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3 Linking syntax and semantics of adnominal possession in the history of German

The present article is an attempt towards a unified picture of some central syntactic and semantic changes within complex (possessive) noun phrases in German. First, the expressive adnominal strategies for possessive relations in German are presented and the semantic concept of possession characterized. Then major changes in syntax-semantics linking within German adnominal (possessive) constructions are traced throughout different historical periods, along with changes of a purely structural kind. In what follows, these changes are modeled using the Role and Reference Grammar framework and an attempt is made to unify the observed data using the following principal components: 1) The prenominal position in complex German noun phrases becomes successively reanalyzed as a position for article expressions, i.e., for Role and Reference Grammar operators. 2) This development competes with the tendency to express the more referential/definite/agentive entity in the relation before the less referential/definite/agentive expression in the noun phrase. 3) Changes in the syntax-semantics linking of adnominal possession in the history of German can partially be explained in terms of this competition.

1 Introduction

In the New High German Standard language there are a number of strategies available for the expression of possessive relations by means of (complex) noun phrases.[1] The most important ones are given in (1). In general, the head (or nucleus, adopting Role and Reference Grammar [RRG] terminology)[2] of these constructions is the possessum expression, abbreviated "H". Its case is that of the whole noun phrase in the syntactic context of the clause. In the following examples, this is the nominative case. The dependent, or argument, of the head/nucleus is, if present, abbreviated "D". Its form depends on the construction as a whole.

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1 The notion of possession is clarified in Section 2.
2 See Van Valin and LaPolla (1997), Van Valin (2005).

(1) a. D-H:
         Auto-reifen
         car-tire
         'car tire'

    b. D_{gen} H (prenominal genitive construction):
        Haralds   Hund
        Harald.GEN   dog
        'Harald's dog'

    c. H D_{gen} (postnominal genitive construction):
        der   Hund   des   Mannes
        Det.NOM   dog   Det.GEN   man
        'the man's dog'

    d. H *von* D_{dat}:
        der   Hund   von   dem   Mann/von Harald
        Det.NOM   dog   of   Det.DAT   man/of Harald
        lit. 'the dog of the man/Harald' / 'the man's/Harald's dog'

    e. H *an/bei* D:
        der   Nachteil   an/bei   Harald
        Det.NOM   disadvantage   at   Harald
        lit. 'the disadvantage of Harald'

    f. H *zu* D:
        der   Bruder   zu   Harald
        Det.NOM   brother to   Harald
        lit. 'the brother to Harald' / 'Harald's brother'

    g. Poss H:
        sein   Hund
        his.NOM   dog
        'his dog'

In non-standard varieties, ranging from colloquial German "down" to local dialects (cf. Schmidt and Herrgen 2011), (1c) is not available due to the almost complete absence of the genitive in these varieties (cf. Behaghel 1923: 479; Schirmunski 2010: 496; Mironow 1957: 391–398). There are only residues of constructions like (1b) containing proper names, and such residues are only found in some regional varieties/dialects, e.g., Low German and Valais German (cf. Wipf 1910; Bohnenberger 1913; Henzen 1932; Bart 2006). At the same time there is one construction in non-standard German that is completely absent

from the standard but can be found in almost all regional varieties/dialects. It is given in (2).

(2) D_{dat} Poss H (adnominal possessive dative)
    dem   *Mann/*   *(dem)*   *Harald* *sein*   *Hund*
    Det.DAT man   (DET.DAT) Harald his.NOM dog.NOM
    lit. 'the man/Harald his dog' / 'the man's/Harald's dog'

Case is mostly indicated by means of the determiner system in German. Taking the definite masculine singular article as the paradigmatic case, Standard German can be described as a four case system exhibiting nominative, genitive, dative, and accusative. As mentioned above, non-standard varieties display an almost complete loss of the genitive. Most Low German varieties lack the dative as well, which syncretized with the accusative case. Western Central German and Western High German varieties show wide-spread syncretism between the nominative and the accusative with a preserved dative. Some varieties show a complete loss of case distinctions, resulting in a common case (cf. Shrier 1965; Koß 1983). The construction in (2) is usually called an "adnominal possessive dative" but this nomenclature is obviously based on the Standard German case system, where we do not find this construction, a fact which should be kept in mind throughout this article.

In the present article I will demonstrate some changes in the syntax-semantics linking that have come about in the expression of adnominal possession in German since the Old High German period, with a special focus on the adnominal possessive dative and its closest relatives from a semantic perspective – the attributive genitive constructions (1b, c) and the postnominal *von* construction (1d). Earlier research suggests that major, primarily syntactic changes have occurred in the German noun phrase (or the determiner phrase, respectively): the definite article developed in the Old High German period (cf. Oubouzar 1992), possessive pronouns (like those in [1g] and [2]) and genitive attributes (like those in [1b] and [1c]) changed their grammatical status (cf. Demske 2001), and the adnominal possessive dative, the origin of which is still not entirely clear (e.g., Weiß 2012), came into existence (cf. Zifonun 2003; Fleischer and Schallert 2011: 96–99). From a semantic perspective, the loss of the genitive in most German varieties (presumably from the 12th century on; cf. Kiefer 1910) could be expected to trigger a functional pressure to "find" or "invent" some syntactic means of expressing the associated semantics. Furthermore, it could be expected that the Middle High German split between prenominal and postnominal genitive attributes (see [1b] and [1c], cf. Ebert 1986: 89–98) and the grammaticalization of the formerly ablative/locative *von* 'of'/'from' (see [1d]) would have repercussions for the syntax-semantics linking.
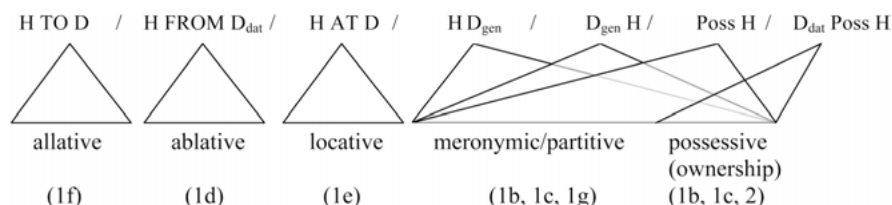
In what follows, I first characterize the semantic concept of possession (Section 2), and then trace the changes in the syntax-semantics linking within German adnominal (possessive) constructions through different historical periods (Section 3) along with purely syntactic changes. These changes are modeled using the RRG framework (Section 4). Section 5 presents an attempt at the unification of the observed data. The steps in this unification are as follows. 1) The prenominal position in complex German noun phrases becomes successively reanalyzed as a position for article expressions, i.e., RRG operators. Contemporary German non-standard varieties exhibit different stages within this development. 2) This development competes with the tendency for the more referential/definite/agentive entity in a relation to be expressed before the less referential/definite/agentive expression in the noun phrase. 3) Changes in the syntax-semantics linking of adnominal possession in the history of German can partially be explained as a result of this competition.

2 Possession and the range of expressive strategies

Using the term "possession" suggests that there is an easily definable semantic concept of possession. This impression is deceptive because several different conceptual domains contribute to what we think of as possession (cf. Chappell and McGregor 1995; Heine 1997; Lehmann 1998; Seiler 1983, 2009). Rather than giving an exhaustive analysis of the conceptual sources, or ingredients, of possession (for this, see Heine 1997), I confine myself to pointing out its most important conceptual sources on the basis of the lexical or original meaning of the "construction markers" (Koptjevskaja-Tamm 2003) that occur in the constructions in question, i.e., (1b) to (1g) and (2).[3] This procedure yields results that are easily comparable to those of Heine (1997). It is important to note that in contemporary German, the prepositional construction markers found in (1b, d, e, and f) are nearly fully grammaticalized in these constructions with only little spatial meaning remaining. This means that today's grammatical constructions expressing possessive relations make use of markers that once indicated, and in other constructions continue to indicate, spatial relations in German, as shown in Figure 1:

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3 Construction markers are elements within the NP that indicate a possessive relation between an H and a D.

H TO D   /   H FROM D$_{dat}$ /   H AT D   /   H D$_{gen}$ /   D$_{gen}$ H /   Poss H /   D$_{dat}$ Poss H

allative | ablative | locative | meronymic/partitive | possessive (ownership)

(1f) | (1d) | (1e) | (1b, 1c, 1g) | (1b, 1c, 2)

Figure 1: Conceptual sources of possession[4]

In the H TO D pattern (which [1f] conforms to), *zu* 'to' is originally, and in other constructions remains, a goal marker. *Von* 'from' in the H FROM D$_{dat}$ construction (cf. [1d]) is originally, and in other constructions in contemporary German remains, a source marker. *An/bei* 'at' in the H AT D construction (cf. [1e]) indicates location in less grammaticalized constructions. The old adnominal genitive (cf. [1b] and [1c]) is usually (and as far as we know) considered to express meronymic and partitive as well as possessive (ownership) relations (besides other relations outside of the realm of adnominal possession, cf. Behaghel 1923: 485–526; Wilmanns 1909: 575).[5] The dative is usually connected to possession (ownership) and participation (as well as other relations that do not belong to the realm of adnominal possession, cf. Behaghel 1923: 609–645). On the far right of the conceptual sources of possession there is "possessive (ownership)". There is a terminological inconvenience here which I do not know how to circumvent: alongside the diverse spatial relations and the part-whole relation presented in Figure 1, the complex conceptual domain of possession has at its core the concept of possession as ownership.

When looking at the conceptual sources of possession as presented in Figure 1, an apparent spatial perceptual basis emerges: allative, ablative, locative, and meronymic/partitive relations can well be characterized as spatial. Only possession as ownership does not immediately conform to this pattern. It seems to have cultural rather than spatial perceptual origins. Conceptually, however, possession as ownership might be reduced to location plus something like

4 Shading in the figures throughout this article has no special meaning but is due to the layered structure of the triangles.

5 The genitives named *objectivus*, *qualitatis*, *explicativus*, and *definitivus* belong to the class of non-partitive and non-possessive (ownership) genitives (cf. Eroms 2000: 282/283). The *genitivus subjectivus* is sometimes treated as a type of the *genitivus possessivus* (cf. Wilmanns 1909: 600; extending this argument, one could also treat the *genitivus auctoris* as a possessive genitive.) However, as will become evident in the text, possession (ownership) is reducible to concrete and spatial relationships between objects. The subjective genitive and the genitive of the author (*auctor*) do not express relations of that kind because they involve events or abstract entities that the "subject" or "author" bring about.

control (cf. Stolz et al. 2008: 17–28): the possessum "is at" the (location of the) possessor, who has it "at his/her disposal" (i.e., control). This relation also seems to lie at the heart of the verb *haben* 'have'. Semantically, we actually find that English *have* and German *haben* derive from Germanic **habæ-*, the durative form of Germanic **hafja-* 'lift' (cf. *heben*; cf. Kluge 2011). Thus, *have* has undergone an extension of meaning before which it meant something like 'hold' (German *halten*), which can very well be treated as the durative of 'lift'. Applying these insights to the spatial conceptual structures underlying possession, one can identify it as the combination of H's being located at/with D and at the same time as D's control of H.

Obviously, the relations we are talking about are binary ones, either spatial or possessive. The corresponding predicate-argument structures could look like (3a) and (3b):

(3) a. GO-TO/COME-FROM/BE-AT/BE-PART-OF (x, y)
  b. POSSESS (y, x)

The reversal between the arguments is the result of the fact that if *x* is at *y* and if *y* controls *x*, then *y* possesses *x*.

