

The Possessor Linking Construction in Middle Low German and Alemannic

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1 Introduction

The possessive construction in (1), which we refer to as the Possessor Linking Construction (PLC), is exhibited across a wide range of modern Germanic varieties and has attracted a good deal of interest in the syntactic literature (e.g. Grohmann / Haegeman 2003; Haegeman 2004; Roehrs 2005, 2020; Strunk 2005; Strunk 2004).

- (1) a. *den Pasturn sien ole(n) Hoot*
the.OBL priest his old(WK) hat
'the priest's old hat' (Low German, Berg (2013: 36))
- b. *em Vater sin Platz*
the.MASC.DAT father his seat
'(the) father's seat' (Alemannic)

The diachronic background of the construction has also received treatment, especially in the context of High German (Grimm 1837; Paul 2007; Weiß 2012), Norwegian (Norde 2012; Perridon 2003) and Dutch (Burridge 1990; Hendricks 2012), as has a related construction attested in early English, the so-called 'his-genitive' (see e.g. Allen 1997, 2002; Lorido / Núñez 2017: 47; Shinkawa 2013). However, there remains no general consensus on the origin of the PLC. For German, for instance, there are two main hypotheses. On the one hand, there is what we refer to as the 'dative hypothesis', which assumes that the PLC emerged from an external dative construction via reanalysis and is widely cited in the literature (see e.g. Behaghel 1923-1932; Fleischer / Schallert 2011; Paul 2007: 349-350; Weiß 2012; Zifonun 2003). On the other hand, certain authors, in particular Weiß (2012), have called into question the validity of the dative hypothesis, suggesting instead that the PLC's origin lies in the adnominal genitive, an idea which can be

traced back to Grimm (1837: 351-352) and which, following Weiß (2012), we term the ‘genitive hypothesis’.

As we will show in this paper, investigations in this area are empirically challenging, because historical data is typically sparse owing to the low frequency of the PLC overall in written texts. In order to decide whether the PLC originates from a dative or a genitive construction one would ideally have data to show that either there is a period in which there are exclusively dative-marked possessors in the PLC, or a time in which unambiguously genitive-marked possessors are exclusively attested. Despite the extensive research in this area for (historical) High German, this empirical requirement is not met. As such, it seems worthwhile to consider other varieties which have been traditionally overlooked. In this paper, we look at novel diachronic and synchronic data from two relatively understudied Continental West Germanic varieties, namely Middle Low German (Middle Low German, c.1250-1650) and modern Alemannic, to try and close this empirical gap. With respect to Middle Low German, we gain insights from corpus data from the recently released Middle Low German component of the Corpus of Historical Low German (CHLG, Booth et al. 2020), together with supplementary data from a related resource, the Referenzkorpus Mittelniederdeutsch/Niederrheinisch (1200-1650) (ReN, ReN-Team 2019). With respect to modern Alemannic, we take advantage of available data from dialect surveys conducted as part of the project Syntax of Alemannic (SynALM).

The paper proceeds as follows. In Section 2, we survey various possession constructions across synchronic Germanic varieties, with a particular focus on the status and specific properties of the PLC. Section 3 introduces the two Germanic varieties which are the focus of this paper, Middle Low German and modern Alemannic, and their relevant syntactic characteristics in the context of the PLC, together with our data sources. In Section 4, we discuss the origin of the PLC in the light of insights from our data and in relation to the dative- and genitive-hypotheses from the literature, drawing parallels also with a related construction attested in early English, the so-called ‘*his*-genitive’. Section 5 concludes the paper and signals some directions for future work in this area.

2 Possession Across Germanic

2.1 Synchronic survey

Possession can be expressed with various constructions across Germanic. The current paper focusses on internal possession, i.e. adnominal constructions in which the possessor and possessum are realised in a complex DP, as in (2). Internal possession comprises a range of constructions that can be found across Germanic. The ordering of the two DPs depends on the specific adnominal construction, as illustrated in (2a) to (2d). (2a) and (2b) show an adnominal construction that allows the possessor to be pre- or postposed with more restrictions on the former. In (2c) the possessor is embedded under a PP and is generally but not exclusively

postposed, whereas in the Possessor Linking Construction in (2d) the possessor must precede the possessum.

The paper will not discuss in detail external possession as in (3), though this type of possession is nevertheless relevant, as the external dative construction in (3d) is regarded as one possible diachronic source for the Possessor Linking Construction in (2d), a fact that we will take up in more detail in section 4.

- (2) a. *Das Auto des Mannes*
the car the.GEN man.GEN
- b. *Des Mannes Auto* (archaic)
the.GEN man.GEN car
- c. *Das Auto von dem Mann*
the car of the.DAT man
- d. *Dem Mann sein Auto*
the.DAT man his car
- (3) a. *Der Mann hat ein Auto*
the man has a car
- b. *Das Auto gehört dem Mann*
the car belongs the.DAT man
- c. *Das Auto ist dem Mann* (some Alemannic and West Central varieties)
the car is the.DAT man
- d. *Der Peter wäscht dem Mann das/sein Auto.*
the Peter cleans the.DAT man the/his car

Across Germanic, even more constructions than those given in (2) can be identified, though not all of them are attested in all Germanic languages. The overview in Tab. 1 is mainly based on Delsing (1998), but see also Dahl (2015) for a more detailed overview, especially regarding North Germanic varieties.

Construction	Distribution
<i>hus-et mitt</i> house-the my	Norw., Ice., Northern Swe.
<i>mitt hus</i> my house	all Germanic languages (North Scand.: when emphatic)
<i>das Haus des Mannes</i> the.NOM house the.GEN man.GEN	Standard Ger., Ice.
<i>hus-et till Per</i> house-the to Per	all Germanic languages except Dan., Swe., Ice.)
<i>Mutters Haus</i> mother.GEN house	Ice. proper names, Ger. and Faroese also kinship terms
<i>mannen-s hus</i> man.GEN house	Eng., Standard Dan. Swe. and Norw. (group genitive possible)
<i>dem Mann sein Haus</i> the.DAT man his house	Norw. dialects, Dan. (West Jutlandic), Dutch and Ger. dialects
<i>hus-et hans Per</i> house-the his Per	North Swe., Norw., Ice. (proper names and kinship terms)

Table 1: Adnominal possession across Germanic

As already mentioned in the introduction, the current paper focusses on the construction in (2d), which we call the Possessor Linking Construction (PLC). As Table 1 shows, the PLC construction is widespread across Germanic but absent from those languages that still productively use adnominal Genitive for expressing possession, see (2a) and (2b) above, namely Icelandic and Standard German.¹ Norwegian allows both the PLC in (4a) as well as the PLC construction in (4b), which is a parallel to that also found in German and Dutch, illustrated again in (5).

- (4) a. *hus-et hans Per*
house-the his Per
'Per's house'
- b. *Per sitt hus*
Per his.REFL house
'Per's house'
- (5) a. *dem Peter sein Haus*
- b. *der Maria ihr Haus*
the.DAT Peter/Maria his/her house

¹ Icelandic does however have a variant of the PLC, parallel to the Norwegian construction in (4):

- (i) *hús-ið hans Péturs*
house-the his Peter.GEN
'Peter's house' (Dahl 2015)

The variant of the PLC as given in (5) is common in most non-standard varieties of German with only a few exceptions, e.g. a highest Alemannic variety spoken in the canton of Valais in Switzerland, which has also retained genitive, cf. Kasper (2014). The special properties of the PLC will be discussed in more detail in the next section.

