function of variable input frequencies (and these are in fact responsible for the v-shaped pattern observed). To do so, a linear regression model is fit that tries to predict a dependent variable (the *s*-genitive proportions) from several independent variables (e.g., *possessor animacy*). The minimal model contains three independent variables: mean possessum length, percentage of human possessors, percentage of ownership relations; Szmrecsanyi explains that the model accurately predicts the decrease in *s*-genitive frequencies in the first half of the 19th century and their recovery, but fails to explain the extent of the decrease as well as the extent of the recovery (in fact surpassing the *of*-genitive).

Therefore, a second model was built using mixed-effects binary logistic regression analysis. The aim here was to bring time into the equation — i.e., to examine whether human possessors favoured the *s*-genitive more strongly in the 17th century than in the 20th century. The dependent variables no longer are the aggregated *s*-genitive frequencies, but individual coding decisions (*s*-genitive vs. *of*-

genitive) for a given gentitive instance in a given corpus text. The minimal model has a predictive accuracy of 96% (i.e., 96% of the genitive occurrences' coding strategies can be correctly predicted by the model) and shows that interaction between the variables *ARCHER time slice* on the one hand and *genitive relation*, *possessor animacy*, *possessum length* and *possessor thematicity* on the other hand accounts for most of the variability. This allows Szmrecsanyi to draw a number of interesting conclusions with respect to genitive grammar change over time. For example, in the first ARCHER period, if there was an *ownership* genitive relation to be encoded, the odds in favour of an *s*-genitive increased by a factor of 19, while in the last period, the corresponding value is 243. Another conclusion drawn by Szmrecsanyi explains why the slump in the *s*-genitive frequencies around the first half of the 19th century was so much more severe than expected: this has to do with a change in the status of the factor *possessor animacy*. While the sheer input frequencies of human possessors dropped, the animacy constraint (due to which human/animate possessors favour the *s*-genitive) was relaxed — an actual change in the grammar of genitive choice speeding up the decrease in *s*-genitives.

How does all of this help in understanding the morphosyntactic status of the *s*-genitive across the periods? Szmrecsanyi, by employing Lehmann's *paradigmatic variability* parameter (Lehmann 1995), notes that in grammaticalization processes, it is common that "expressions for human concepts come to be used also for concepts that are inanimate", citing Heine (1997). Thus, dropping the selectional restriction concerning animacy in 19th century news texts can be seen as a sign of grammaticalization. Conversely, the increasing sensitivity of the *s*-genitive towards the factors *possessor thematicity* and *possessum length* can be seen as a development towards a freer "choice of items according to communicative intents" (Lehmann 1995, 164) and thus as degrammaticalization. The fact that the *s*-genitive increasingly attracted ownership relations can be explained using the *paradigmatic integrity* parameter, again by Lehmann (1995): grammaticalization involves semantic bleaching until only grammatical features remain; here, however, we find the opposite process, where lexical-semantic features (i.e., ownership) are in fact added to the *s*-genitive. Thus we again find degrammaticalization.

The fourth paper by **Catherine O'Connor, Joan Maling and Barbora Skarabela** titled *Nominal categories and the expression of possession — A cross-linguistic study of probabilistic tendencies and categorical constraints* is the first paper in the collection that moves beyond English in presenting a cross-linguistic study of what the authors call the Monolexemic Possessor Construction (MLP). The aim of the paper is to compare the stochastic patterns of prenominal possessives in English to the MLP found in a variety of languages (Germanic, Slavic, Romance). The choice of a prenominal possessive over a postnominal one in English correlates strongly with the features animacy, weight and discourse status, but is not categorical in nature (i.e., in a given context, a certain coding choice may be more probable than the other). This is not the case with the MLP; in this construction, the possessor occurs immediately left to the possessum, and the possessor may not be longer than a single word, as in the Czech examples in (6a–a'). If the possessor is to be expressed as a full phrase, the MLP is ungrammatical (6b), and the full phrase adnominal genitive has to be used as in (6c).