Another dimension to the domain of possession is that of alienability/inalienability: When looking at (4a) and (4b) we find a potential meaning difference:

(4) a. *Haralds   Bein*
      Harald.GEN   leg
      'Harald's leg'

  b. *das   Bein   an   Harald*
      Det.NOM   leg   at   Harald
      lit. 'the leg at Harald' / 'the leg attached to Harald'

(4a) is a quite natural expression of the inalienable relation between Harald and his leg. When hearing (4b), in contrast, we infer that the leg in question need not, or even cannot be Harald's "inherent" leg. The rationale seems to be that the D_{gen} H construction is usually (though not exclusively) used to code inalienable relations, where the leg is initially understood to be inherently relational, while the H *an*/*bei* D construction is usually used to code alienable relations, where the leg is initially understood to stand in an established spatial relation with Harald (cf. Seiler 1983).

Besides the conceptual sources of possession and the alienability/established vs. inalienability/inherent opposition, animacy also seems to play a role. Note

that from the perspective of the conceptual sources of possession depicted in Figure 1, all possessors except the ones standing in an ownership relation to the possessum should be open to any degree of animacy as listed in (5) (cf. Kuno and Kaburaki 1977; Silverstein 1976; Comrie 1989; Bickel 2010):

(5) human > kin > animate > inanimate > abstract

   This is indicated by the examples in (6):

(6) a. *dem*   *Haus*   *sein* *Balkon*
       DET.DAT house   its   balcony
       lit. 'the house its roof' / 'the roof of the house'

    b. *der*   *Deckel* *zu* *dem*   *Topf*
       DET.NOM lid   to   DET.DAT pot/pan
       lit. 'the lid to the pan' / 'the lid of the pan'

    c. *der*   *Balkon*   *des*   *Hauses/*   *vom*   *Haus/*
       DET.NOM balcony DET.GEN house.GEN/ from-DET.DAT house/

       am   *Haus*
       at-DET.DAT house
       'the balcony of the house' / 'the balcony at the house'

    d. *sein* *Balkon*
       its   balcony
       'its [= that of the house] balcony'

   In other words, possession (ownership) seems to be restricted to at least animate entities, since its possessor must be capable of executing control (6a). The status of (6b) is difficult to assess. On the one hand (6b) seems acceptable, on the other hand *der Balkon zu dem Haus* 'the balcony of the house' and similar constructions seem less acceptable.

   Taken together, the expressive adnominal possession strategies found in different periods need to be located within the semantic spectrum just sketched, ranging from the conceptual sources of the possessive relation to the alienability/ established vs. inalienability/inherent opposition and to the animacy dimension. The conceptual semantic domains can be expected to remain constant through history and to require expressive strategies, whilst the corresponding syntactic strategies may vary. The next step is therefore to look at the syntactic options for the adnominal expression of possession available at different periods in German. I will focus mainly on the basic strategies represented by the H *von* D construction, the genitive constructions, and the adnominal possessive dative.

3 Syntactic strategies for expressing adnominal possession in the diachrony of German

3.1 Expressive strategies for adnominal possession in Old High German

Starting out from the position that speakers of Old High German needed expressive strategies for communicating ablative, meronymic/partititive and possessive (ownership) relations, we find that the corresponding syntactic options differed from those found in the contemporary standard and the non-standard varieties of German (see [1] and [2]).

The Old High German analogue of the contemporary German H *von* D construction is the NP *fon(n)(e/a)* NP construction. Note that the latter is not a single NP constituent but most probably consists of two adverbal constituents, the relation between which is encoded by a verbal predicate. In contrast, in an adnominal H *von* D construction the exact relation is not overtly coded by a verbal predicate but must be inferred. To my knowledge, there is no H *fon(n)(e/a)* D construction in Old High German that unambiguously expresses adnominal possession (cf. Kiefer 1910). Example (8) illustrates an ambiguous case. The Old High German NP *fon(n)(e/a)* NP construction can thus be assumed to not express meronymic/partitive and possessive (ownership) relations, but mainly adverbal ablative, albeit metaphoric (e.g., temporal) ones (cf. Behaghel 1924: 33–35). Structures like (8) are possible sources for the reanalysis of an adverbal relation as an adnominal one in later periods of German. Another, related observation is that the source role in an ablative relation is often inanimate, often even a location (or point in time), and that the relation is an established and not an inherent one. Additionally, (7) demonstrates that if the noun governed by *fóne* 'from' is in Latin, it appears in the ablative case.

(7) *Fóne   déro   questione   chúmet   si   a   phisicam*
    From   this.DAT question   come.3   she.3NOM to   physiological.ACC

    disputationem
    discussion.ACC
    'From this question she comes to a physiological discussion.'
    (Notker, Consolatio, p. 182, l. 12)

(8) *gibót   iz   ouh   zi uuáru \   ther   kéisor   fona   Rúmu.*
    command.3   it.ACC   and   indeed   DET.NOM   emperor   from   Rome
    'And indeed, the emperor commanded it from Rome.'
    (Otfrid, I, 11, 2)

(9) *Sih*   *scéident [...] gilíabe [...]*   *Múater*   *fona kínde [...].*
each-other separate.3PL loved-ones.NOM mother.NOM from child.DAT
'Loved ones . . . separated from each other: . . . Mother from child. . .'
(Otfrid, V, 20, 39–41)

When we look at the analogues of New High German genitive constructions in Old High German, we find that there are two semantically separate constructions. In partial revision of Behaghel (1932: 181–193), Carr (1933) could show that, in Old High German, non-partitive genitives almost always appear in prenominal position. They occur in postnominal position only when a Latin original exhibits this order. That means all genitive types (see note 5) as well as the one expressing possession (ownership) appear in front of the head/nucleus. An example of a (probably) *genitivus qualitatis* is given in (10), a *genitivus possessivus* is given in (11). On the other hand, partitive (and meronymic) genitives usually follow the nucleus/head (Behaghel 1932: 178).

(10)   *uzs*   *fona*   *paradises*   *bliidhnissu*
away   from   paradise.GEN   joys.DAT
'away from the joys of paradise'
(Isidor, 5, 10)

(11)   *dhiz*   *ist chiquhedan*   *in*   *unseres*   *druhtines*   *nemin*
this.NOM   is   said   in   our.GEN   lord.GEN   name.DAT
'this is said in the name of our lord'
(Isidor, 3, 3)

Some changes occur with Notker in the late Old High German period. From this time on there seems to be a tendency to place names and designations of persons in the prenominal/pre-head position and to place inanimate and abstract entities in the postnominal/post-head position (cf. Carr 1933). A consequence of this development should be that non-partitive inanimate genitives should now be placed after the head/nucleus of the complex noun phrase, at odds with what we find in (10) or before Notker.

(12)   *díu*   *geskáft*   *téro*   *dingo*
DET.NOM   creation.NOM   DET.GEN   things.GEN
'the creation of things'
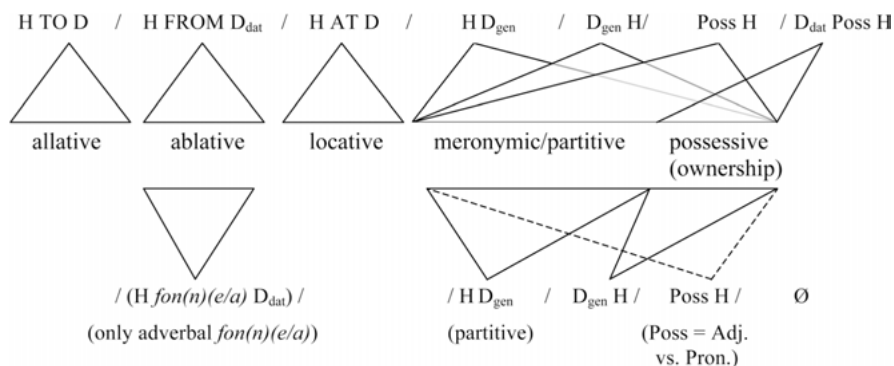(Notker, Consolatio, p. 81, l. 16)

Turning to the Old High German analogue of the adnominal possessive dative (D$_{dat}$ Poss H), we can say, with some certainty, that this construction

does not yet exist (cf. Weiß 2012). The only Old High German types of constructions that come close to that construction are exemplified by (13) and (14):

(13) *Sámenont   ímo   sîne   heîligen*
  gather.3PL   him.DAT   his.NOM.PL   saints.NOM
  'His saints gathered for him'
  (Notker, Psalter, p. 172, l. 5)

(14) *du   uuart   demo   balderes   uolon   sin-uuoz*
  there   was   DET.DAT   Balder.GEN   colt.DAT   his/its.NOM-foot.NOM
  birenkict
  dislocate.PTCP
  'The foot of Balder's colt was affected by dislocation'
  (2. Merseburger Zauberspruch)

Usually, these constructions should be read as involving an adverbal free *dativus (in)commodi* or a dative of pertinence (*Pertinenzdativ*). These sentences allow an adnominal possessive interpretation, but they also allow a free dative reading in the sense of 'his saints gathered for him' and 'it happened to the disadvantage of Balder's colt that its foot was affected by dislocation'. Therefore, we cannot be sure about the status of these constructions. Other structural reasons why they should probably not be considered D_{dat} Poss H constructions are discussed in later sections (cf. Kiefer 1910; Behaghel 1923; Demske 2001).

The picture that emerges with respect to constant conceptual domains and expressive requirements for Old High German is that the prenominal genitive (D_{gen} H) is the primary, if not only, construction by means of which adnominal possession (ownership) is expressed in Old High German. The postnominal genitive (H D_{gen}) construction is reserved for partitive/meronymic relations in the time before Notker and to relations with inanimate Ds from Notker's time on. There is no adnominal possessive dative in Old High German. These considerations are condensed in Figure 2, which is modeled on Figure 1. The top line lists the conceptual sources of today's possessive constructions. They correspond to semantic domains (spatial ones, like allative, ablative etc., and others that are more than simply spatial, like possessive [ownership]). Old High German requires expressive strategies for these meaning domains and for the specific meanings within them. These are indicated in the bottom line. The triangles relate these expressive strategies not only to the specific meanings they are used to express but also to their own conceptual sources. The NP *fon(n)(e/a)* NP is shown in parentheses because it most probably consists of two adverbal

| H TO D / | H FROM D_{dat} / | H AT D / | H D_{gen} / | D_{gen} H/ | Poss H | / D_{dat} Poss H |

allative   ablative   locative   meronymic/partitive   possessive (ownership)

/ (H *fon(n)(e/a)* D_{dat}) /   / H D_{gen} / D_{gen} H /   Poss H /   Ø

(only adverbal *fon(n)(e/a)*)   (partitive)   (Poss = Adj. vs. Pron.)

Figure 2: Old High German expressive strategies for adnominal possession

constituents. A consistent syntactic structure corresponding to Poss H does not yet exist in Old High German. It will emerge later from the D_{gen} H construction in Middle High German (see Section 4 for details). But we do find some possessive pronouns "already" behaving like adjectives in Old High German, as in (11), along with pronouns that are "still" personal pronouns in the genitive, as in *ira hûs* 'the house of hers'.

Taking the example of the ablative meaning, we see that there is a one-to-one mapping between the conceptual source H FROM D_{dat} and the expressive strategy NP *fon(n)(e/a)* NP, although this construction appears only adverbally, and with two constituents. We do not expect the ablative meaning to disappear or to change over time, but it is to be expected that syntactic constructions will change with respect to the range of meanings they can express. In Old High German, we do not find that the NP *fon(n)(e/a)* NP construction deviates from its ablative source meaning.