2.2 The Possessor Linking Construction (PLC)

As mentioned in section 2.1, the Possessor Linking Construction is widely attested across Germanic varieties and has as such attracted attention in the syntactic literature. In this context it has been referred to with a number of different labels, including ‘possessor doubling’ (e.g. Grohmann / Haegeman 2003; Haegeman 2004; Roehrs 2005, 2020), the ‘possessive dative’ (e.g. Burridge 1990; Kasper 2014; Norde 2012) or the ‘garpe-genitive’ (e.g. Torp 1992). However, since the construction does not in our view involve doubling in terms of morphosyntactic redundancy, nor has necessarily dative or genitive case-marking, nor is necessarily a contact phenomenon in all Germanic varieties, we prefer the label ‘Possessor Linking Construction’ (PLC); see Koptjevskaja-tamm (2003), Strunk (2004, 2005) and Dahl (2015) for similar terminology. Attested constructions in early English texts which appear at least superficially similar to the PLC have been referred to as the ‘his-genitive’ (e.g. Allen 2002; Janda 1980) or the ‘separated genitive’ (e.g. Lorigo / Núñez 2017), as we discuss in detail in section 4.4. In order to make our own terminology clear, we will use the following terms throughout to refer to the various components of the PLC. The first DP, *dem Mann* in (6), we will refer to as the ‘possessor-DP’ and the second DP, *sein Auto* in (6), we will call the ‘possessum-DP’. For the *sein* element within this possessum-DP, we adopt the neutral term ‘possessive element’.

- (6) *dem Mann sein Auto*
 the.DAT man his car
 ‘the man’s car’

As pointed out by Weiß (2008: 384), the possessor-DP is typically marked for the most oblique case available. As such, in Germanic varieties which have a three-case system, the possessor-DP is marked for dative; in those varieties with only a two-case system, e.g. modern Low German dialects, the possessor-DP is marked for non-nominative case, e.g. (7), cf. Berg (2013). The possessum-DP is marked for the case that the whole DP is assigned at sentence-level, and the ordering is strictly possessor-possessum.

- (7) *den Pasturn sien ole(n) Hoot*
 the.NONNOM pastor his old(NONNOM) hat
 ‘the pastor’s hat’ (Berg 2013: 36)

In addition to variation regarding case-marking of the possessor-DP, there is also variation with respect to the possessive element in the possessum-DP. In most cases, this element matches the gender of the possessor. Thus, with male possessors the element *sein* ('his') is used as in (6), whereas with female possessors the element *ihr* ('her') is used, as in (5b). However, in both diachronic and some synchronic varieties, the element *sein* is also compatible with female possessors, suggesting that it may be underspecified for gender, as shown in (8). Another interesting fact about the PLC is that, while the possessive element itself is chosen depending on the gender of the possessor, the inflection on the possessive element is determined by the head noun, a peculiarity that is investigated in detail in Georgi / Salzmann (2011).

- (8) *de Oma sin Schurz* (Alemannic)
 the.DAT.FEM granny his apron
 'the granny's apron'

3 Middle Low German and Alemannic

3.1 Properties of Middle Low German and Data Sources

Middle Low German is a cover term for several Continental West Germanic scribal dialects which were in use across northern Germany and the north-eastern Netherlands in *c.*1250-1650. The main scribal dialects which will be relevant for this paper are Westphalian (WP), Eastphalian (EP), North Low German (NLG) and Eastelbian (EE), see Map 1.



Map 1: Map of Middle Low German scribal dialects

Middle Low German texts exhibit diatopic variation across these dialect areas, as well as diachronic variation across the centuries. In this respect, the language stage is standardly periodised into three sub-periods: (i) early Middle Low German, 1250-1370; (ii) Classical Middle Low German, 1370-1520; (iii) late Middle Low German, 1520-1600 (Peters 2017). The data for this paper spans 1250-1652, with the bulk of the data in the Classical Middle Low German period (1370-1520). As such, we adopt an alternative periodization, which consists of four periods of roughly equal length, the middle two of which overlap with much of the traditional Classical period: 1250-1349; 1350-1449; 1450-1549; 1550-1652.

The syntax of Middle Low German remains relatively understudied, despite its rich attestation which offers a ripe opportunity for syntactic studies; large numbers of prose texts are preserved from the period and span a range of genres, from chronicles and city rights, to charters, private letters, religious and scientific texts (Meier / Möhn 2000). Situated on the Continental West Germanic dialect continuum, with the Dutch dialect area to the west and High German dialects to the south, Middle Low German shares features with both of these groups. At the same time, a number of recent studies have shown that the language exhibits syntactic characteristics which signal its unique position within Continental West Germanic with respect to e.g. the verbal complex (Mähl 2014), verb-second and the left periphery (Petrova 2012, 2013), negation (Breitbarth 2014b), adverbial clauses (Wallmeier 2015) and unexpressed subjects (Farasyn 2018; Farasyn / Breitbarth 2016).

There are two recently released resources which provide valuable new opportunities for syntactic studies of Middle Low German, and we make use of both in this study: (i) the Referenzkorpus Mittelniederdeutsch/Niederrheinisch (1200-1650) (ReN-Team 2019) and (ii) the Middle Low German component of the Corpus of Historical Low German (Booth et al. 2020). The Referenzkorpus Mittelniederdeutsch/Niederrheinisch (1200-1650) (henceforth ‘ReN’) contains approximately 1.45 million words spanning 145 texts. Each text is presented in a diplomatic transcription and is lemmatised, POS-tagged and annotated for morphological information e.g. case, number, gender and person for nominal categories. For more details on the design of the ReN, see Barteld et al. (2017). For this paper, the relevant data from ReN were extracted via AQL queries using the ANNIS platform (Krause / Zeldes 2016).²

The ReN – with its relatively large scope, as well as its POS-tags and rich morphological information – is a valuable resource for certain types of syntactic investigation, particularly as its specially designed tagset, the Historische Niederdeutsch-Tagset (‘HiNTS’, Barteld et al. (2018)), already encodes some information regarding word order. However, for certain types of syntactic investigation, where e.g. hierarchical structural relations and word order properties beyond adjacency are relevant, additional syntactic annotations are necessary. This is provided by the Middle Low German component of the CHLG, which has been developed in

² <http://annis.corpora.uni-hamburg.de:8080/gui/ren>

collaboration with the ReN, adding an additional layer of syntactic annotation to a small pro-portion (approximately 200,000 words) of the ReN texts, on top of the inherited POS-tags and morphological annotations. An overview of the texts in the Middle Low German component of the CHLG is provided in Table 2. The syntactic annotation is constituency-based and follows the Penn standard for historical English (Santorini 2010), in line with other historical corpora for related varieties, e.g. Old Saxon (Walkden 2015) and Early New High German (Light 2011). The data from the CHLG for this paper was extracted using the CorpusSearch query language (Randall 2005).