(6) a. Milan-ova kniha
Milan-POSS.ADJ book
'Milan's book'

a'. Kunder-ova kniha
Kundera-POSS.ADJ book
'Kundera's book'

b. * Koupila jsem Milan-ovu Kunder-ovu
buy.PAST.1.SG.FEM be.PRES.1SG Milan-POSS.ADJ.ACC Kundera-POSS.ADJ.ACC
knih-u
book-ACC
'I bought Milan Kundera's book.'

c. Koupila jsem knih-u Milan-a Kunder-y
buy.past.1.sg.fem be.pres.1sg book-acc Milan-gen Kundera-gen
'I bought (a/the) book of Milan Kundera.'

The paper disusses the stochastic generalization put forward by e.g., Bresnan et al. (2001) which asserts that statistically noticeable but noncategorical patterns found in one language (e.g., the genitive alternation in English) often correlate with categorical and inviolable patterns in other languages (e.g., the MLP). The focus of the paper is to show how the very same values of the animacy, weight and discourse status features involved in the English pattern also account for the variation in the MLP/non-MLP pattern, but in a categorical manner. Evidence from Czech, Russian, Icelandic, German etc. is adduced showing that optimal weight, discourse status and (less strictly) animacy are all grammaticalized in the MLP. With respect to discourse status, a cross-linguistically valid accessibility hierarchy ermerges as in (7). If a language has an MLP, it will (always) allow it with pronouns (which are the most accessible elements in discourse); if a language allows it with e.g., kinship terms, it will also allow it with any element occurring to the left of the kinship terms in (7). It would be interesting to see how this typological prediction holds up when looking at an even larger language sample.

(7) *Monolexemic Possessor Accessibility Hierarchy:*
Pronoun ⟩⟩ Proper Noun ⟩⟩ Kinship Term ⟩⟩ Common Noun
Most accessible ⟨——————————⟩ Least accessible

The scale in (7) implies that in a given context, pragmatic decisions must take place to resolve the possessor in an MLP; in particular, the question arises how a possessor is resolved if there are e.g., multiple pronouns available. To address this question, the paper further includes a discussion of whether the categorical restriction is at work in terms of pragmatic communicative decisions, or whether it just constitutes a frozen remnant of the stochastic tendencies observed e.g., in English; by citing elicitation experiments with native speakers of Czech, the authors confirm that the categorical restrictions reflect an active discourse pragmatic requirement.

In the fifth paper, *Expression of possession in English — The significance of the right edge* by **Kersti Börjars, David Denison, Grzegorz Krajewski and Alan Scott**, returns to the topic of *s*-genitive/*of*-genitive alternation in English. The focus of the paper is on the categorization of the *s*-genitive as a clitic or an affix. Analyzing spoken data from the British National Corpus, the authors are especially interested in the right edge criterion, which is key evidence for the *s*-genitive's status as a clitic: the item's ability to occur at the right edge even in cases where the possessor is postmodified, as in e.g., (8).

(8) the man in the car's wallet

The authors conduct a regression analysis based on non-structural factors (animacy, discourse structure, phonology etc.) again confirming the findings of the papers discussed above and of others such as Rosenbach (2002): the animacy of the possessor is the dominant factor in the choice of the possessive. The study then turns to structural factors and discusses a regression analysis examining the influence of weight in the construction choice; the authors mention that while the factor weight is discussed in several studies (cf. the paper by O'Connor, Maling and Skarabela discussed above), fewer studies distinguish as to how the weight is distributed in the phrase. Weight is expected to play a role in choosing the preferred construction since language has the general tendency to put longer constituents at the end of the phrase.

The crucial question for the authors in deciding about the morphosyntactic status of the *s*-genitive then is: what happens if the possessor is postmodified; i.e. if the *s*-genitive does not appear on the head of the possessor phrase, as in (8)? The authors discuss two new variables, length of premodifying sequence as well as length of postmodifying sequence, for checking whether it makes a difference where the weight of the possessor is located: before or after the head. It turns out that the effect of premodification is weaker than of postmodification, so that the latter decreases the odds of the

s-genitive more strongly (unfortunately, the data the authors work with is too sparse to examine any further the effects of the actual length of the postmodification). The so-called split possessive (also discussed by Allen in the first paper of the volume) then is argued to be a strategy for avoiding standard *s*-genitives where the possessor contains postmodification, and the data shows a clear correlation between the presence of a split and the length of the postmodification. What is less clear from their account is how the choice of the *escape hatch* (*of*-genitive vs. split genitive) is driven: is this also weight-based, and does the distribution of weight matter in the choice?