In sum, there appears to be a rather straightforward linking between adnominal syntactic constructions involving a genitival D on the one hand and partitive/meronymic and possessive semantics on the other, even though major syntactic changes already occur at Old High German times, for instance with Notker. Syntax-semantics linking between adnominal constructions involving prepositionally governed Ds and possessive semantics do not exist at this stage.

3.2 Expressive strategies for adnominal possession in Middle High German and Early New High German

Middle High German also requires means to express the meanings depicted in Figure 1, i.e., from allative to possessive (ownership). Turning first to the Middle

High German analogue of the New High German H *von* D construction, we find it in the H *von(e)* D construction. There is often an ambiguity between an ablative and a non-ablative reading in these constructions. Because Middle High German *geschëhen* 'happen' in (16) is not a motion verb, a purely adverbal ablative meaning of *rede von in* (lit. 'speech from him') is unlikely and an overlap of the H *von(e)* D construction with the meaning of the adnominal *genitivus auctoris* seems possible. The use of the latter would have required a genitive form of the personal pronoun of the 3rd Ps. Sg. Masc., i.e., something like *sîner rede* 'the speech of him', a construction that is indistinguishable from one with a possessive pronoun. As Ebert (1986: 92) notes, the *von* periphrasis becomes the primary strategy for expressing functions of the genitive, especially in pronominal contexts where genitives are not marked distinctly. (17) seems to have a partitive meaning, since an adverbal ablative reading of *ein teil von dîner nœte* 'part of your sorrows' seems to be excluded. In (18) the difference between the genealogical origin (ablative) and a possessive reading begins to blur: *dem vogte von den sahsen* could be understood as 'the reeve of the Saxons' and as 'the reeve from the Saxons'.

(15) *Sus   sprach der   künec   von   Brandigân*
      thus   spoke   DET.NOM king.NOM of/from Brandigan
      'Thus spoke the king of/from Brandigan'
      (Parzival, 215, 15)

(16) *dô   diu   rede   von   in   geschach*
      after DET.NOM speech from/of him.ACC happened
      lit. 'After the speech from him happened'
      (Parzival, 389, 3)

(17) *«Obylôt, nu   sage mir / ein teil von   dîner   nœte.»*
      Obylot   now say me.DAT a   part from/of your.DAT sorrows.DAT
      'Obylot, entrust part of your sorrows to me.'
      (Parzival, 373, 16/17)

(18) *Dem   vogte   von   den   Sahsen was daz wol geseit*
      DET.DAT reeve.DAT from/of DET.DAT saxons was that well known.PTCP
      'This was well known to the reeve from/of the Saxons.'
      (Nibelungenlied, A 208, 1; B 207, 1; C 210, 1 [*vogete*])

These observations are backed up by Kiefer (1910) (see also Behaghel 1924: 62; Ebert 1986: 92), who claims that from the 12th century on, the original geni-

tive meanings begin to be expressed by the H *von(e)* D and other constructions discussed below. An important restriction is that a meronymic/partitive or a possessive semantics for a NP *von(e)* NP syntactic construction is possible only where *von(e)* NP is also reanalyzed as an adnominal rather than an adverbal phrase.

With respect to the genitive constructions, the changes found in the Old High German period continue into Middle High German. According to Ebert (1986) and Demske (2001), building on analyses by Carr (1933), expressions designating persons and names occur as prenominal genitives, whereas expressions designating things and abstract entities are placed after the head/nucleus of the complex phrase as postnominal genitives.[6] This development is completed as early as the 15th century (Early New High German period). From the 16th century on, two other developments take place. Firstly, appellative genitive expressions designating persons begin to "move" to postnominal position. This development is completed in the 17th century towards the beginning of the New High German/Modern German period, when these expressions are highly preferred in postnominal position (cf. Prell 2000; Demske 2001: 215–230). Secondly, postnominal partitive/meronymic genitives are reanalyzed as appositional nominatives or accusatives due to the loss of genitival morphology, e.g., *ein fesla guten alten wein* 'a keg of good aged wine' (cf. Behaghel 1923: 532).

The first of these developments seems to have begun in pre-Old High German times. Germanic attributive genitives probably occurred prenominally, independently of their semantics. In early Old High German the partitive ones tend to occur postnominally. The data for Early New High German in the 17th century are thus part of a process of diachronic postposing of attributive genitives that had by then already been going on for maybe a thousand years, and is not yet finished today.

Turning back again to Middle High German and to its analogue of the contemporary adnominal possessive dative (D_{dat} Poss H), we find that this is the period in which we can first identify unambiguous examples of this construction. However, case on the possessor is ambiguous between genitive and dative in (19). Although unambiguously a dative in (20), one should not infer that it is also a dative in (19) because there are also constructions with unambiguous genitives, as in (21).

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6 This process takes place earlier in Middle High German prose than in Middle High German verse. The latter seems to be more conservative and influenced by the constraints of meter and rhyme (cf. Prell 2000).

(19) *Ich sach ir iren stolzen lîp.*
I saw her.GEN/DAT her.ACC proud body
'I saw her proud body.'
(Die Beichte, 63)[7]

(20) *dô sach man trüebe unde naz / dem Bernaer*
Then saw one hazy and wet DET.DAT one-from-Berne.DAT

sîniu ougen
his.ACC eyes.ACC
'One saw the hazy and wet eyes of the one from Berne there.'
(Dietrichs Flucht, 7817)

(21) *swaz ich von Parzivâl gesprach, / des sin âventiur*
what I of Parzival told DET.GEN his.NOM adventure.NOM

mich wiste,
me.ACC know
'what I told about Parzival whose adventure I came to know'
(Willehalm 4, 20)

These constructions are only rarely attested in Middle High German and they are not easy to find (cf. Weise 1898; Kiefer 1910; Behaghel 1923: 638–640; Weiß 2012). However, it is remarkable that in the few examples we know of, the dependent possessor expression is mostly one designating a person and mostly a proper name, (19) being an exception. The marginal Middle High German D_{dat} Poss H construction thus shares the tendency with the attributive genitive constructions to place expressions designating persons in the prenominal position. In fact, there is no evidence for postnominal possessive datives in the history of German. Similar to the H *von(e)* D construction, it seems that the syntax-semantics linking between D_{dat} Poss H and possession (ownership) is possible only where NP_{dat} Poss NP has been reanalyzed as one adnominal constituent rather than two adverbal constituents.[8]

**7** Cf. Schröder (1969) for further information on the editions of this text.
8 When interpreted adverbally, ambiguous constructions like *dass ihm seine Beine schmerzen*, lit. 'that to him his legs ache' are instances of a *dativus incommodi*, where the pain occurs to the disadvantage of the referent of *ihm* 'him'. An adnominal interpretation is no paraphrase of the adverbal one, since there is no *incommodi* meaning. It simply means 'that his legs ache'. Because of their similarity of meaning, however, the adverbal construction is a likely candidate for the source of the reanalysis as an adnominal construction.

Turning to the Poss H construction, it seems to be established in Middle High German with Poss behaving consistently like an adjective, including those cases where Old High German exhibited personal pronouns. This is illustrated in (19) by *iren* 'her.ADJ' (see also Section 4).

The resulting pattern, i.e., the relationship between meanings that need expression and the actual expressive strategies for Middle High German and Early New High German is given in Figure 3 below.

The dotted lines indicate changes in the syntax-semantics linking, where some syntactic structure emerges or extends its semantic range. In the case of Middle High German and Early New High German, the H *von(e)* D construction begins to be used for the expression of meronymic/partitive and possessive (ownership) meanings. Its original ablative meaning lives on. The H D_{gen} construction, restricted to meronymic/partitive meanings in Old High German, begins to be extended to possessive (ownership) relations as well. This happens in those contexts where appellative person expressions "move" into the postnominal position. Possessors (and hence ownership) are necessarily among these expressions. The D_{gen} H construction is thus more and more restricted to relations with human possessors expressed by proper names (and some kin expressions). At the same time we witness the emergence of the first unambiguous adnominal possessive dative constructions. Its characteristic feature in this period is the occurrence of both dative (in Middle and Early New High German) and genitive (possibly in Middle High German, definitely in Early New High German) possessors.

Without attempting to provide a causal explanation, it seems noteworthy that highly relevant processes in the linking of syntax and semantics take place nearly simultaneously in Middle High German and Early New High German: the
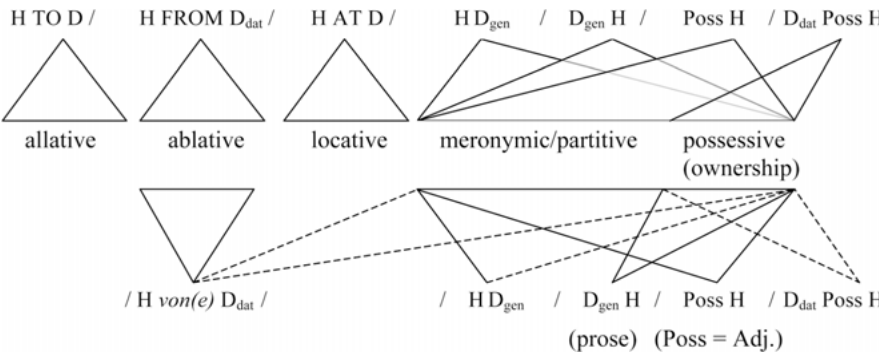
Figure 3: Middle High German/Early New High German expressive strategies for adnominal possession

H *von(e)* D and the D_{dat} Poss H constructions begin to be used for originally genitival functions (see Figure 3) in higher frequency at the same time as the adverbal genitive object begins to come under pressure from other, mostly prepositional and accusative, object types (cf. Fleischer and Schallert 2011: 87–94 for an overview). Importantly, these changes from genitive to accusative and prepositional expressions result in the loss of the original expressive strategy for partitivity. In the adverbal domain, partitivity thus has to be expressed by other means, for instance by using the determiner/quantifier system (*Brot essen* 'eat some bread' vs. *ein Brot essen* 'eat a bread') or prepositional objects with *von* (*vom Brot essen* 'eat some of the bread'; cf. Ebert 1986: 37/38).

Keeping these broader changes in mind, the observable changes in the syntax-semantics linking of adnominal constructions gravitate around two seemingly independent phenomena: firstly, changes that revolve around the prenominal and postnominal positions in the German noun phrase, resulting, for instance, in a broadening of the meanings expressible with the H D_{gen} construction, and secondly, changes that involve the reanalysis of formerly adverbal constituents as a single adnominal constituent, accompanied by the rise of new meanings for the newly developed syntactic constructions.

3.3 Expressive strategies for adnominal possession in contemporary non-standard German varieties

In the introduction I mentioned that non-standard German varieties exhibit different patterns of case syncretism and different degrees of case loss. Very few of them have a preserved, and still productive, genitive, e.g., the highest Alemannic dialects of Valais German (cf. Wipf 1910; Bohnenberger 1913; Henzen 1932, Bart 2006). Three-case systems in Central and High German and two-case systems in Low German varieties predominate. The nearly complete absence of the genitive has important repercussions for the expressive strategies associated with the constant meanings in Figure 1. The H *von* D construction (with its regional characteristics) is omnipresent and has – from the perspective of its areal distribution – become the primary strategy for the expression of meronymic/partitive and possessive (ownership) relations (cf. Mironow 1957: 395; Schirmunski 2010: 495–500). The original ablative meaning of this construction seems to be semantically outweighed by the partitive/meronymic and possessive (ownership) meanings.[9] In the H *von* D construction the case of the

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9 The ablative meaning can also be expressed using the preposition *aus* 'out of, from', as in *der Schneider aus/von Panama* 'the tailor from Panama'.

possessor is governed by the preposition, depending on the case system of the variety in question. It may thus be a dative where this is a distinct case category (i.e., most West Central German and High German varieties) or an accusative (i.e., East Central German and most Low German varieties) or a common case (i.e., some Low German varieties). The H *von* D construction can also be found in Valais German (cf. Henzen 1932: 100–102) as an expressive strategy for meronymic/partitive and possessive (relations).