Text ID	Dialect	Genre	Date
Arzneibuch		science	1451-1500
Herford	Westphalian	law	1375
Soest		law	1367
Spiegel		religion	1444
Braunschweig		law/charter	1301-1500
Duderstadt I/II	Eastphalian	law	1279
Engelhus		literature	1435
Zeno		literature	1401-1450
Bremen		law/charter	1300-1350
Buxtehuder		religion	1451-1500
Griseldis	North Low German	literature	1502
Oldenburg		law/charter	1350-1500
Willeken		private letter	1535
Flos		literature	1401-1450
Greifswald		law	1451
Rostock	Eastelbian	law	1580
Schwerin		law	1451-1500
Stralsund		law/charter	1301-1500

Table 2: Middle Low German texts in the Corpus of Historical Low German

Despite the recent surge of interest in Middle Low German, the syntax of possession in the language remains neglected. As such, only one possession construction is typically mentioned in connection with Middle Low German, the Possessor Linking Construction (PLC) detailed in section 4.2, e.g. (9).

- (9) a. *de volgeden carle sines willen*
they followed Carl.DAT his.GEN will.GEN
‘they followed Carl’s will’
(ReN: Rossiliun-Frag., tokens 3499 - 3511)
- b. *Lorins syn bede was gar entwicht*
Lorin.GEN his.NOM request.NOM was even desecrated
‘Lorin’s wish was desecrated’
(ReN: Kortw.-Hist.-Laurin, tokens 5435-5447)

The research to date has focussed exclusively on the role of the Middle Low German PLC as the source of parallel constructions in Scandinavian dialects via language contact during the Hanseatic period (e.g. Braunmüller 2018; Jahr 1999; Nesse 2002; Norde 2012). Yet despite the strong focus on this contact story surrounding the PLC, no dedicated study has pinned down the precise status and properties of the construction in Middle Low German itself. Norde (2012: 346) claims that the PLC is “commonly attested” in Middle Low German, but does not provide specific evidence to support this claim. According to Nesse (2002: 176), meanwhile, the possessor-DP in the Middle Low German PLC is in most cases not dative-marked, but instead appears with nominative or genitive case-marking. Apart from these sparse statements, very little is known about the Middle Low German PLC.

In fact, examining the syntactic expression of adnominal possession in corpus data from CHLG shows that genitive case-marking on the possessor is by far the most frequent strategy in Middle Low German, outweighing the PLC which by comparison occurs very infrequently in the corpus, see Table 3. This is in line with other early Germanic languages, where genitive case-marking is very much the dominant strategy. The genitive DP-possessor can be either prenominal, e.g. (10) or postnominal, e.g. (11), and the data shows a roughly even distribution for the two orders (51% prenominal; 48% postnominal), in line with previous research on the position of attributive genitives in Middle Low German (Fischer / Peters 2012; Lundemo 1989; Solling 2015, 2016).

Construction	<i>n</i>	% share
Prenominal Gen.-DP	1,174	51%
Postnominal Gen.-DP	1,087	48%
PLC	23	1%
Total	2,284	100%

Table 3: Relative frequency of three adnominal possession constructions in CHLG (1250-1650)

- (10) a. *se ys gud weder **des houedes culden***
it is good against the.GEN head.GEN colds
‘it is good against head colds’ (CHLG: Arznei)
- b. *To lesten sprak **enes greuen son***
to last spoke a.GEN count.GEN son
‘lastly a count’s son spoke’ (CHLG: Zeno)
- (11) a. *vnde **de aderen der wangen se sterket***
and the.ACC veins.ACC the.GEN cheeks.GEN it strengthens
‘and it strengthens the veins in the cheeks’ (CHLG: Arznei)
- b. *gi dot **de werk ivwes vader***
you do the.ACC work.ACC your.GEN father.GEN
‘you do your father’s work’ (CHLG: Buxtehuder)

By contrast, examples of the PLC are strikingly rare ($n=23$), though this may be due to the fact that the PLC is dispreferred in written language compared to the spoken language, as in modern Germanic varieties (Vezzosi 2000). The attested PLCs will be discussed in more detail in section 4.2.

There are also attested examples in Middle Low German where adnominal possession is encoded via a PP headed by *van* ('from'), e.g. (12).

- (12) a. *creffte vnde sympellicheit der crude van medecinen*
 powers and simplicity the.GEN herb.GEN of medicine
 '(the) powers and simplicity of medicine's herbs' (CHLG: Arznei)
- b. *de gherade van der moder*
 the lineage of the mother
 'the mother's lineage' (CHLG: Ruethen)
- c. *de tafele van den eersten boeke*
 the contents of the first book
 'the first book's contents' (CHLG: Spieghel)

This is not surprising, given that similar PP-strategies for possession marking emerge elsewhere in Germanic around this time. In High German, it has been observed that *von*-periphrasis gradually takes over from genitive case-marking in Middle High German from the 12th century onwards (Ebert 1986: 92; Kiefer 1910). Similarly, in English, *of*-periphrasis as a possession-marking strategy is attested from the 12th century onwards and increases throughout the Middle English period (Vezzosi 2000). A similar trend has been observed for Middle Dutch, where the PP strategy has become dominant by the 15th century (Vezzosi 2000). A full examination of the status of *van*-periphrasis for possession marking in Middle Low German is beyond the scope of this study; we leave this for future research and concentrate instead on the PLC.

Finally, any investigation of Middle Low German syntax must take into consideration the erosion of morphological case which is underway during the period. A study of the 14th century text the *Wolfenbütteler Psaltertext* by Björnheden (1997), for instance, found that only 37% of all NPs in this text display unequivocally identifiable distinctive case-marking. This aspect of Middle Low German will be especially relevant for the status of the PLC in Middle Low German, as we discuss below in section 4.2. Here, we draw attention to some of the key trends concerning morphological case which Middle Low German texts exhibit and which are relevant in the context of this study. Already in Middle Low German there is a tendency towards accusative/dative syncretism in the MASC.SG on account of the double forms in the MASC.SG.DAT, as seen in the paradigm for the definite article (see Table 4). A similar tendency towards accusative/dative levelling is reflected in the paradigm for the strong adjectival inflection (see Table 5).

	masc.sg.	neut.sg.	fem.sg
nom.	<i>dê/die</i>	<i>dat</i>	<i>dê/die</i>
acc.	<i>den(e)</i>	<i>dat</i>	<i>dê/die</i>
dat.	<i>dem(e)/den</i>	<i>dem(e)/den</i>	<i>der(e)</i>
gen.	<i>des</i>	<i>des</i>	<i>der(e)</i>

Table 4: The definite article in Middle Low German (Härd 2000: 1432)

	masc.sg.	neut.sg.	fem.sg
nom.	<i>blint/blinter</i>	<i>blint</i>	<i>blint/blinde</i>
acc.	<i>blinden</i>	<i>blint</i>	<i>blinde</i>
dat.	<i>blindem(e)/blinden</i>	<i>blindem(e)/blinden</i>	<i>blinder</i>
gen.	<i>blindes</i>	<i>blindes</i>	<i>blinder</i>

Table 5: The strong adjectival declension in Middle Low German (Härd 2000: 1432)

This represents a case-levelling process which proceeds throughout the period and beyond, coming to completion in modern Low German (Härd 2000) where only a two-way distinction remains in the MASC.SG between nominative and a ‘non-nominative’ case derived from the former accusative and dative (Table 6).