For Börjars, Denison, Krajewski and Scott, the evidence adduced is not in favor of a simple dichotomy *affix* vs. *clitic*; in fact, they argue that this is an oversimplification that does not do justice to the mixed properties of the English *s*-genitive and the corresponding Swedish construction examined by Börjars (2003), and propose a spectrum of categories with an *affix end* and a *clitic end*. It sounds reasonable to do away with notions such as *clitic-like affix* and instead recognize the fact that in morphosyntactic reality, things tend to get more complicated than that and certain items display non-uniform behavior.

The sixth paper, *A cognitive analysis of John's hat* by **Richard Hudson**, takes an entirely different approach and presents a cognitive analysis of the English *s*-genitive, couched within Hudson's Word Grammar framework (Hudson 2010). The general assumption here is that a string such as *John's hat* in fact spawns two different syntactic analyses in the mind of a speaker of English. Under the first analysis, the morpheme {*z*} (*morph* in Hudson's terminology) behaves like a suffix and is a direct descendant of the Old English inflected genitive case; here, the string *John's* behaves like a single word which doubles in function as a determiner. Under the second analysis, the same morpheme {*z*} behaves like a clitic (a separate syntactic word POSS, which in Hudsons's view is a special type of determiner and is realized as a suffix) giving rise to the group genitive.

Hudson claims that each of these analyses has advantages and disadvantages for a learner of English. The suffix analysis involves a straightforward morphology/syntax mapping, but the possessor phrase must receive a complex analysis, doubling in syntactic classification as a (possessive) pronoun and a noun (common or proper); it also involves a separate referent in the semantics. Hudson acknowledges that this analysis seems more intuitive in cases where we have simple (e.g., proper noun/one word) possessors, like *John's hat*. On the other hand, when the possessor is complex, and the *s*-genitive is not adjacent to the possessor phrase head (e.g., the possessor involves postmodification), the group genitive is the only analysis available. Here, Hudson states a simple mapping at the syntax-semantics and morphology-syntax interfaces, at the cost of the special morphology involving a clitic.

Hudson thus assumes that in any example, {*z*} will spawn one of the analyses above; everywhere it occurs, it will be either an affix or a clitic. Compare this to the analysis by Börjars, Denison, Krajewski and Scott where the *s*-genitive will only receive a single analysis, retaining all of its morphosyntactic properties in a single entry. Hudson further discusses the construction which is in competition with the *s*-genitive, the *of*-genitive, and argues (like others above) that the variation is due to a processing effect: people prefer the *s*-genitive with short possessors, since they put the *landmark* relation (a semantic relation in Word Grammar terminology) first. If the distance between the head of the possessor and the possessum becomes too large, processing benefits dictate the *of*-genitive. Hudson's account lacks a discussion of the split genitive; it is not evident how this construction can be handled under his account, since the *s*-genitive in such cases seems to display mixed properties (adjacent to possessor head *and* taking scope over the whole possessor phrase).

John Payne's paper *The oblique genitive in English* deals with the construction in (9), which is known as the *oblique genitive* (OG below) and also commonly referred to as the *double genitive*. Payne notes that the construction has previously been analyzed as a variant of the *s*-genitive (e.g., *the Prime Minister's friend*; Payne refers to this as the subject-determiner construction), as a variant of the *of*-genitive (e.g., *a friend of the Prime Minister's*; Payne calls this the *of*-oblique) as well as an equivalent of the partitive (e.g., *one of the Prime Minister's friends*).

(9) a friend of the Prime Minister's

Payne proceeds to compare the OG to all of these correspondents in turn. In short, the OG is much more semantically restricted than the *s*-genitive and involves a quite different pattern in the selection of determiners; the *of*-genitive does not quite stand in complementary distribution with the OG either, and patterns differently with respect to weight; and finally, the partitive always involves anti-uniqueness, while the OG does not always do so, contrary to what is claimed by Barker (1998); see example (10).

(10) that nose of his

The paper comes up with a separate analysis for the OG, carried out on data from the British National Corpus. The analysis presents the insight that the semantic relations realized by the OG in fact constitute a subset of the relations that are possible with the *s*-genitive (as noted by other researchers, such as Barker (1998) and Chomsky (1970), and provides attested examples for 13 different thematic relations occurring with the OG. A further insight from Payne's data analysis is that there are many cases where the OG occurs with a definite article, some of which present clear evidence against the anti-uniqueness claim by Barker (1998).