Turning to the D_{dat} Poss H construction, we find that it is the other main strategy for expressing meanings formerly associated with the genitive in non-standard German varieties alongside the H *von* D construction. For colloquial German and many regional and dialectal varieties it has been assumed that the adnominal possessive dative is restricted to animate possessors (e.g., Wegener 1985: 49; Behaghel 1923: 540). This would indicate its restriction to "real" possessive (ownership) relations. However, such claims neglect a considerable amount of data. It seems that it is common in Low German varieties to have expressions like (22).

(22) *mien   Huus   sien* ...
      my   house   his/its
      lit. 'my house its [H]; the [H] of my house';
      (Lindow et al. 1998: 160)

Here, it is perfectly natural to use inanimate possessors. In the context of the research project "Syntax hessischer Dialekte (SyHD)" (cf. www.deutscher-sprachatlas.de/projekte/syhd/index_html and Fleischer, Kasper, and Lenz 2012) we have collected data from Hessian dialects which show that in dialects coming from the Southern Rhine-Franconian parts of Hesse, the construction seems to become increasingly grammaticalized. While the construction with animate possessors like (23) can be found across all of Hesse (and in most High and Central German areas), there are also a number of constructions of the type exemplified by (24).

(23) *de   Gertrud ihr   Bröll*   East-Hessian, Kerzell
      DET.DAT Gertrud her.NOM glasses.NOM
      lit. 'the Gertrud her glasses' / 'Gertrud's glasses'

(24) *de   Bopp   ehrn   Fuß*   Rhine-Franconian, Ernsthofen
      DET.DAT puppet.DAT her.NOM foot.NOM
      lit. 'the puppet her foot' / 'the foot of the puppet'

These constructions with inanimate but human-like possessors seem to enter Hesse from the South. That similarity to humans probably plays a role is indicated by the fact that just one out of 700 informants produced an adnominal possessive dative for the relation in (25) with an inanimate and non-anthropomorphic possessor (here: a [toy] crane).[10] The *von* construction was almost the exclusive variant here.

(25) *de   Oarm vun deum   Kran*   Rhine-Franconian, Ernsthofen
       DET.NOM arm of your.DAT crane.DAT
       lit. 'the arm from your (toy) crane' / 'the arm of your (toy) crane'

The Low German and Hessian data indicate that, if they have a possessor that bears some similarity to human beings, adnominal possessive datives may code partitive/meronymic relations as well, at least in some German varieties.

It is also often purported that the D_{dat} Poss H construction does not appear with first and second person possessors (e.g., Zifonun 2003: 101; Behaghel 1923: 638).[11] However, these can be found in Low German (predicative constructions) and Berlin German:

(26) *dat   is mien/dien   sien?*
       that is my/your   his
       lit. 'that is my/your his; is this mine/yours?'
       (Lindow et al. 1998: 165)

(27) *meiner/deiner   seiner*
       my/your   his
       lit. 'my/you're his'/ 'mine/my / your(s)'
       (Schiepek 1898/1909: 221, cit. in Weiß 2008: 393)

A last observation concerns the status of the possessive element. In some areas it lacks the typical gender agreement with the possessor that for instance

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10 Methodological wariness prevents me from drawing the conclusion that the D_{dat} Poss H construction is a possible expressive strategy for the partitive/meronymic relation. A single occurrence among 700 is probably an exception.

11 Behaghel even considers a possessor expressed by a third person pronoun impossible, i.e., *ihm sein Hut* (lit. 'him his hat'). This is clearly contradicted by a wealth of data (e.g., Henn-Memmesheimer 1986: 144–146).

occurs in (22) to (24). Instead, a default element is placed between D and H, as exemplified by (28):[12]

(28) *de*   *Gertrud soi*   *Brell*   Central Hessian, Niederweidbach
    DET.DAT.F Gertrud his/its.NOM.M/N glasses.NOM
    lit. 'the Gertrud his/its glasses' / 'Gertrud's glasses'

It was mentioned in the introduction that the designation "adnominal possessive dative" draws on Standard German nomenclature. However, case on the possessor may well differ, depending on the case system of the variety in question. In particular, Weiß (2008: 384) claims that D in this construction bears the genitive in those varieties where this case category is preserved, that it bears the dative where the genitive is lost, that it bears the accusative where both genitive and dative are lost, and that it bears the common case where all case distinctions have been lost. This can be summarized in (29) (cf. Weiß 2008: 384):

(29) Case of the possessor in the "adnominal possessive dative" construction:
    gen > dat > acc > common

However, Weiß' (2008) generalization does not account for the absence of the whole construction in a variety, as with Valais German, which lacks the adnominal D_{dat} Poss H almost entirely. Revising, we can state that (29) holds true if this construction is available in the given variety. Another possible problem is Henzen's (1932: 101) claim that the dative is an option besides the genitive in predicative constructions, for instance in *dits iš dm luikxas* 'this is the.DAT Lukas' / 'Lukas owns this'. Unless we can exclude that this is change in progress, however, Weiß' generalization need not be dismissed.[13]

In most non-standard varieties, the Poss H construction seems to have a status similar to the Standard German analogue. However, one cannot exclude uses of Poss in conservative varieties, conserving states of Early New High German, Middle High German, or even Old High German. More data are necessary at this

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12 This observation needs to be distinguished from another: In many West Middle German varieties other than Central Hessian, feminine proper nouns get the neuter gender: *das Gertrud* 'the.NEUT Gertrud'. Poss in these varieties agrees with D_{dat} in gender, e.g., *dem Gertrud seine Brille* ('Gertrud's glasses'). In contrast, Poss in (28) as a default element is independent of the gender of D_{dat}.

13 In fact, Henzen (1932: 101) mentions the optional dative in predicative possessive constructions in the context of his discussion of "changes that alter the traditional status of the genitive" ("[…] daß der gen. auf dem wege ist, in seiner althergebrachten geltung veränderungen zu erfahren.")
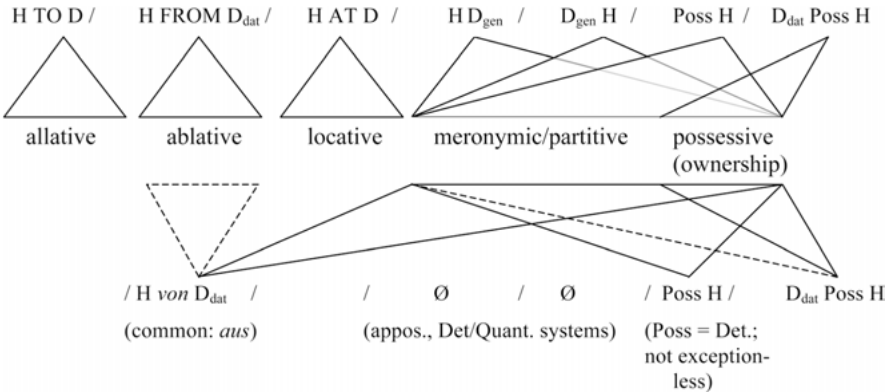
Figure 4: Expressive strategies for adnominal possession in contemporary non-standard German varieties (genitive lost)
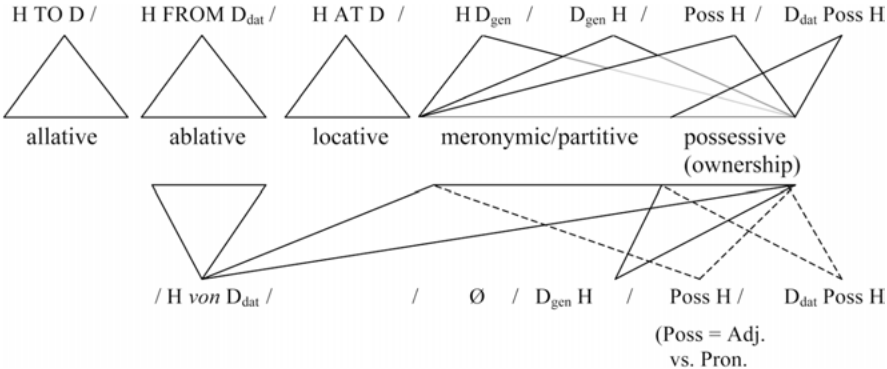
Figure 5: Expressive strategies for adnominal possession in a contemporary non-standard German variety (genitive preserved)

point. One attested exception is Valais German, where we indeed find a pattern similar to the Old High German one with coexisting adjectival and personal pro-nominal uses (cf. Wipf 1910: 144).

The resulting picture for those varieties lacking the genitive is given in Figure 4. The picture for Valais German as an example of a variety with a pre-served genitive is given in Figure 5.

The dotted lines leading from the H *von* D_{dat} construction to the ablative meaning indicate that the primary function of this construction is no longer the expression of ablative relations, but rather to express meronymic/partitive and possessive (ownership) relations. The loss of the genitive constructions for

expressing partitivity/meronymy is further compensated for by appositional constructions and the determiner/quantifier systems. The second expressive strategy for possessive (ownership) relations is the D_{dat} Poss H construction. The data from (22) and (24) are reflected in the dotted lines encompassing meronymic/partitive relations.

The pattern in Figure 5 is mainly based on data of Bart (2006), collected in the context of the "Syntaktischer Atlas der deutschen Schweiz (SADS)" (see http://www.ds.uzh.ch/dialektsyntax/ and references there). In the region in question the D_{dat} Poss H is only marginally used. This may be due to the fact that the prenominal genitive is still used for many originally genitival functions.[14] Postnominal genitives are not used at all (Bart, p.c.). However, the observation that the H *von* D_{dat} construction is used very frequently for both meronymic/partitive and possessive relations suggests that there is no simple relationship between the presence or absence of the genitive and the presence or absence of alternative strategies.

Assuming that it is today's non-standard (i.e., regional) varieties which continue the diachronic changes discussed above, and that they – to a certain degree – map diachronic changes onto space,[15] one global tendency in the syntax-semantics linking emerges. An originally few-to-few or even one-to-one mapping between adnominal constructions and meronymic/partitive and possessive (ownership) relations in Old High German (see Figure 2) is developing into many-to-many mappings. The latter are a result of two processes. Firstly, some new adnominal syntactic constructions arise (e.g., D *von* H, D_{dat} Poss H) as means to express meronymic/partitive and possessive (ownership) relations and become established alongside the ones that exist in Middle High German/Early New High German (see Figure 3). Secondly, certain adnominal constructions broaden their semantic range depending on the syntactic options available in the respective varieties (Figures 4 and 5).[16] H D_{gen} in Middle High German extends to possession (ownership); D_{dat} Poss H in contemporary non-standard varieties extends to meronymic/partitive relations (Figure 4). Together with the fact that the D *von* H construction encodes both meronymic/partitive and possessive (ownership) relations from the very beginning, this leads to the existence

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14 A different explanation would be that D_{dat} Poss H only gradually emerges from the D_{gen} (Poss) H construction, as Weiß (2008, 2012) proposes.