	masc.sg.	neut.sg.	fem.sg
nom.	<i>de dicke Kopp</i>	<i>dat oole Book</i>	<i>de oole Kann</i>
non-nom.	<i>den dicken Kopp</i>	<i>dat oole Book</i>	<i>de oole Kann</i>

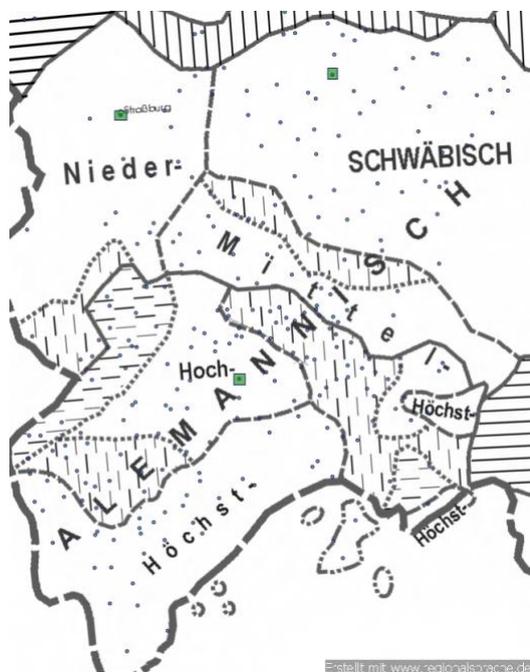
Table 6: The case system in modern Low German (Askedal 2005: 6)

Compared to the accusative/dative syncretism story, relatively little has been written about the status of the genitive in the history of Low German. In modern Low German, the genitive is found only sporadically as fossilised forms (Berg 2011; Kasper 2017). In particular, it has been shown that the the prenominal genitive of personal names has been retained across Northern Germany in Low German-speaking areas (Pickl 2020). The exact diachrony of the loss of the genitive is hard to pin down, but Pickl (2020), citing Behaghel (1923-1932: 189), suggests the 15th century for its loss in spoken German. An extra consideration is the fact that it is generally assumed that the erosion of case proceeded at different rates across Middle Low German dialects (Lasch 1914). As far as the written language is concerned, there is evidence to suggest we are not dealing with a simple trajectory of increasing decline in the genitive. Scott (2014: 315) claims for Dutch and German in general that the adnominal genitive underwent a resurgence in the 15th century following its earlier decline up to 1400, as evidenced by a striking increase in the adnominal genitive in written texts at this time, perhaps as part of the emergence of a distinct prestigious written variety (see also Pickl (2020) for discussion). We pick up this point again in section 4.2 in relation to our findings for the PLC in Middle Low German. Another feature of the Middle Low German

nominal system which will be relevant for the discussion in section 4.2 is the fact that there is dative/genitive syncretism in the FEM.SG (see Tables 4 and 5).

3.2 Properties of Alemannic and Data Source

Alemannic is a Southern German dialect, spoken in a large area that covers regions in four countries. The dialect is divided into five varieties, namely Highest, High, Middle, Low Alemannic and Swabian. It thus provides a good basis for investigating morphosyntactic (micro-)variation. The area is displayed in Map 2, a snippet of the classical dialect map by Wiesinger (1983), which was created with the Rede SprachGIS (Bock et al. 2008). Furthermore, there is a solid database comprising Alemannic texts from Old, Middle and Early New High German, which makes it particularly interesting for investigating language change.



Map 2: The Alemannic area

Alemannic has several characteristic phonetic, lexical and morphosyntactic properties of which we can only list some here. One prominent phonetic feature is the realisation of monophthongs where we find diphthongs in Standard German, as Alemannic has not undergone the MHG diphthongisation (with the exception of Swabian) as illustrated in (13) and (14).

- (13) a. *Wii* (Alemannic)
 b. *Wein* (Standard German)
 'wine'

- (14) a. *bruuche* (Alemannic)
 b. *brauchen* (Standard German)
 ‘need’

A prominent morphosyntactic feature of Alemannic is variation in relative clause introducers (RCI). In Standard German, RCs can only be introduced by a pronoun and in most cases it is a d-pronoun, as in (15a). In Alemannic, the d-pronoun is available as an RCI but, in addition, RCs can also be introduced by the particle *wo* as in (15b), or by a combination of particle and pronoun as in (15c). This phenomenon can also be found in other German dialects but there is an interesting areal distribution within the Alemannic area concerning this type of variation. While in the Alemannic regions outside of Switzerland the pronoun and the particle are equally accepted as RCIs, this is not the case for the Highest and High Alemannic regions in Switzerland that almost solely allow the particle strategy. This leads to a higher frequency of resumptive pronouns, see (16), which are claimed to compensate for the absence of case marking on the particle, especially in oblique RCs (Bräuning 2020; Fleischer 2013; Salzmann 2006).

- (15) a. *Der Mann, der ...*
 b. *Der Ma, wo ...*
 c. *Der Ma, der wo ...*
 ‘The man, who...’
- (16) *Der Ma, wo er ihm gholfe het.*
 the man, PRT he him helped has
 ‘The man, whom he has helped’

Another characteristic feature of Alemannic is the use of uninflected adjectives. While, in Standard German, attributive adjectives must always inflect, they can occur uninflected in a variety of contexts in Alemannic, a phenomenon that is already mentioned as a typical property of Alemannic in Birlinger (1868) and which is investigated in detail in Rehn (2019).

- (17) a. *mit dem neu Wage* (Alemannic)
 b. *mit dem neu-en Wagen*
 ‘with the new car’

Furthermore, Alemannic has a strong and a weak form of the definite article. The latter obligatorily occurs with proper names and is also used in generic DPs, as illustrated in (18). The weak and the strong form of the definite article is investigated in detail in Schwarz (2009) and for Alemannic, focusing on the varieties spoken in Switzerland in Studler (2011).

- (18) a. *d’ Anna het a neus Auto*
 the Anna has a new car
 ‘Anna has got a new car’

- b. *dr Wii isch us Trube gmacht*
 the wine is from grapes made
 ‘Wine is made from grapes’

Before continuing with the special properties of possession in Alemannic, the data sources will be briefly presented to make the method and origin of the Alemannic data transparent. The Alemannic data were collected within the SynAlm³ project for which detailed questionnaires were sent out across the Alemannic region over a timeframe of four years. The area and the individual places to which questionnaires were sent are displayed in Map 2 above; the black dots mark the places to which questionnaires were sent. In total, seven questionnaires were sent out to these places addressing various phenomena. As expected, the number of participants declined over time; in the first questionnaire, about 1000 people participated, by the seventh questionnaire we still had 500 participants.

The questionnaires contained different task types, e.g. judgement tasks, translation tasks and choice tasks in which participants had to choose between different options. In addition to this, participants could also write down alternatives that were not included in the questionnaire. Figure 1 illustrates one type of choice task, in which participants indicated whether or not they use a certain construction. The sentences were always given in the local Alemannic variety to avoid interference of the standard variety. Figure 2 illustrates a translation task. In this task type, a sentence was given in Standard German and participants were asked to translate this sentence into their dialect.