The question then is brought up what drives the choice between the OG and the *s*-genitive in these cases, and Payne suggests that this choice is largely a matter of information structure: in the *s*-genitive, the referent is identified by first processing the genitive NP, which provides an *anchor* (a term coined by Fraurud 1990) for the identification, while in the OG, the function of that genitive NP anchor is reduced, and processing happens largely by contextual anchors. An analysis along the lines of Abel (2006) involving focus is challenged by Payne; however, since his counterexample involves contrastive stress on the possessor, it does not necessarily speak against Abel's account.

In the eighth paper, *The marker of the English "Group Genitive" is a special clitic, not an inflection* by **Stephen R. Anderson**, the author develops a formal account of the possessive marker s in English. Basically, the paper paints the picture already presented in Anderson (2005), and makes a bigger theoretical point in that Anderson claims that accounting correctly for the English group genitive (EGG below) can tell a general story about various grammatical categories.

Anderson establishes the feature [POSS] (realized by the *s*-genitive) as a feature which is marked on the phrasal level (in his view: on a possessor DP residing in the specifier position of a higher DP), then discusses two quite different accounts of phrasal properties. One is the account that he is in favor of, namely to treat the group genitive as a *special clitic* (Zwicky 1977). Under this account, rules modify the phonological makeup of phrases by introducing what Anderson refers to as "affix-like phonological content" (i.e., clitics or particles) at a certain point within the phrase. These rules are technically not different from morphological rules at the word level. The EGG marker, then, is such a special clitic, introduced at the right edge of a (possessor) DP in a certain structural configuration. The clitic bears the feature [POSS] which is percolated up to the possessor DP via one of these rules.

The other account called "EDGE inflection", as put forward by e.g., Nevis (1986) and Zwicky (1987), treats the group genitive as a special inflectional pattern applied at the edges of words. Here, certain features are identified as EDGE features of a phrase, and transmitted via the daughters of that phrase until they land on a terminal node, where they are realized through inflection. To explain the EGG, this account would involve a feature [POSS] which is identified as of type EDGE: LAST. The feature would then successively walk through the rightmost daughters of the DP tree, and being an EDGE: LAST feature, it is realized only when it lands on the rightmost terminal node.

Anderson mentions that both accounts produce the right facts for the EGG, but the theoretical implications and mechanisms are different: One involves a clitic as a single marker of the [POSS] feature at the edge of the phrase, the other realizes the feature (through intermediate constituents) on a single grammatical word, as an affix. The author then proceeds to discuss some general properties of clitics and affixes, then demonstrates that there are rather clear cases where one analysis is favorable over the other: Heiltsuk clearly makes use of independent clitics for marking determiners, while it seems clear that Australian Kuuk Thaayorre uses edge inflection affixes to mark the ergative. From these examples, Anderson establishes three diagnostics for distinguishing clitics from edge

inflection: selection of certain parts of speech is more likely to apply to affixes; lexical gaps as well as idiosyncratic shapes are more likely to occur with affixes. The EGG shows prototypical properties of clitics, with the exception of the idiosyncratic shapes of possessive pronouns (*my*, *your*, *mine*, *yours* etc.). Anderson accounts for this by assuming that pronouns are special determiners that do not lexicalize just a single terminal node, but an entire DP; with possessive pronouns, this lexicalized DP is assigned the feature [POSS].

Phonologically, Anderson argues that the possessive */z/* is in fact adjoined to the final syllable (instead of being incorporated into it). Here, possessive */z/* is no different from plural */z/*, which is also adjoined. This way, Anderson can nicely account for the data in (11a) vs. (11b), e.g., by saying that two instances of adjoined */z/* are collapsed into one in (11a) (thus in fact modeling the *Haplology Criterion* discussed by e.g., Zwicky 1987), while in the examples in (11b) we only have a single instance of adjoined */z/*; the other one is in fact part of the base syllable.