15 The latter aspect is illustrated by the contrast between Valais German and Central German varieties, where the former represents an earlier and the latter represent a later state with respect to the changes discussed here, e.g., the expansion of the D von H and D_{dat} Poss H constructions and the structural changes within the NP.
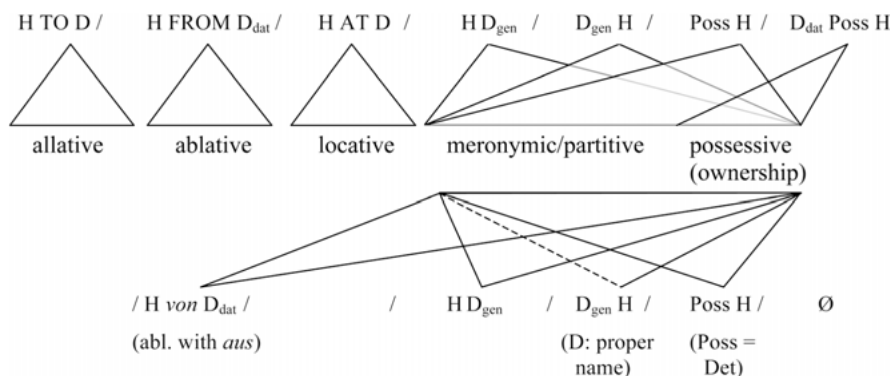
16 This also concerns the New High German standard variety (see following section).

of several polysemous constructions in Middle High German/Early New High German, the contemporary non-standard varieties, and even contemporary Standard German (see next section). That means, from a syntax-semantics linking perspective, that it is often not initially clear for an interpreter whether some syntactic structure is to be interpreted as a possessive (ownership), meronymic/partitive, or even an ablative (in the case of D *von* H) relation. I will return to these matters in Section 5.

3.4 Expressive strategies for adnominal possession in contemporary Standard German

Syntax-semantics linking in Standard German can be discussed rather briefly. The H *von* D construction is used for meronymic/partitive and possessive (ownership) relations. Ablative relations are primarily expressed by a construction with *aus* 'out of, from'. The prenominal and postnominal genitives can be connected to earlier developments: Only proper nouns and some kin expressions occur in prenominal position, otherwise this construction seems rather archaic (cf. Demske 2001: 251). Given the necessarily animate status of the possessor, this construction tends to be interpreted as a possessive (ownership) one (see Section 5 below on this point), but partitive/meronymic interpretations are also possible. All other genitives occur in the postnominal position. No restriction to either partitive/meronymic or possessive (ownership) relations can be postulated for this construction. The D_{dat} Poss H construction is absent from Standard German. Note that in both Valais German and Standard German the presence of the genitive correlates with the absence or marginal status of this otherwise highly prominent construction. Poss in the Poss H construction has the status of a determiner and expresses meronymic/partitive and possessive (ownership) relations. These considerations are summarized in Figure 6. The dotted lines from the prenominal genitive construction to the meronymic/partitive meaning indicate a possessive (ownership) relation is dominant for this construction. In addition, the polysemous status of many of the adnominal constructions diagnosed for Middle High German/Early New High German and the non-standard varieties also holds true for Standard German.

   After this rather global sketch of the historical states and diachronic processes concerning the linking of syntax and semantics in German adnominal possessive constructions, the next section takes a closer look at rather subtle syntactic changes within the German noun phrase – syntactic changes that must be part of an explanation of the transformations reported on above.

H TO D /	H FROM D_{dat} /	H AT D /	H D_{gen} /	D_{gen} H /	Poss H /	D_{dat} Poss H
allative	ablative	locative	meronymic/partitive		possessive (ownership)	

/ H *von* D_{dat} /	/	H D_{gen} /	D_{gen} H /	Poss H /	Ø
(abl. with *aus*)			(D: proper name)	(Poss = Det)	

Figure 6: Expressive strategies for adnominal possession in contemporary Standard German

4 Syntactic changes in the German noun phrase: an RRG perspective

The developments sketched in Section 3 seem to follow an inherent "logic": Three developments that extend over several periods in the history of the German language are observable:

i. The genitive as a case category is gradually replaced by other constructions.
ii. Prenominal attributive genitives gradually move into the postnominal position, with only proper nouns and some kin expressions left in the prenominal position.
iii. The almost complete decay of the genitive case category and with it the disappearance of the original expressive strategy for partitivity/meronymy and possession (ownership) is accompanied by the expansion of the H *von* D construction from an original ablative meaning to the original genitive meanings and by the rise of the D_{dat} Poss H construction.

The causes of (i) seem numerous and are not entirely clear. It has been mentioned above that adverbal genitives were gradually replaced by competing constructions featuring accusatives and prepositional objects. This development could be associated with the loss of an aspectual category in German, but fails to provide a sufficient explanation, since it does not cover ditransitive constructions involving a genitive (cf. Fleischer and Schallert 2011: 83–101 for an overview). Another factor seems to be the decay of distinct inflectional genitive forms causing syncretism with other case categories (cf. Behaghel 1923: 479–483). Whether or not, or in which way this is causally connected to the aforementioned considerations is not entirely clear.

The causes of (ii) can probably be connected to syntactic changes in the German noun phrase. The general pattern seems to be as follows: Prenominal elements in German noun phrases are gradually reanalyzed as determiners (for details on this and the following, see Demske 2001). Part of this is a) the development of the definite article out of the demonstrative pronoun in Old High German (cf. Oubouzar 1992), b) the reanalysis of the possessive pronoun as an adjective (Old High German or pre-Old High German) and then as a determiner (New High German), c) the reanalysis of prenominal attributes as determiners (New High German) (cf. Weiß 2008).

a) According to Demske (2001), the demonstrative pronoun in Old High German marks pragmatic definiteness, its absence unmarked definiteness. Whenever it occurs, the demonstrative occurs with adjectival attributes of the weak declension. Strongly inflected attributes occur in the absence of the demonstrative. Unique referents occur without a demonstrative in early Old High German. "In Old High German the definite article word accompanies nominals representing sortal concepts. The noun provides sortal information about the referent which is applicable to precisely one entity in the given context." (Demske 2001: 116, my translation). Thus, the distribution of strong and weak attributive adjectives is semantically motivated in terms of pragmatic definiteness. However, already in late Old High German (with Notker) demonstratives begin to be used with semantically definite expressions (cf. Oubouzar 1992): The referents of these expressions are identifiable independently of the context, e.g., *diu sunna* 'the sun', so the demonstrative is redundant. And in New High German *die Tochter eines armen Bauern* 'the daughter of a poor farmer' "the definite article does not express definite reference, but the definiteness of the connection between the head noun and the article." (Demske 2001: 109, my translation). The association of adjectival declension (strong/weak) and definiteness that worked in Old High German may have become blurred in Early New High German, where the adjectival inflection was partially lost. The relation between article and noun had to be reanalyzed as being morphologically licensed, not semantically: The determiner governs the declension of the attributive adjective morphologically, not semantically.

b) Related to this development is that of the possessive pronoun (cf. Demske 2001: 132–163). In Old High German many possessive pronouns already show the inflection of the strong adjective and agree with the head noun in case, number, and gender. However, some of them behave like personal pronouns in the genitive. In Middle High German the possessive pronoun is established as an adjective. It co-occurs with articles and does not determine the strong or weak forms of attributive adjectives. It may occur prenominally or postnominally, like other

adjectives. In New High German adnominal possessive pronouns are not adjectives any more. They show the inflectional pattern of the indefinite article and show complementary distribution with following adjectives as regards strong or weak declension.[17] And in contrast to Old High German and Middle High German, they show complementary distribution with the definite and indefinite articles and cannot occur postnominally. Noun phrases with possessive articles are definite in the sense that their referents are identifiable. As regards the gradual reanalysis of prenominal elements as determiners, the possessive article is hence the product of the same processes as the definite article, and the results are two inflectional paradigms for possessive pronouns in New High German: one for adnominal possessive articles (*sein schönes Buch* 'his nice book'), and one for possessive pronouns (as in: *Seins ist ein schönes Buch* 'His one is a nice book').

c) The changes associated with attributive genitives discussed in Section 3 can also be connected to the reanalysis processes in the German noun phrase discussed above (cf. Demske 2001: 208–230). As a consequence of the rise of morphologically motivated definite articles, prenominal genitives in New High German are reanalyzed as determiners just like possessive pronouns. They show complementary distribution with respect to definite articles (*das Peters Buch 'the Peter's book'), unlike in earlier times. Postnominal, but not prenominal genitives may be modified to the right (**Peters, der aus Bremen kommt, Buch* 'Peter who is from Bremen's book' vs. *das Buch Peters, der aus Bremen kommt* 'The book of Peter who is from Bremen') and to the left (**des armen Peters Buch* 'poor Peter's book' vs. *das Buch des armen Peters* 'the book of poor Peter'). This was possible up until the Early New High German period. Just like definite and possessive articles, prenominal genitives determine the declension of following adjectives (*Pauls erster Roman* 'Paul's first novel'). The strong declension indicates that *-s* does not bear grammatical information except that indicating possession (ownership) (cf. Weiß 2008).

How can the changes in (iii) be reconciled with this? Prepositional attributes including the H *von* D construction seem not to be affected by the reformation of the prenominal position. Instead, this construction takes over the semantic range of the originally prenominal genitives. When we look at the D_{dat} Poss H construction, we have another prenominal attribute. If the changes reported on above were valid without exception, we would expect diagnoses similar to those for the possessive pronoun and the prenominal genitive. The prenominal cluster

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17 One of the reviewers provides an alternative characterization of these states of affairs with which I agree, namely that the distribution of the strong or weak adjectival declension is exactly the same as for the indefinite article.

indeed seems to determine the declension of following adjectives (*dem Paul sein erster Roman*, lit. 'the Paul his first novel') and is in complementary distribution with the definite article (**der dem Peter sein erster Roman* 'the.NOM the.DAT Peter his first novel'). However, it may be modified to the left or the right (*dem armen Peter von Gegenüber sein Buch* 'the.DAT poor Peter from across [from here] his book') and it may be multiplied, as in (30), taken from the SyHD data:

(30) *em*   *Peere* *seiner* *Freundin*   Rhine-Franconian, Ober-Kinzig
      DET.DAT   Peter   his.DAT   girlfriend

      ihr   *nei*   *Audo*
      her.NOM   new   car
      'the new car of Peter's girlfriend'

The latter observations do not fit the pattern. D_{dat} in the D_{dat} Poss H construction cannot be considered a pure article expression but it seems to have the status of a constituent. Poss alone could be considered an article marking H as definite, in accordance with the reanalysis of possessive pronouns as articles. But the data in (26) to (28) above seem to point in another direction. Poss in these sentences is no longer an anaphor, since it does not agree with D in gender. If it determines the strong declension in following adjectives in these varieties, then it also lacks grammatical features and must be considered an element indicating nothing but a possessive (ownership) relationship. Poss would then no longer be an article in varieties where (28) is possible ([26] and [27] being predicative constructions). I would therefore propose the following: Poss in D_{dat} Poss H constructions is in different states of grammaticalization in contemporary German varieties. Where it develops into a mere marker of a possessive (ownership) relationship (cf. Koptjevskaja-Tamm 2003: 623–626), the construction as a whole including D_{dat} is on its way to being reanalyzed as a definite article expression, just like New High German possessive articles and prenominal genitives. In varieties where it maintains its grammatical features, it may work as a definite article, the D_{dat} component being an argument expression in terms of Role and Reference Grammar (RRG).

In what follows, I propose syntactic representations of Old High German, Middle High German/Early New High German, and Standard New High German possessive noun phrases as well as those from non-standard varieties within the framework of RRG (cf. Van Valin and LaPolla 1997; Van Valin 2005). These representations illustrate the aforementioned syntactic changes within the German (possessive) noun phrase throughout its history.