	Ja	Nein
5.1. Jo, mir het er aglütde und gseit, dass er erscht schpöter chunnt	<input type="checkbox"/>	<input type="checkbox"/>
5.2. Jo, mir het er agglütde und gseit, ass er erscht schpöter chunnt	<input type="checkbox"/>	<input type="checkbox"/>

Figure 1: Choice task

Unsere Berge sind nicht sehr hoch, die euren sind viel höher.
6.1. _____

Figure 2: Translation task

Figure 3 illustrates a judgement task. Sentences were given in the local Alemannic variety and participants were asked to rate these sentences on a scale from 1 (natural) to 5 (not possible).

³ The project was funded by the DFG (German Research Foundation) and was led by Ellen Brandner.

8a	1 natürlich	2	3	4	5 geht nicht
1. Des isch de Lena es Rad	<input type="checkbox"/>				
2. Des isch em Vaddr d'Uhr	<input type="checkbox"/>				

Figure 3: Judgement task

The answers of the participants are connected to geographic coordinates that allows one to display the results on maps, created with the Rede SprachGIS. These maps make it possible to identify certain regional distributions that may exist within the Alemannic area (cf. the distribution of RCIs (15) and (16) above) and see also Map 3 and Map 4 below.

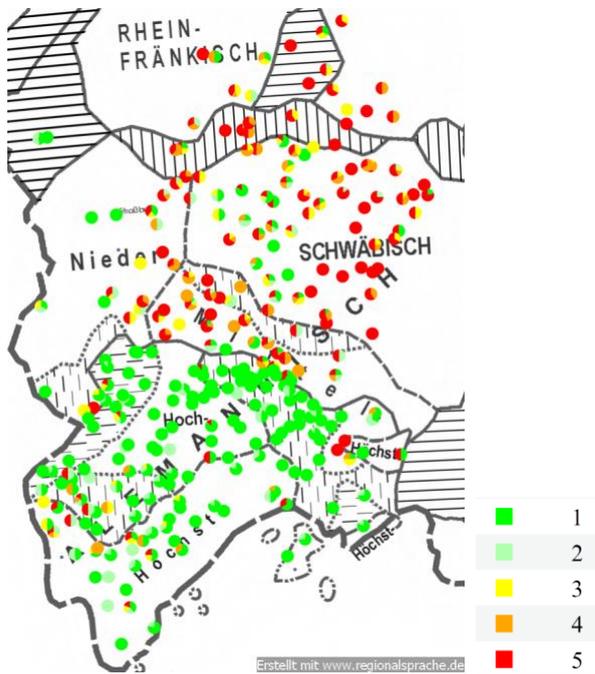
Returning to the properties of Alemannic, possessive constructions in Alemannic show some interesting characteristics and were also investigated as part of the SynAlm project. Both the PLC as well as the PP-construction for expressing possession are productively used across the Alemannic varieties. This is evident from a translation task. Participants translated the sentence in (19a) containing an adnominal genitive. Due to the absence of genitive in Alemannic, participants were forced to choose an alternative strategy. The PLC and the PP-construction were the most common alternatives chosen across the area, see (19a) and (19b). The distribution of the two constructions for this translation task is illustrated in Map 4, revealing that, in the Highest Alemannic region, the PP was preferred over the PLC. This is an expected result, as in this region we find the archaic Alemannic dialects which have preserved the adnominal genitive. As Alemannic has a three-case system, the possessor within the PLC is generally marked for dative. In addition, Alemannic has some special properties regarding the inflection of possessive pronouns, as it allows strong inflection in nominative masculine DPs. This is interesting, because adding inflectional material in this context leads to sharp ungrammaticality in the standard variety, and is in fact also regionally restricted in Alemannic, as the overview in Baechler (2017) shows.

- (19) a. *mit Lenas neuen Stiefeln* (Standard German, Genitive)
 b. *mit der Lena ihre Stifle* (Alemannic, PLC)
 c. *mit de Stifle vu der Lena* (Alemannic, PP)
 'with the Lena her boots/ with the boots of Lena'
- (20) *Min-er Sohn isch Mechaniker* (Alemannic)
 **Mein-er Sohn ist Mechaniker* (Standard German)
 my-MASC.SG. son is mechanic
 'My son is a mechanic'

In addition to the properties of Alemannic regarding adnominal possession already noted, Alemannic also has an interesting external possessive construction besides those that are also available in the standard variety, namely the construction in (21). In this construction, there is a copula followed by a possessor-DP, which is

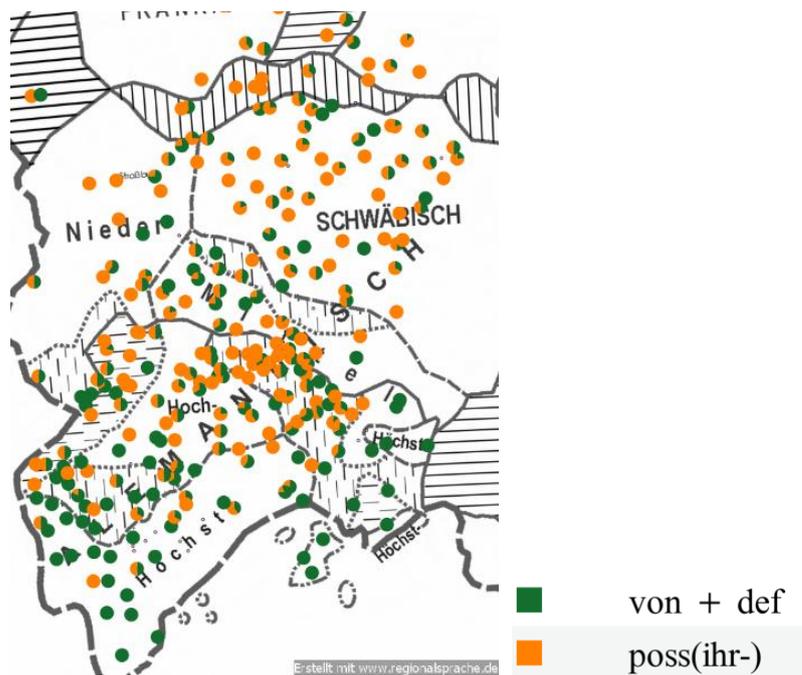
marked for dative. This construction is again regionally restricted in the Alemannic dialect region, being most common in the Highest and High Alemannic areas, whereas rejection centers in the Swabian area (cf. Map 3).

- (21) *Das Auto ist dem Mann*
 the car is the.DAT man
 ‘The car belongs to the man’
- (22) *Das ist dem Peter*
 this is the.DAT Peter
 ‘This belongs to Peter’



Map 3: *External Dative*

The external possessive construction in (21) and (22) suggests that, in this case, dative is indeed relevant for the expression of possession, whereas in the PLC there is a clear tendency to realise the most oblique case available but the absence of oblique case-marking does not lead to absence of the PLC. Thus, unlike the construction in (21) and (22), case-marking on the possessor-DP within the PLC does not seem to be relevant for expressing the possessive relation in this case.



Map 4: PLC (orange) and PP (green) as results of a translation task

4 The Origin of the Possessive Linking Construction

4.1 Two origin stories

The origin of the PLC is not clear to date. Two possible diachronic sources are discussed in the literature on High German which, as mentioned in section 1, we refer to as the ‘genitive hypothesis’ and the ‘dative hypothesis’ (cf. Weiß 2012: 281). The latter has received a lot more attention in the literature than the former but has also been recently disputed by Weiß (2012). In the following, we introduce both hypotheses and discuss the points in Weiß (2012) in detail.