(11) a. anyone who likes kids' (*kids's) ideas
b. the fuzz's old cars; at Buzz's

Liliane Haegeman discusses two kinds of prenominal possessor patterns in West Flemish, a dialect of Dutch, in the twelfth article titled *Two prenominal possessors in West Flemish*. The paper is of a descriptive nature, and the main focus is to show that, while several other papers propose a unitary account for the two patterns, they actually show different syntactic features and thus cannot have an identical syntax. The first pattern is shown in (12a), referred to by Haegeman as the doubling construction (DC below); the second pattern, called the *sen construction* (SC), is shown in (12b). In (12a), the DP possessor *Valère* is doubled by the possessive pronoun *zenen*, and the latter can also occur on its own; Haegeman mentions that when this is the case, as in (12c), the properties of the pronoun are the same as in the DC.

(12) a. (Valère) zen-en hoed
(Valère) his-MSG hat
'Valère's hat'
b. Valère sen hoed
Valère sen hoed
'Valère's hat'
c. zen-en hoed
his-MSG hat
'his hat'

It is important to note that the possessive pronoun displays double agreement, matching both the possessor (person, gender in the singular, number) as well as the possessum (gender, number). In the SC construction, *sen* does not agree with either; the only restriction imposed by *sen* is that the possessor DP's head be singular. The DC and SC pattern alike with respect to constituency, thematic relations, possessor properties (semantic and syntactic), recursion as well as definiteness. However, the author presents abundant evidence against a unifying approach to the two constructions, including the mentioned agreement patterns, reciprocal possessors, as well as adjacency effects. The latter are discussed by Haegeman at some length: while in the SC, the prenominal possessor DP always occurs adjacent to *sen*, in the DC the possessor may occur in at least two different positions in the containing DP. These patterns can be observed with quantifier phrases, appositives, discourse particles, and others, and Haegeman gives examples of all of these. (13) illustrates the obligatory adjacency for the SC, while (14) shows the possible patterns for the DC; both of these examples involve quantifier phrases.

(13) a. K'ee-n [al [Marie sen boek-en]] gezien.
I have-1SG all Marie sen book-PL see-PTCP
'I have seen all Marie's books.'
b. * K'ee-n [Marie al sen boek-en] gezien.

(14) a. K'ee-n [al [Marie eur boek-en]] gezien.
I have-1SG all Marie her book-PL see-PTCP
'I have seen all Marie's books.'

b. K'ee-n [Marie al eur boek-en] gezien.
I have-1SG Marie all her book-PL see-PTCP
'I have seen all Marie's books.'

Haegeman mentions that the possibility of the possessor to move to the left of the quantifier may be influenced by information structure, although she does not develop this point any further. To account for the adjacency effects, she proposes that there are three different prenominal positions for possessor DPs: in the SC, the possessor occupies a specifier position of an IP in the nominal domain (the details of this particular assumption are not evident), while in the DC, the possessor may either occupy the specifier of DP or the specifier of a higher projection (e.g., the specifier of the quantifier phrase in (14b)). As a more general point, Haegeman suggests that it is because of the agreement pattern in the DC that the possessor may be non-adjacent, which seems like a reasonable assumption.

In a descriptive paper, entitled *A Mozart sonata and the Palme murder — The structure and uses of proper-name compounds in Swedish*, **Maria Koptjevskaja-Tamm** describes Swedish nominal compounds where the first nominal constitutes a personal proper name (proper name compounds — PNC below). The author asserts that there has been little work on such compounds in the past, but that they are nonetheless an important means of constructing possession (in the broadest sense) across Germanic languages. This is illustrated by the fact that the said compounds are (almost) synonymous with other possessive nominals (using the Swedish equivalents of either the *s*-genitive or the *of*-genitive). The natural question brought up by Koptjevskaja-Tamm is what influences the choice between the constructions, but the author also discusses the similarities and differences between PNCs and common noun compounds (CNCs). An empirical/statistical analysis is missing from Koptjevskaja-Tamm's account, as she focuses on an initial description of the compounds, using mainly Google searches and informants.

Discussing the formal properties of PNCs, Koptjevskaja-Tamm notes that they are structurally more simpler and more complex than CNCs — simpler because morphological processes (such as the German *Fugenelemente* ('linking elements')) are rare inside PNCs, but more complex since the proper noun part may itself be morphologically complex. However, this complexity is argued to be deceiving, as proper nouns are lexically fixed expressions; inflectional morphemes, attributive adjectives and other modification are generally integrated parts of the proper nouns involved. This limitation in the formal makeup constitutes a disadvantage when compared to *s*-genitives and postnominal possessives, where such restrictions do not apply, and plays an important role in the choice between the three constructions, according to Koptjevskaja-Tamm.