RRG belongs to the functional tradition of grammar theories and views syntax as standing in the service of semantics and pragmatics. Syntactic units are therefore considered to either have semantic correlates or be pragmatically motivated. The syntactic representation is organized into layers that correspond to pieces of predicate-argument structures, i.e., semantic representation. The idea is that this allows a representation of syntax that is valid for all languages. The syntax-semantics correlations are given below (cf. Van Valin and LaPolla 1997: 27).

Table 1: Correlations between semantic elements and syntactic units in RRG

semantic elements	syntactic units
predicate/reference	nucleus
argument	core argument
non-argument	periphery
predicate + arguments	core
predicate + arguments + non-arguments	clause/NP (= core + periphery)

Inside the clause, but outside the core there is another, non-universal position called the precore slot (PrCS), where *wh*-expressions or topicalized elements can occur, for instance. Left-detached adverbs, noun phrases, or prepositional phrases that are set off from the rest of the clause by an intonational break etc. can stand before precore elements (e.g., *Yesterday, what did you show to Peter?*) in what is called the left-detached position (LDP), considered to lie outside the clause, but inside the sentence. These positions are mainly pragmatically motivated. Categories like definiteness, aspect, negation, modality, tense, evidentiality, illocutionary force and so on are treated as operators, since they are qualitatively different from the semantic notions in predicate-argument structures that underlie syntactic categories. Operators are accorded a representation separate from the syntactic structure, unlike functional categories in the Principles and Parameters or Minimalist frameworks. Different operators in RRG apply to different layers of the clause/NP, where higher layer operators have scope over lower layer ones. RRG acknowledges the considerable parallelism between clauses and noun phrases and grants noun phrases a layered structure, too. One difference is that the analogue of a clausal nucleus dominates a PRED "predicate", while the nominal nucleus dominates a REF "reference". There is nothing in a noun phrase that exactly fits the clausal PrCS, LDP, or the core-internal subject position, since prenominal noun phrases behave like PrCS, LDP, or core internal subject elements in some respects. Therefore, the noun phrase structure includes a unique NP-initial position (NPIP) for these elements. NPIP is outside the core
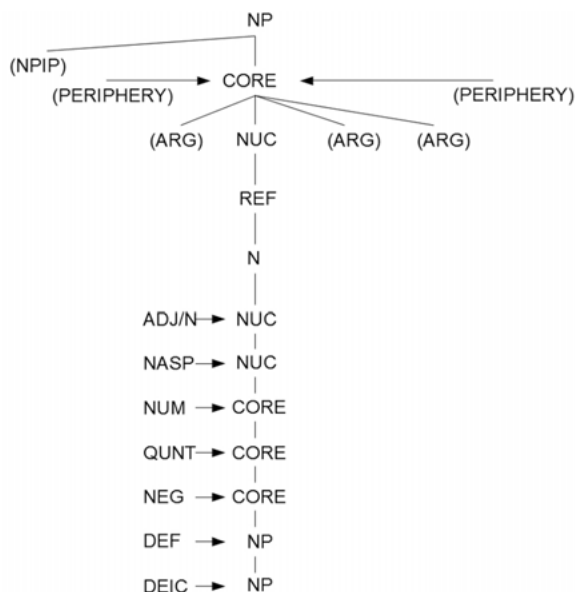
Figure 7: Layered structure of the NP

but inside the noun phrase. The general schema of the layered structure of a noun phrase is given in Figure 7:[18]

The projection below N is the operator projection, above N resides the syntactic representation with its different layers. Note that definiteness appears exclusively in the operator projection of N and has no dedicated role in the syntactic representation (cf. Van Valin 2005: 24).

Applying this to the Old High German D_{gen} H construction expressing a possessive (ownership) relation yields Figures 8 and 9, the latter illustrating the structure of (11) above. What these structures illustrate is the change from an argument personal pronoun (*ira*.GEN.F 'her/of her') to a possessive adjective standing in NPIP (*unseres*.GEN 'of our'), which took place partially in Old High German and in the transition to Middle High German.

Note that in Old High German, genitival attributes can be expanded to the left and to the right by modification (periphery).

As discussed in Section 3, all kinds of D occur prenominally in Old High German, whereas partitive/meronymic genitives occur postnominally. The fact

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18 Operators: ADJ/N: adjectival/nominal modification; NASP: nominal aspect; NUM: number; QUNT: quantity; NEG: negation; DEF: definiteness; DEIC: deictics. For details see Van Valin and LaPolla (1997: 56).
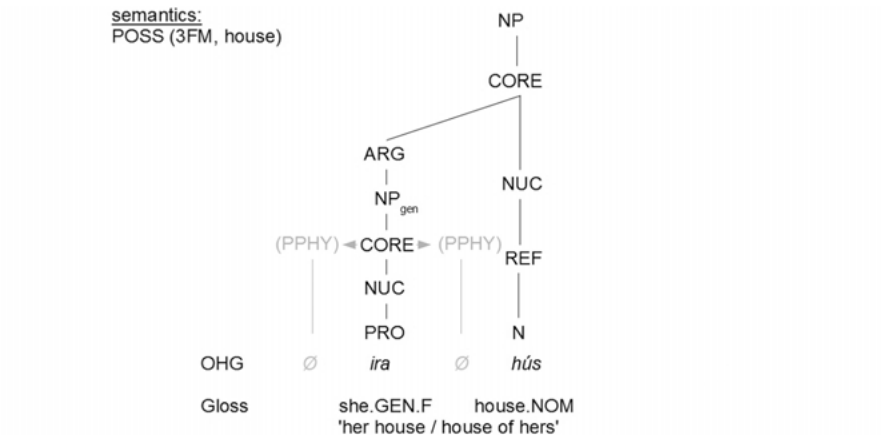
Figure 8: Old High German D$_{gen}$ H construction expressing possessive (ownership) relation
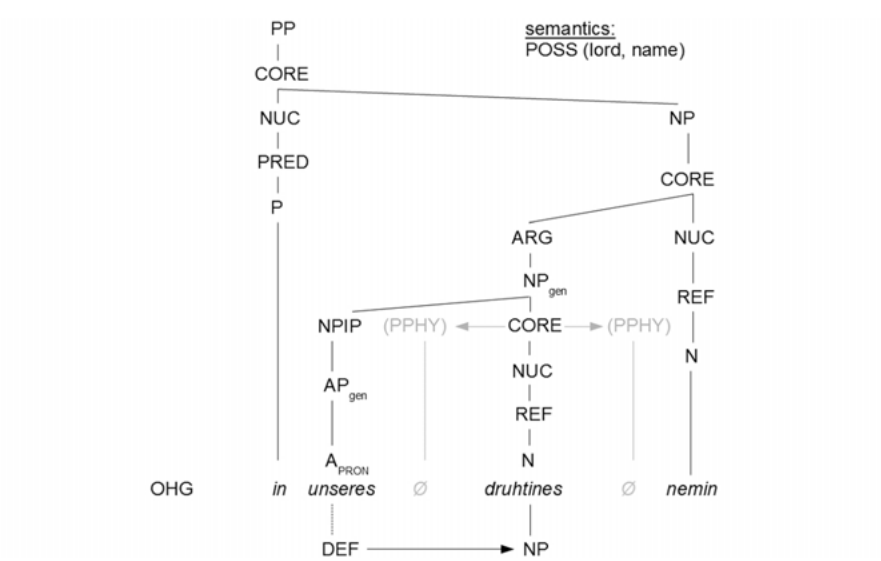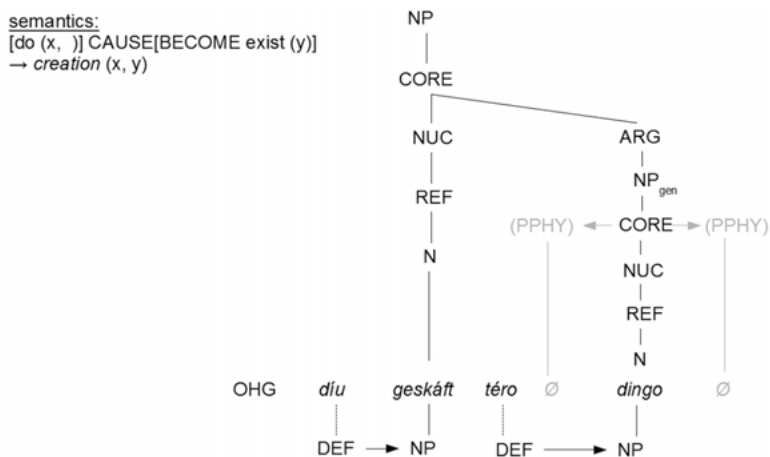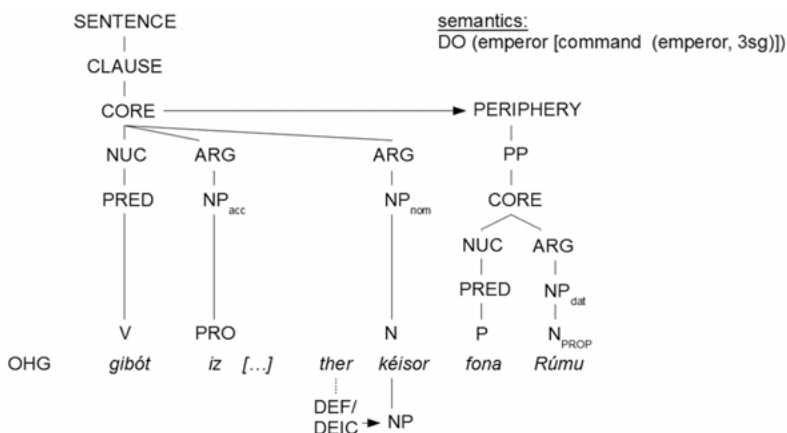
Figure 9: Old High German D$_{gen}$ H construction expressing possessive (ownership) relation

that in late Old High German non-partitive (and, trivially, non-possessive) inanimate and abstract entities tend to be placed post-nominally, is captured in Figure 10, displaying (12). It can therefore be viewed in contrast to the prenominal genitives in Figures 8 and 9.
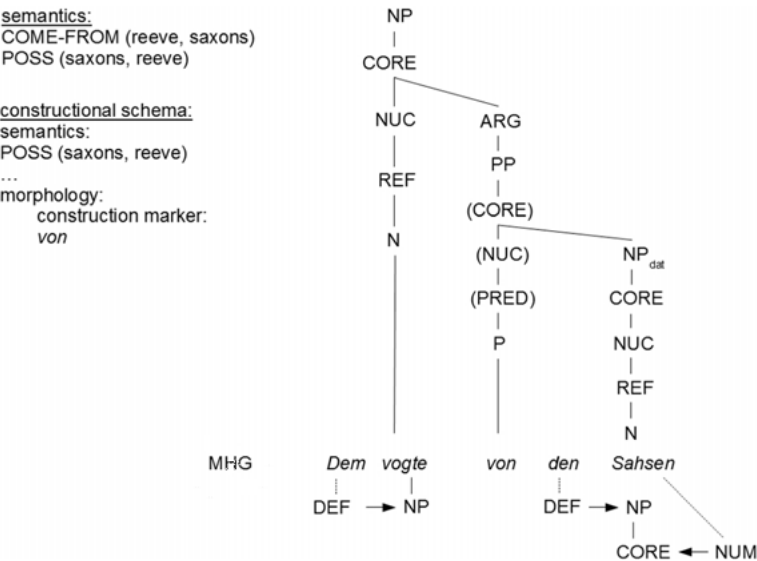
semantics:
[do (x,)] CAUSE[BECOME exist (y)]
→ *creation* (x, y)

Figure 10: Old High German H D$_{gen}$ construction expressing non-possessive relation

semantics:
DO (emperor [command (emperor, 3sg)])

Figure 11: Old High German adverbal PP headed by *fon(n)(e/a)*

In Old High German, possession (ownership) is expressed by genitival attributes. The expansion of other strategies has not yet happened (see Figure 2). Prepositional phrases with *fon(n)(e/a)* 'from' following a noun phrase in adjacent position or an animate NP$_{dat}$ preceding a noun phrase in adjacent position must be interpreted adverbally. The former case is illustrated in Figure 11, illustrating (8). It stands in contrast to Middle High German and younger adnominal prepositional phrases headed by *von* 'from/of' which is shown in Figure 12, illustrating (18). However, the Old High German prepositional phrase headed

```
semantics:                          NP
COME-FROM (reeve, saxons)           |
POSS (saxons, reeve)               CORE
                                    |
constructional schema:        NUC       ARG
semantics:                     |         |
POSS (saxons, reeve)          REF        PP
...                            |          |
morphology:                    N       (CORE)
    construction marker:       |
    von                        N      (NUC)        NP_dat
                                       |            |
                                     (PRED)        CORE
                                       |            |
                                       P           NUC
                                                    |
                                                   REF
                                                    |
                                                    N

MHG           Dem   vogte      von    den   Sahsen
              ┊      |                 ┊
             DEF ─▸ NP               DEF ─▸ NP
                                              |
                                            CORE ◂─ NUM
```

Figure 12: Representation of a Middle High German H *von(e)* D construction expressing a possessive (ownership) relation

by *fon(n)(e/a)* being adjacent to another noun phrase is a probable source of reanalysis towards the H *fon(n)(e/a)* D construction.