The dative hypothesis (e.g. Ágel 1993; Behaghel 1923; Demske 2001; Ebert 1986; Paul 2007; Schmid 1988) states that the PLC has its origin in an external dative construction and is the result of reanalysis of a phrase boundary, whereby the possessor and possessum as two separate constituents, e.g. (23a), are reanalysed as a single constituent, e.g. (23b).

- (23) a. *der Peter wäscht [dem Opa] [sein Auto]*
 b. *der Peter wäscht [dem Opa sein Auto]*
 the Peter cleans the.DAT grandfather his car
 ‘Peter cleans the car for his grandfather/ Peter cleans his grandfather’s car’

Such accounts are generally built on at least one of the following three observations:
 (i) the oldest examples of the PLC in High German have a dative-marked possessor,

(ii) the PLC in modern High German dialects exhibits exclusively dative-marked-possessors and (iii) the dative-marked DP and the DP containing the possessive pronoun were generally adjacent, enabling the assumed reanalysis as a single constituent.

The genitive hypothesis goes back to Grimm (1837: 351-352), who notes that in MHG a genitive may already be accompanied by an emphasising possessive pronoun. Grimm also states that, in the upper German varieties, genitive is replaced by dative in this construction but explicitly lists PLCs with genitive-marked possessors, e.g. (24), and assumes adnominal genitive to be the source of the construction; the dative hypothesis is not mentioned by Grimm.

- (24) *ich habe mich mit des grafen seinem Koch verlobt*
 I have me with the.GEN duke his chef engaged
 ‘I got engaged to the duke’s chef’

While Grimm’s suggestion that specifically emphasis may play a role is no longer adequate, Weiß (2012) provides novel evidence from various stages of High German which cast doubt on the dative hypothesis and at least allow for a genitive source for the PLC. Firstly, he shows convincingly that there are problems with the evidence typically cited in favour of the dative hypothesis. With respect to the oft-cited earliest examples from OHG which are taken by many to be PLCs with a dative-marked possessor (e.g. Ramat 1986), Weiß points out that they in fact allow for a free dative reading, so it is not conclusive that they are actually PLCs. A relevant example is provided here in (25).

- (25) *Dû uuart demo Balderes uolon sîn uuoz birenkit*
 there was the.DAT Balderes.GEN colt.DAT his.NOM foot.NOM wrenched
 ‘There was the foot of Balder’s colt wrenched’
 (2nd Merseburger Zauberspruch in Weiß (2012: 274))

With the OHG examples excluded, the first clear examples of the PLC appear in MHG, specifically in the 13th century. But, as Weiß also points out, these early examples in fact feature a feminine possessor whose case-marking is ambiguous between dative and genitive due to syncretism in the paradigm, e.g. (26).

- (26) *noch scherpfer dan der bîn ir zagel*
 PRT sharper than the.DAT/GEN bee her sting
 ‘even sharper than the bee’s sting’
 (Parzival 297,12 in Weiß (2012:282))

Due to the case syncretism, examples like (26) also cannot be used as explicit evidence for the dative hypothesis (or for the genitive hypothesis either, for that matter). Another problem arises concerning the evidence from modern German dialects. As Weiß shows, dative is not in fact the exclusive case marked on the

possessor in the PLC; genitive-marked possessors can in fact be found in Alemannic and Bavarian varieties e.g. (27).

- (27) *mein's Vodas san lustigha Bou*
my.GEN father.GEN his cheerful son
'my father's cheerful son'

(North Bavarian, Weiß (2012:284))

Alongside these issues concerning the evidence standardly assumed to be in support of the dative hypothesis, Weiß also cites some, albeit rather scarce, novel evidence in favour of a genitive source. Specifically, PLCs with unambiguous dative-marking on the possessor only occur later, at the end of the 13th century. However, as Weiß does not give earlier examples of PLCs with unambiguous genitive-marked possessors, it is not clear how this observation alone can bear on the origin dispute. More useful evidence cited by Weiß comes from one text from Reinmar von Zweter which is extant in multiple manuscripts; in a later manuscript the earlier genitive-marking on the possessor has been substituted for dative. Although this is only one example and so by no means enough to conclusively opt for the genitive hypothesis, it at least fits with a genitive origin.

A final observation from Weiß, which does not bear on the origin of the PLC directly but will be relevant in our study of Middle Low German below is that, by ENHG, there is considerable variation in the case-marking on the possessor, even at the intra-speaker level. Weiß points out that in the letters of Magdalena Paumgartner, for instance, both dative and genitive are used within the same year, cf. (28).

- (28) a. *meinem pruter seim weib*
my brother.DAT his wife.ACC
'my brother's wife' (Paumgartner 1895:32 in Weiß, (2012: 280))

- b. *des Paulus Behems sein hondsclag*
the Paulus Behem.GEN his handshake
'Paulus Behem's handshake' (Paumgartner 1895:32 in Weiß, (2012: 280))

Overall, in the context of High German there appear then to be some serious empirical holes in terms of the dative hypothesis for the origin of the PLC, and some (rather scant evidence) which at least allows for a genitive origin, if not conclusively supporting it to the exclusion of a dative origin. In particular, it is noteworthy that Weiß (2012) does not specifically provide early examples of the PLC with an unambiguously genitive-marked possessor-DP, which one would expect to find if the genitive hypothesis were correct. As such, the origin of the PLC remains unresolved. Moreover, and as discussed, diachronic accounts for High German have traditionally been formulated on the basis of relatively scarce data, partly due to the fact that the PLC overall is a low-frequency phenomenon in written texts, and that many examples which appear to be PLCs on first sight must ultimately be

discounted as potentially alternative constructions involving a free dative or apposition. Furthermore, previous accounts do not appear to differentiate much between the diachrony of individual High German dialects, despite the fact that OHG and MHG are clearly not monolithic. As such, it is worthwhile to consider a wider range of data in detail, specifically diachronic and diatopic data from Middle Low German which has not been previously considered for this issue, and synchronic data from modern Alemannic dialects.

4.2 Middle Low German data

As mentioned, to be sure that an example is a genuine PLC, one must be able to conclusively rule out the possibility that the example in question is one of two other construction types which can appear superficially similar to the PLC: i) the free dative and ii) straightforward apposition. With respect to the Middle Low German data, all examples which resulted from the search queries were manually checked and ruled out if they allow for the free dative reading, e.g. (29), or an analysis as straightforward apposition, e.g. (30).