In what follows, Koptjevskaja-Tamm provides a detailed discussion of the uses of PNCs in Swedish. She establishes that PNCs may be used as proper names (15a–15b) and common nouns (15c); Koptjevskaja-Tamm calls cases such as (15b) and (15c) "commemorative compounds" as they involve no inherent relation between the referent of the proper noun and the common noun head, while (15a), on the other hand, is non-commemorative as there is a clear or inherent relation between the two (note that the *s* morpheme in (15a) is a *Fugenmorphem* ('linking morpheme') rather than an *s*-genitive). Koptjevskaja-Tamm does not provide clearcut characteristics for distinguishing between the two (probably as there aren't any), and acknowledges that commemorativeness must be a tendency at best.

(15) a. Strindberg-s + muse-et
Strindberg-LNK + museum-DEF.SG.N
'the Strindberg museum' non-commemorative, proper name

b. Kristoffer + skola-n
Christopher + school-DEF.SG.COM
'the Christopher school' commemorative, proper name

c. en Gustav Adolf + bakelse
a Gustav Adolf + cake
'a Gustav Adolf cake' commemorative, common noun

PNCs compete with possessive NPs in Swedish for naming streets, churches and other entities; this even happens for one and the same entity: the hospital that goes by the official name *Astrid Lindgren-s sjukhus* is sometimes also named *Astrid Lindgren+sjukhus-et*, which is a PNC. The author notes that the heaviness of the proper noun might play a role, so that longer proper nouns appear mostly with genitives, while shorter ones appear mostly within PNCs. The connection to processing seems obvious (see also the papers by Allen, Hudson, and Payne), but as the exceptions from the rule are numerous, Koptjevskaja-Tamm notes that this must be regarded as a tendency only. The difference between (16a) and (16b), on the other hand, is rather clear: (16a) refers to the particular moustache that was part of Hitler's face, while the PNC in (16b) specifies a typified moustache of the kind Hitler wore. The difference between identifying particular instances and typified instances is general and productive in Swedish (and other Germanic languages, one might add).

(16) a. Hitler-s mustasch
Hitler-GEN moustache
'Hitler's moustache'

b. Hitler + mustasch
Hitler + moustache
'Hitler moustache'

Koptjevskaja-Tamm further finds that PNCs may be created on the spot for anaphoric reference within a discourse, where the function of the compound is thus purely anaphoric and does not reflect an independent category outside of the particular discourse. Here, PNCs also compete with adnominal possessors, and the author sees the alternation in line with Ariel's accessibility theory for noun phrase antecedents (Ariel 1990). Regarding structural simplification, the author explains that a large proportion of PNCs provide concise and salient labels for entities that would otherwise need long descriptions, and therefore lack any direct correspondence with adnominal possessives. Morphosyntactically, PNCs are often chosen over their possessive counterparts where the referent is indefinite (since the possessive NPs normally have a definite interpretation).

Koptjevskaja-Tamm tries to approach two theoretical questions at the end of the paper: 1) whether the issue of (non-)referentiality is relevant for the occurrence of proper names within compounds, and 2) whether the distinction between instance specification and type specification is relevant for choosing between PNCs and the corresponding *s*-genitives. Regarding the first question, the author notes that referentiality is not a fully testable notion with respect to PNCs, and that anaphor to parts of words (i.e., parts of compounds) is fully grammatical, but governed by independent pragmatic principles. In addition, the accessibility of a proper noun referent inside a PNC will depend also on the type of compound; e.g., in commemorative PNCs, pronouns will probably not be able to refer to back to the proper noun of a PNC. Regarding the second question, Koptjevskaja-Tamm again argues for a differentiated approach, as the distinction between instances and types is not always clearcut either (e.g., the English *a Picasso picture* may describe both). She adds that proper names may conflate types and instances, referring to Langacker (1991), and concludes that instead of treating PNCs as a single construction, it might in fact be more fruitful to split the construction apart into several distinct patterns.