Figure 12 illustrates an example from Middle High German where the reanalysis of an adverbal ablative prepositional phrase as an adnominal ablative or possessive prepositional phrase has already taken place. The complex noun phrase seems to be ambiguous between an ablative and a possessive (ownership) interpretation. In the ablative interpretation – COME-FROM (reeve, saxons) –, the preposition *von* 'from' is a predicating element and has a core and a nucleus. In the possessive interpretation, *von* 'of' is not a predicate and lacks a nucleus or a core. It is merely a construction marker, as indicated by its constructional schema. These schemas contain "idiosyncratic, language-specific features of constructions" (Van Valin 2005: 132). Figure 12 only presents the structure corresponding to the possessive interpretation. Accordingly, *von* is specified as a construction marker in the possessive interpretation in the corresponding construction schema.

In Middle High German the D_dat Poss H construction also begins to become an expressive strategy for possessive (ownership) relations. This strategy becomes increasingly prominent in Early New High German and is the primary means for expressing possession (ownership) in most contemporary non-standard varieties.
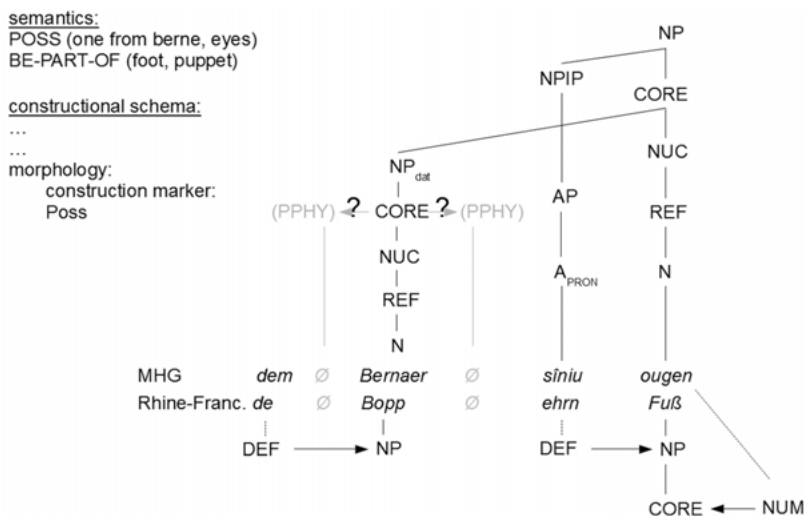
Figure 13: Middle High German and contemporary Rhine-Franconian D_{dat} Poss H construction expressing possessive and partitive/meronymic relations, respectively

In some of these varieties it can already be used for partitive/meronymic relations as well, pointing to a grammaticalization of the construction as a whole. Regularities in this change are discussed in Section 5. Figure 13 illustrates a possessive example from Middle High German – illustrating (20) – and a partitive/meronymic relation from a contemporary Rhine-Franconian dialect, illustrating (24).[19]

In line with my proposal concerning the different grammaticalization states of Poss, *sinîu* and *ehrn* in these constructions each behave like articles and contribute definiteness to their respective Hs (*ougen* 'eyes', *Fuß* 'foot'), making the respective referents identifiable in discourse. At the same time, they function as the construction marker in this construction, as indicated in the constructional schema. The dative noun phrases, coding the semantic possessors, function as arguments to the respective nuclei/Hs. It is expected that NP_{dat} can be expanded to the left and to the right by means of modification. More data are necessary at this point (indicated by the question marks at the periphery branches). At that stage, the D_{dat} Poss part of the construction has not yet been reanalyzed as an article expression, but subsequent changes follow exactly this path. The struc-

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19 According to the definition of possession in Section 2 (in brief, if *x* is located at *y*, and if *y* controls *x*, then *y* possesses *x*), a puppet cannot be interpreted as a possessor. The reasons why *dem Bernaer sîniu ougen* 'the eyes of the one from Berne' is not interpreted here (in the first instance) as a partitive/meronymic relation are discussed in Section 5.
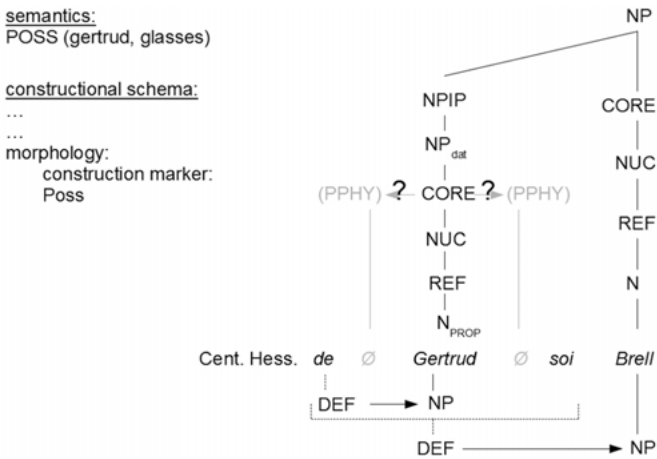
Figure 14 content:

```
semantics:                                                    NP
POSS (gertrud, glasses)

constructional schema:              NPIP              CORE
...
...                                   NP_dat            NUC
morphology:
    construction marker:              CORE
    Poss           (PPHY) ? CORE ? (PPHY)              REF

                                      NUC                N

                                      REF

                                      N_PROP

      Cent. Hess.  de    Ø    Gertrud   Ø   soi      Brell

                        DEF ──► NP

                                      DEF ─────────► NP
```

Figure 14: Contemporary Central-Hessian D_{dat} Poss H construction expressing possessive (ownership) relation; Poss grammaticalized

tural reflex of this is the incorporation of D_{dat} into NPIP which was formerly occupied by Poss alone. This process is distinct from the grammaticalization of the whole construction and is restricted to its precore part, i.e., D_{dat} Poss. Figure 14, illustrating the structure of (28), demonstrates this.

Poss no longer behaves like an adjective and it can no longer function as an anaphor to the possessor but it now constitutes the article expression for H/the nucleus together with NP_{dat}. Whether or not NP_{dat} can be expanded to the left and right by modification cannot be decided without additional data (hence the question mark at the periphery branch), but if D_{dat} Poss functions as an article expression, I would predict that it would not work.

Turning to Standard New High German, we find a preserved genitive. As a possessor, only proper nouns and some kin expressions may stand prenominally, i.e., preceding H. An example is given in Figure 15.

In Figure 15, *Paul* and the element *-s* together function as an article expression of H/the nucleus (*Roman* 'novel'), marking it as definite. The categorial status of *-s* is difficult to assess, because it is not clear whether or not it is a genitive marker (cf. Demske 2001; Eisenberg 2006). In any case it is part of NPIP. I consider it a construction marker, analogous to Poss and forms of *von* 'of' in the above cases. Because of the reanalysis of D_{gen} as an article expression, it can no longer be modified (hence the "X" in the branch linking core and periphery in Figure 15). Only if it had maintained its status as an argument, would this be possible. D_{gen} has exactly this status when in postnominal position, as shown in Figure 16.

semantics:
POSS (paul, novel)

constructional schema:
...
...
morphology:
  construction marker:
  -s
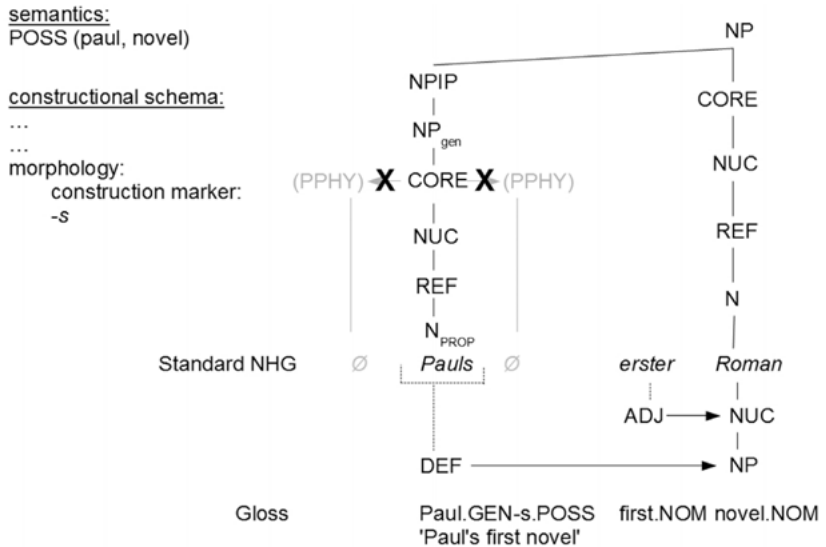
Figure 15: Standard German D$_{gen}$ H construction expressing possessive (ownership) relation

semantics:
POSS (paul, book)

constructional schema:
...
...
morphology:
  construction marker:
  -s
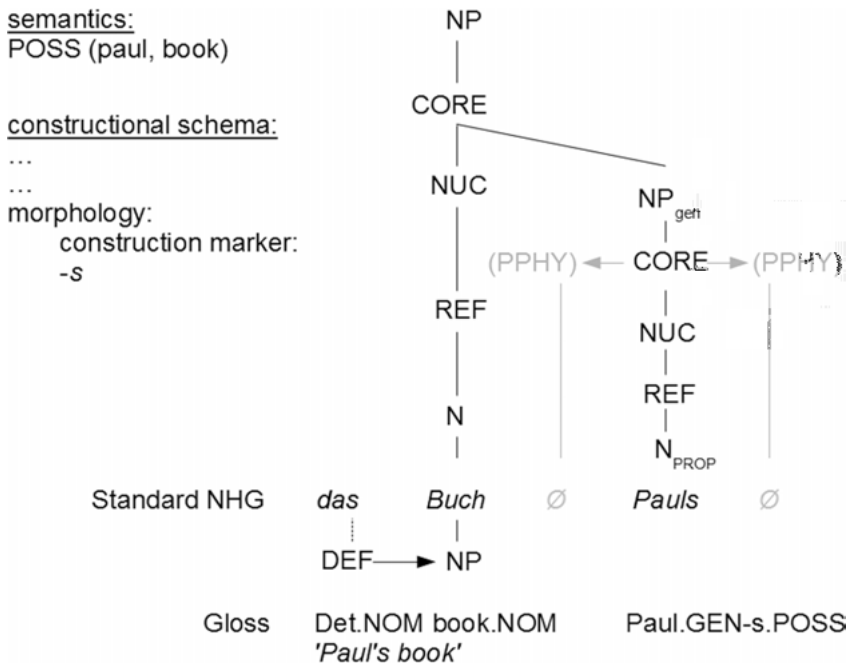
Figure 16: Standard German H D$_{gen}$ construction expressing possessive (ownership) relation

As discussed earlier in this section, D_{gen} can indeed be modified in this position. The similarity between the expressions in Figures 15 and 16 is only superficial. They differ in more than just the positions of the genitive noun phrase. The syntactic status of the prenominal position makes the difference.