- (29) a. *Sunder en ridder De openede **em sine side** myt Deme spere*
 but a knight that-one opened he.DAT his.ACC side.ACC with the spear
 ‘But a knight, he opened his side with the spear.’ (CHLG: Buxtehuder)
- b. *vnd se vorwosteden **ome al sin lant***
 and they ravaged he.DAT all.ACC his.ACC land.ACC
 ‘and they ravaged all his land.’ (CHLG: Engelhus)
- c. *Dar du **em sijn ere** mede mochtet berouen*
 there you him.DAT his.ACC inheritance.ACC with wish rob
 ‘with which you wish to rob him of his inheritance’ (CHLG: Spiegel)
- (30) a. *Jodoch adam vnde **eua sin wif** weren alle beyde naket*
 but adam and eve.NOM his.NOM wife.NOM were all both naked
 ‘But Adam and Eve, his wife, were both naked’
 (ReN: Lüb._Bibel, tokens 2388 - 2400)
- b. *Do sede em **martha sin suster** des*
 then said he.DAT Martha.NOM his.NOM sister.NOM so
 ‘Then Martha, his sister, said to him so’
 (ReN: Buxteh._Ev., tokens 11526 - 11538)
- c. *Item hans beneken is schuldich **Tideke beneke syneme brodere***
 and Hans Beneken is in-debt Tideke Bekene his.DAT brother.DAT
teyn lubesche mark
 10 Lubish marks
 ‘And Hans Beneken owes Tideke Beneke, his brother, 10 Lubish marks’
 (ReN: Schwer._Stb._1401-1450, tokens 2524 - 2536)

Once these instances were excluded, the combined data from the ReN and the CHLG (see section 3.1) yielded 83 examples of constructions which are conclusively PLCs. An overview of this dataset with respect to the case-marking on the possessor-DP is provided in Table 7. We collapse nominative and accusative together into one type of case-marking, since there is a good deal of syncretism in the paradigm here (see section 3.1) and the distinction between these cases is not decisive for the dative/genitive origin investigation. We keep dative and genitive separate for instances where there is unambiguous dative or genitive case-marking, with an additional column for possessors which are FEM.SG. and are ambiguously dative/genitive due to syncretism in the paradigm (see again section 3.1). The final column, ‘other’, serves as a catch-all for examples which cannot be identified as one of the other four types, as they involve e.g. proper names which exhibit no case marking at all, or instances of accusative/dative syncretism.

	NOM./ACC.	DAT.	GEN.	DAT./GEN.	other
CHLG	7	7	4	2	3
ReN	15	19	14	8	4
Total	23	26	18	10	7

Table 7: PLCs in Middle Low German by case-marking on the possessor-DP

In terms of diachrony, breaking the overall dataset down by the time periods outlined in section 3.1 yields a mixed picture, see Table 8, although the four periods are not directly comparable, since the first and last periods in particular are affected by data sparsity.

	NOM./ACC.	DAT.	GEN.	DAT./GEN.	other	total
1250-1350	0	3	3	1	1	8
1351-1450	7	18	5	6	4	40
1451-1550	14	5	5	3	2	29
1551-1652	1	0	5	0	0	6

Table 8: PLCs in Middle Low German by case-marking on the possessor-DP (1250-1652)

The first observation is that, already in the earliest period (1250-1350), the texts exhibit PLCs with (unambiguous) genitive case-marking on the possessor, e.g. (31), as well as (unambiguous) dative-marked possessors, e.g. (32). Nominative/accusative marking on the possessor is robustly attested in Middle Low German, but only from 1351 onwards.

- (31) a. *vortmer geue ik... vortmer mertens van der sal siner husfrven*
 furthermore give I furthermore merten.GEN van der Sal his wife
 ‘furthermore I give... furthermore Merten van der Sal’s wife’

(CHLG: 1301-1350, Stralsund)⁴

- b. *Ok ne scole wi derheren Mōlen eren Tolnen vnde ere Mūnte, eder*
 and NEG shall we the.GEN sirs.GEN Mole.GEN their duty and their coin or
Nynerleye gūth van vm kopen
 no goods from them buy
 ‘And we shall not buy the Sirs Mole’s duty and coins or no goods from
 them’

(CHLG: 1301-1350, Oldenburg)

- (32) a. *wante he deme rike sine ere weder wan*
 for he the.DAT kingdom.DAT its honour back won
 ‘for he won back the kingdom’s honour’
 (ReN: 1301-1350, Brem._Sächs._Wchr., tokens 17837 - 17849)
- b. *Sterft emme manne sin wif*
 dies a.DAT man.DAT his wife
 ‘if a man’s wife dies’
 (ReN: 1300, Hildesh._StR_1300, tokens 6807 - 6819)

Just as Weiß (2012) observed for ENHG (see section 4.1), in later Middle Low German texts this variation in case-marking on the possessor-DP also occurs within individual texts, potentially indicating intraspeaker variation. This is exhibited in particular in two texts, *7 digitalisierte Berliner Urkunden (Berlin)* and *Duisburg: Chronik Wassenberch (Duisburg)*, see Table 9.

	date	NOM./ACC.	DAT.	GEN.	total
Berlin	1401-1450	4	10	5	19
Duisburg	1518	2	0	4	6

Table 9: PLCs in two Middle Low German texts by case-marking on the possessor-DP

Examples of the diversity of case-marking on the possessor-DP in the texts *Berlin* and *Duisburg* are shown in (33) and (34) respectively.

- (33) a. *Dat dy gnannten vnsegnedigen heren ore Eruen vnd Nakomen*
 that the.NOM/ACC named.NOM/ACC our.NOM/ACC gracious.NOM/ACC
 lords.NOM/ACC their heirs and descendents Marggraffen to Brandenburg
Buwen sollen vnd mögen...
 margraves to Brandenburg build shall and may
 ‘that our named gracious lords’ heirs and descendents, margraves to Bran-
 denburg shall and may build...’
 (ReN: Berl._Uk._1401-1450, tokens 883 - 895)
- b. *Wes ozen gnaden oren Eruen vnd nakomen Marggraffento*
Brannborg dar euen vnde beqwemesynwert
 whatever our.DAT graces.DAT their heirs and descendents margraves

⁴ Later in the token there is reference to *merten* as a subject in the nominative.

to Brandenburg there strong and convenient be become
'Whatever will be strong and convenient for our graces' heirs and descen-
dents, margraves to Brandeburg'

(ReN: Berl._Uk._1401-1450, tokens 907 - 919)

- c. *siner gnaden brüdereoren Eruen vnd Nakomen Marggraffento*
his.GEN gracious.GEN brothers.GEN their heirs and descendents margraves
Brandborg in guden truwen/stede vaste vnd vnüerbroken ewichliken
to Brandenburg in good faith steadfast and unbroken forever
to holden

to hold

'to hold forever in good faith, steadfast and unbroken, his gracious
brothers' heirs and descendents, margraves to Brandenburg'

(ReN: Berl._Uk._1401-1450, tokens 1746 - 1758)

- (34) a. *Ende was hartoch Jan van cleue syn suster*
and was duke Jan.NOM/ACC van Cleue his sister
'And (she) was Duke Jan van Cleue's sister'

(ReN: Chr._Wass. Duisburg, tokens 15244 - 15256)

- b. *tuyschen hartoch kaerll van gelre ende marien hartoch Jans van*
between Duke Kaerll van Gelre and Maria duke Jan.GEN van
cleue syn dochter

Cleue his daughter

'between Duke Karl van Gelre and Maria, Duke Jan van Cleue's daughter'

(ReN: Chr._Wass._Duisburg, tokens 16270 - 16282)

Crucially, one must take into account the fact that Middle Low German exhibits not just diachronic variation but also diatopic variation. As mentioned in section 3.1, morphosyntactic change in Middle Low German is known to have proceeded at different rates (e.g. Breitbarth 2014a; Lasch 1914). In particular, recent work has shown that the distinction between the Low German-speaking Saxon Altland and the Neuland east of Elbe, the latter more recently colonised by Low German speakers, is particularly relevant. Breitbarth (2014a), for instance, has shown that, with respect to negation, morphosyntactic change is accelerated in the Hanseatic cities in the Neuland (e.g. Lübeck, Stralsund), compared to the more conservative dialects of the Altland. The high level of innovation is found especially in the Stralsund (East Elbian) texts, whereas the Altland Westphalian texts are especially conservative. As such, if there are diachronic trends concerning the PLC underway during the Middle Low German period, one could perhaps expect them to show up in the Altland/Neuland distinction in a similar way.