The last paper, *Possessive clitics and ezafe in Urdu* by **Tina Bögel and Miriam Butt**, compares two ways of expressing possession in the Indo-Aryan language Urdu. The first pattern exemplified in (17a) uses the genitive case marker *k-* which, according to the authors, can be analyzed in a straightforward way as a case clitic (in the fashion of Butt and King 2004). The second pattern,

shown in (17b), uses the *ezafe*, a loan construction from Persian. The paper discusses the formal properties and syntactic distributions of both constructions and provides analyses couched within Lexical-Functional Grammar (LFG). In the discussion of the grammatical framework, the authors pay special attention to the projection architecture of LFG, where different modules of grammar are interrelated through well-defined projections. This point is of central importance for the alignment of prosody and syntax with respect to clitics.

(17) a. yasin=ki gari
Yassin.M.SG=GEN.F.SG car.F.SG
'Yassin's car'

b. sahib=e takht
owner.M.SG=EZ throne.M.SG
'the owner of the throne'

Focusing on the genitive case marker, the authors note that it may be used for several different functions: kinship, subjects of verbal nouns, objects (of actions, feelings, notions), as well as possession and the description of properties. They establish that the range of uses of the genitive does not vary much from languages such as English; all the uses reflect an abstract sense of possession and express a more or less clearly-defined relationship between two entities. Regarding the genitive's morphosyntax, they find that it agrees in gender and number with the head noun, a unique property among the case markers of Urdu. Otherwise, they state that it adheres to the general head-final syntax of Urdu, and present conclusive evidence for its status as a clitic stemming from coordination and clitic inclusion. In the LFG analysis, the genitive case clitic is the functional head of a possessive case phrase, which ends up as a possessive specifier in the functional structure. The prosodic alignment of the genitive is straightforward: the case clitic integrates with the possessor (*yasin* in (17a)) under a single prosodic node, as this is its prosodic host; syntax and prosody are thus aligned.

The authors then turn to the *ezafe* construction, mentioning that it has been extensively discussed by other papers (e.g., Samvelian 2007), some of which identify it as a clitic, while others see it as an affix and a part of nominal morphology. In Persian as well as in Urdu, the *ezafe* construction displays a head-initial pattern, and modifiers appear to the right, which is exceptional in both languages. Moreover, the *ezafe* always prosodically forms a unit with the head noun to its left, while at the same time licensing modifiers to the right; syntactic function and prosodic realization thus differ. Bögel and Butt discuss the account of Samvelian (2007) in some detail, who argues that the Persian *ezafe* is a phrasal affix. Unlike Anderson (this volume, 2005), however, who refers to phrasal affixes as *special clitics* using the terminology of Zwicky (1977), Samvelian analyzes *ezafe* as part of word-level morphology, and not as being introduced post-lexically; Samvelian's main evidence comes from other phrasal affixes which seem to be in complementary distribution with the *ezafe*, thus they must be generated on the same level by the *Haplology Criterion* (see, e.g., Zwicky 1987). Bögel and Butt challenge Samvelian's morphological account and argue that different groups of phrasal affixes might belong to different classes, and that the *Haplology Criterion* must not hold in the morphological component, but may in fact apply in the phonological/prosodic part of the grammar (see Anderson's paper in this volume for an example involving syllables).

Bögel and Butt's own account of the (Urdu) *ezafe* involves ample evidence that the marker behaves like a clitic in many respects: e.g., it is separable from its host using parentheticals, it can take scope over noun conjunction (see (18) for an example), it does not display morphophonological idiosyncracies. On the other hand, it also has some non-clitic-like properties; for example, it displays a high degree of lexical selection, as it only occurs with nouns of Persian origin as its head. All in all though, the authors conclude that Urdu *ezafe* should be analyzed as a clitic (a phrasal affix in the original, post-lexical sense of e.g., Anderson 2005). With respect to the semantics, *ezafe*, just like the genitive, is not restricted to possession but shows a wider range of usage; although the authors mention that Urdu *ezafe* is mainly found in high literature and attaches to Persian nouns only, a more detailed discussion of the choice between the genitive and *ezafe* is not included in the paper.

(18) [ye [mal o daulat]=e dunya
this material and wealth=EZ world
'this material and wealth of the world'

Their own LFG analysis involves separate modules of grammar, taking into account the misalignment within the *ezafe* construction: while it is a functional head selecting a modifier to its right, prosodically it attaches to the word on its left. The first (syntactic) property is modeled via LFG's standard c(onstituent)-structure and f(unctional)-structure, while the second (prosodic) property is modeled on a separate p(rosodic)-structure; nothing in the LFG architecture requires these structures to align. The final prosodic analysis by Bögel and Butt for examples such as the one in (19 is as given in (20); the authors emphasize that the *ezafe* is analyzed as an independent functional item in the lexicon, whose prosodic properties are special and must be dealt with post-lexically. Their account is thus remarkably similar to Anderson's *special clitic* account of the English group genitive in this volume.