5 A tentative unification of syntactic and semantic changes in German adnominal possession

In Sections 3 and 4 I tried to trace changes in German adnominal noun phrases revolving around the concept of possession (in a broad sense). These changes concerned a) the relationship between adnominal expressive strategies in different periods and presumably constant conceptual-semantic differentiations that require expression. The observed changes also concerned b) changes in the structure of the German noun phrase that cannot easily be connected to conceptual-semantic considerations. Is there a unifying pattern in these developments?

Looking first at the changes occurring in the context of the prenominal and postnominal genitive constructions, the following generalization in (31) seems to hold with respect to the major developments:[20]

(31) Expressions that are "moving" into postnominal position over the history
      of the German complex noun phrase:

partitive expressions	>	non-person non-partitive expressions	>	appellative person expressions
(Germ > OHG)		(OHG > MHG)		(MHG > ENHG)

Switching the perspective to the prenominal position yields the generalization in (32):

(32) Expressions that are "staying" in prenominal position across the history
      of the German complex noun phrase:

non-partitive expressions	>	person expressions	>	proper names (/kin names)
(Germ > OHG)		(OHG > MHG)		(MHG > ENHG)

At a closer look, the scales in (31) and (32) can be related to a sub-scale of the animacy (or empathy) hierarchy, namely that pertaining to types of referen-

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20 Abbreviations: Germ = Germanic; OHG = Old High German; MHG = Middle High German; ENHG = Early New High German.

tial expressions. This scale is given in (33) (cf. Lehmann 1998; Yamamoto 1999; Corbett 2000; Langacker 2002; Croft 2003; Stolz et al. 2008):

(33)   proper name > kin expression > appellative expression (animate) > appellative expression (inanimate) > abstract/mass noun

The rationale seems to be this: with respect to their inherent definiteness, the concepts shown in (33) decrease from left to right. That means proper names designate referents that are unambiguously identifiable in a given discourse, kin expressions are easily identifiable in relation to someone in a given discourse, animate common nouns designate an indefinite number of animate entities that are similar in a particular respect, etc. The connection to (31) and (32) can be captured in the following way: Expressions moving into the postnominal position in the periods of German (31) "climb up" the referential expressions scale (from right to left). Expressions staying in prenominal position in the periods of German (32) reduce to those at the top (left pole) of the referential expressions scale. That means those referents whose identity is determined easiest in discourse remain in prenominal position. Referents whose identity is less easy determined occur in postnominal position. At the same time the exodus of expression types to the postnominal position constitutes a tendency towards a nucleus > argument or head > dependent order in the complex noun phrase. The exceptions to this order are the highly referential possessor expressions in the D_{gen} H construction in contemporary Standard German and those non-standard varieties that have preserved the genitive.

This cannot be the whole story, however, since there is no plausible reason why appellatives designating inanimate entities should be less identifiable than those designating animate entities. Because of this, a closer look at the relationship between partitive/meronymic relations and possessive (ownership) relations seems necessary. In particular, I propose the following cognitively motivated interpretation principle:

(34)   Interpretation principle (implicature):
       Animate D expressions in a complex noun phrase expressing partitivity/ meronymy are interpreted as possessors (ownership).

Why should this be the case and how does it contribute to the relationship between (31)/(32) on the one hand and (33) on the other? Concerning the first question, there is a widely acknowledged analogous principle at work in the linking of syntax and semantics. Van Valin and Wilkins (1996), on the basis of Holisky (1987), claim that in clauses, animate causers (or effectors, in their terminology) are interpreted as intentional agents. This leaves many lexical

entries of verbs unspecified with respect to agentivity. Agentivity is inferred on the basis of a lexical feature of an argument, namely its animacy. This is the reason why killers, hitters, and the like are interpreted as agents, if animate. Now recall how possession (ownership) was characterized in Section 2: as a spatial relationship plus what I have dubbed "control". Control is an important ingredient of agentivity (cf. Comrie 1989; Primus 1999). I am not aware of any reason why Holisky's observation should hold for animate effectors but not for animate D expressions in the constructions in question. This assumption also explains why the H *von* D_{dat} construction extends not only to partitive/meronymic meanings in the history of German but also to possessive (ownership) ones, namely if D_{dat} is animate, thereby triggering (34) to become active.

With respect to the second question, the relevance of (34) for the relationship between (31)/(32) on the one hand and (33) on the other, we find that (33) is also in part a scale of potential agentivity, and therefore of potential "real" possessors, i.e., those executing control. From a neurolinguistic and cognitive perspective, language users and "the person on the street" strive to identify the causer/controller within a sentence (cf. Bornkessel-Schlesewsky and Schlesewsky 2009) and within a real-life event (Kasper 2013) as fast as possible. A similar process seems to be at work in the complex noun phrases in question. The processes within adnominal genitive phrases have left potential agents in the prenominal position. (Note that in virtually all possessive (ownership) relations the possessor is higher in animacy than the possessum.)

However, language users' cognitive striving to identify the initiator/controller of any event as soon as possible obviously competes with the syntactic tendency to develop an H > D order within the noun phrase, which corresponds to the order possessum > possessor. The only possessor expressions that withstand this tendency are highly referential entities with potential for agentivity, namely the D_{gen} H of Standard German and non-standard varieties with a genitive case and the D_{dat} Poss H constructions found in many non-standard varieties. These constructions involving prenominal possessors are grammatical means for expressing possession (ownership) which obviate the need for the pragmatic implicature in (34). That implicature remains active in postnominal possessor expressions since these – although often animate or human – may in fact be part of "mere" partitive/meronymic relations.

Neither principle – the pragmatic implicature in (34) nor the search for the agent/controller in relations – can explain data in which we find the D_{dat} Poss H construction with an inanimate D_{dat} referent (as in [24] from Rhine-Franconian involving a puppet; [22] from a Low German variety involves a house).[21] In these

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[21] Recall that in Rhine-Franconian, a crane as "possessor" did not work (see [25]). It must at least be human-like.

constructions, inanimate D expressions occur prenominally despite not being possible agents/controllers. They can only be interpreted as expressing meronymic/partitive relations. One could argue that empathy plays a role where D refers to a puppet (cf. Kuno and Kaburaki 1977), causing human-like entities to be treated as humans, but this does not work for the Low German data. At present I have no explanation for these data and can only speculate that they result from an idiosyncratic development of the adnominal possessive dative or the noun phrase as a whole within the history of Low German varieties.[22]

Finally, do the considerations above allow us to offer a causal explanation of changes in the linking of syntax and semantics? The answer is twofold and may also seem disappointing, though I deem it reasonable: Firstly, we cannot say with certainty whether the syntactic changes surrounding the reanalysis of two originally adverbal constituents as a single noun phrase (e.g., D_{dat} Poss H, D *von* H) cause the attested changes in the interpretation of these structures. Allowing for other than purely structural explanations, it is also possible that the reverse is true: If interpreters strive to conceptually establish the relation between two objects as soon as possible (as Kasper 2013 claims), that would provide an impetus for a syntactic reanalysis of two adjacent adverbal constituents as a single one, once this structural adjacency configuration had occurred. Secondly, a clear causal relation between the changes in the prenominal position within the noun phrase and the associated changes in the way they are

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22 Lübben (1882: 108/109) and Lasch ([1914] 1974) cite Middle Low German data for the origins of the D_{dat} Poss D construction that differ from those that are discussed for Middle and High German. Concerning the latter, the usual explanations allude to the reanalysis of sympathetic adverbal datives (*Er hat [dem Vater] [sein Haus] angezündet* lit. 'He set the father his house on fire' / 'He set the father's house on fire' → *[dem Vater sein Haus] ist abgebrannt* lit. 'The father his house is burned down' / 'Father's house burned down') or the replacement of the prenominal genitive by the dative plus an added emphasizing Poss (*des Vaters Haus* 'Det.GEN father.GEN house' → *des Vaters sein Haus* 'Det.GEN father.GEN his house' → *dem Vater sein Haus* 'Det.DAT father.DAT his house'). The first, probably more prominent, hypothesis was put forward by Behaghel (1923), among others, the latter by Grimm (1837) and recently by Weiß (2012). In contrast, Lübben finds the origins of the Low German variant of D_{dat} Poss D in examples like *dat wîf des he eren sone levendich makede* (the.NOM woman whose.GEN he.NOM its.ACC son alive made; 'the woman whose son he brought/woke to life'). The genitival relative pronoun was then used in the nominative or accusative *deme, de dat pant sîn is* (the-one.DAT who.NOM/ACC the.NOM deposit his is; 'the one whose deposit this is') and later all genitival relations, not only relative constructions, were replaced by constructions like *mîn vader sîn hûs* (my.ACC father.ACC his house; 'my father's house'). Such a course of events differs considerably from those for Central and High German and if it took place in that way, it becomes probable that what we call "adnominal possessive dative" in German is not as uniform as it seems and might have different historical origins and motivations for different areas, at least with respect to Low German vs. High/Central German varieties.

interpreted cannot be provided either. In a similar vein to the above, it might be the case that there is a cognitive (or parsing) routine (cf. Hawkins 2004) applying to a particular structural configuration once it occurs, thus triggering its reanalysis. The solution to questions like these cannot be provided in a large-scale and coarse-grained survey like this article, which covers changes in the syntax-semantics linking over several hundred years. At a minimum, it would require the simultaneous observation across time of some cognizers' language-processing performances and their associated conceptual-semantic activity – a task which lies way beyond what we are actually able to do. For the time being, we must confine ourselves to stating the correlations between syntax and semantics as adequately as possible, leaving matters of causality for the future.

6 Conclusion

This article attempts to unify syntactic and semantics observations pertaining to adnominal noun phrases from the realm of possession across time and in contemporary varieties of German, observations which possibly reflect different developmental states in a continuum of changes within the adnominal expression of possession. It has been demonstrated that different lines of change are at work in the complex German noun phrase, for instance that concerning the prenominal position, that concerning the possessive element, that concerning the D_{dat} Poss H construction as a whole, and that concerning the relationships between the range of expressive strategies German varieties exhibit and the range of conceptual-semantic differentiations that need to be expressed. The inclusion of data from Standard German and very different non-standard German varieties (e.g., Low German vs. Valais German) forces one to conclude that there are no simple causal relationships to be found. In fact, Valais German itself illustrates this. While the preservation of the genitive and its functions could be argued to "block" the frequent use of the adnominal possessive dative, the highly frequent use of the *von* periphrasis in originally genitival functions points to a peaceful coexistence.

Although some important regularities in the change of the mapping between syntax and semantics, and some correlations between syntactic options and possible interpretations could be uncovered, they defy a simple causal explanation at present.

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