(19) hukumat=e pakistan
government.M.SG=EZ pakistan
'the government of Pakistan'

(20) ((hukumat)ω e)ω (pakistan)ω)ϕ

3 Evaluation

Shortcomings of the volume as a whole are of a technical nature. Some examples in some of the papers lack glosses. The numbering of the examples is also off in some cases. In addition, some cited references are not included in the bibliography at the end of the volume (I have found at least four such instances across all the papers).

There is also some unclarity in the volume regarding the terminology of clitics. Anderson uses the term *special clitic* for the English group genitive in the sense coined by Zwicky (1977). Special clitics are clitics which are special in their morphosyntax (when compared to the regular syntax of the particular language); they are morphemes bound to and existing as part of their host, and thus show similarities with morphological affixes. This distinguishes them from other, *simple clitics* in the sense that these are free and independent morphemes. Both simple and special clitics are, however, prosodically dependent to adjacent material. Anderson in his earlier work has coined the term *phrasal affix* (Anderson 1992) which turns out to be equivalent to Zwicky's *special clitics*. The intention behind this term was to point out the parallelism of distribution and function between morphological affixes and clitics. Anderson seems, however, to use Zwicky's term presently, which is why the term *phrasal affixes* does not feature in his paper in this volume. Bögel & Butt in their paper, referring to Anderson's work, use his earlier terminology and talk about *phrasal affixes*. To complete the confusing picture, Samvelian (2007) in her discussion of the Persian *ezafe* considers phrasal affixes to be part of the morphology and treats them essentially as EDGE affixes in the sense of Zwicky (1987) and Miller (1992).

The paper by Börjars et al. may in part provide the answer for such issues. Anderson as well as Bögel and Butt in their papers acknowledge that the markers they analyze (English group genitive and Urdu *ezafe*) display mixed properties of affixes and clitics, but both papers proceed to analyze the markers as clitics. A dichotomy *affix* vs. *clitic* may in fact turn out to be an oversimplification that does not do justice to the mixed properties of such items, and Börjars et al. instead suggest a scale of grammatical categories with a *clitic end* and an *affix end*. While this is an interesting proposal, the exact makeup of the proposed scale is left for further research.

The volume provides an interesting perspective on possessive alternations, which is the key theme of several papers (Börjars et al., Bögel and Butt, Szmrecsanyi, Haegeman, O'Connor et al., Allen, Juvonen). Throughout the paper, the features animacy, weight and topicality/discourse status crop up, and clear correlations are established between these features and the choice of a particular possessive encoding strategy. The question arises whether these tendencies form part of the grammar,

or whether they belong in a separate component capturing language use. O'Connor et al. answer this by looking at languages where those factors are implicated in categorical distinctions between separate constructions, and thus clearly form part of the grammar. It can therefore be concluded that the statistical patterns displayed e.g., by English actually form part of the grammar and need to be represented in a model of grammar. A question I would add is in how far the features animacy, weight and topicality hold up in a cross-linguistic study of possessive patterns, or whether there are more features that involve categorical distinctions and/or statistical preferences in other languages; this is, however, a question that must be resolved in a typological study.

All in all, the volume is essential reading for any linguist interested in the morphosyntactic realization of possession, and in fact presents the state of the art with respect to possession marking in Germanic languages and beyond. While the overall focus is clearly on the English language, this is not necessarily a hurtful restriction: it enables the volume to approach the various issues in English from several distinct angles, while maintaining a manageable set of data. Empirical-statistical (Allen, Juvonen, Szmrecsanyi), cognitive (Hudson) and theoretical-explanatory (Börjars et al., Anderson, Payne) accounts add up to render a rather complete picture of the English possessive constructions from a synchronic as well as from a diachronic perspective. In addition, descriptive (O'Connor et al., Haegeman, Koptjevskaja-Tamm) and analytical (Bögel & Butt, O'Connor et al.) papers team up to provide insights into other languages' possessive structures as well.

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