Since the overall dataset for Middle Low German PLCs is small, dividing the dataset into two further subcategories results in small numbers, so we now collapse periods 1 and 2 and periods 3 and 4 together, cf. Tables 10 and 11. There is no striking difference in the diachrony between the two geographic areas, but there are a few subtle observations to note. Firstly, genitive case-marking on the possessor appears to be more characteristic of Neuland texts in the first half of the period

(1250-1450) but more characteristic of Altland texts in the second half (1451-1650), though the numbers remain small and one must be cautious about drawing any conclusions from such little data.

	NOM./ACC.	DAT.	GEN.	DAT./GEN.	other	total
1250-1450	3	10	1	5	2	21
1451-1652	11	1	6	0	1	19

Table 10: PLCs in Middle Low German Altland by case-marking on the possessor-DP, (1250-1652)⁵

	NOM./ACC.	DAT.	GEN.	DAT./GEN.	OTHER	total
1250-1450	4	11	7	2	1	25
1451-1652	2	3	0	2	0	7

Table 11: PLCs in Middle Low German Neuland by case-marking on the possessor-DP, (1250-1652)⁶

Four of the six genitive examples in Altland texts for 1451-1650 in fact come from a very late text from the year 1652 from the Eastphalian region, written by the author Johann Lauremberg (*Lauremberg_1652*). The text exhibits four PLCs which all have genitive case-marking on the possessor-DP, see (35).

- (35) a. *Idt sy doch des Heren syn Wolgevalle*
 it be however the.GEN sir.GEN his pleasure
 ‘unless it is the sir’s pleasure’
 (ReN: Lauremberg-1652, tokens 15457 - 15469)
- b. *Wen idt wehre des Hern sin Wille*
 if it were the.GEN sir.GEN his will
 ‘if it were the sir’s will’
 (ReN: Lauremberg_1652, tokens 14965 - 14977)
- c. *Dat drüdde Schertz= Gedichte . Wol nicht wil uth*
 the third joke-poem well not wishes out
der Lüde ere Gratie schlippen
 the.GEN people.GEN their grace fall
 ‘the third joke poem does not wish to fall from the people’s grace’
 (ReN: Lauremberg_1652, tokens 16977 - 16989)
- d. *Men wat in disses Mans syn Hóvet is begrepen*
 but what in this.GEN man.GEN his.ACC head.ACC is understood
 ‘But whatever in this man’s head is understood’
 (ReN: Lauremberg-1652, tokens 25824 – 25836)

⁵ Altland = North Low German, Westphalian, Eastphalian

⁶ Neuland = Lübisich, East Elbian, South Markish, Elbian Eastphalian, Baltic

Strikingly, this very late Altland text is the only text in which all PLCs have an (unambiguous) genitive-marked possessor. One may be tempted to see the apparent late (small) boom in genitive-marked possessors in Altland varieties as evidence that genitive-case marking in this context is an innovation on the rise, building on an original PLC with dative-marking on the possessor. In this context, the fact that genitive is more robustly attested earlier in Neuland texts than in the Altland texts, generally thought to be innovative with respect to language change, would be in line with what one would expect. However, well before this (small) boom, there is already an earlier example of the PLC with a genitive-marked possessor in Altland texts, the example in (31b) above (*Oldenburg*, 1301-1350). As such, it is hard to argue that the late boom in Altland varieties is a wholly new innovation. There is in fact another explanation for the preponderance of genitive-marked possessors in this very late Altland text, specifically the resurgence of the adnominal genitive in written texts from the 15th century onwards in connection with increased standardisation, which, as mentioned in section 3.1, has been observed for Dutch and both High and Low German (Kiefer 1910; Pickl 2020; Scott 2014). We suggest that this could be one explanation for the apparent late (and small) boom in genitive-marked possessors in the Altland but that, as the diachronic Middle Low German data indicates, this particular development took place long after genitive-case marking on the possessor was already an established option within the Middle Low German PLC.

In sum, the Middle Low German data, much like the OHG/MHG data in Weiß (2012) as discussed in section 4.1, do not definitively show that the PLC has its origin in a genitive source, but nor do they rule it out. However, there are further types of evidence and lines of investigation that can be considered as a way to shed light on the origins of the PLC, as we discuss in the next section.

4.3 Further Considerations

As mentioned, the sparsity and inconclusiveness of the empirical data leads us to consider further lines of investigation. These are i) comparative evidence regarding the distribution of the PLC across Germanic, ii) tendencies regarding the directionality of morphosyntactic change, and iii) facts concerning the external dative as a source for the PLC.

With respect to i), there is complementary distribution between adnominal genitive as a means for expressing possession and the PLC in Germanic, in the sense that those varieties that productively use adnominal genitive lack the PLC entirely, e.g. Icelandic, Standard German and Valais German (a highest Alemannic variety, cf. Kasper (2014)). One can take this as indication that the PLC arises in connection with case erosion as the loss of genitive as a ‘junktor’ in the sense of Weinrich (2005) requires new means for expressing possession. This also implies that we should find a stage of transition in which both the PLC and adnominal genitive are

present, leading to an intermediate construction with PLCs with genitive-marked possessors.

With respect to ii), if one assumes the dative hypothesis for sake of argument, it is not clear how one explains the fact that PLCs with unambiguous genitive case-marking on the possessor are robustly attested in various German varieties, both past and present. Weiß (2012) already pointed this problem out, making the argument that, if the dative hypothesis is correct, then it is not clear how genitive-marked possessors in the PLC arise; unlike free datives, which are a core feature even at the earliest stages of German varieties, ‘free genitives’ were never attested. Moreover, the fact that there are genitive-marked examples even relatively early in Middle Low German indicates that one cannot dismiss all genitive examples as simply the result of hypercorrection driven by standardisation. As such, promoters and followers of the dative hypothesis need to be able account for how genitive-marked possessors come about as an innovation, and to our knowledge such an account has never been proposed. By contrast, in terms of the genitive hypothesis, an account whereby an original PLC with genitive-marked possessors later yields dative-marked possessors is far from beyond reason; in fact, this is in line with general trends following the well-assumed case hierarchy, cf. (36).

(36) GEN > DAT > ACC > NOM Weiß (2008)

Furthermore, the change from genitive to another strategy or case in the adnominal domain is not without precedent, and can also be observed in pseudopartitive constructions. For this construction, a trend towards either dropping the case-ending or towards parallel case-marking can be observed, e.g. (37) (cf. Hentschel (1993) and also the discussion in Rehn (2021)).⁷

- (37) a. **mit ein-em Glas Wasser-s*
 with a-DAT glass water-GEN
 b. *? mit einem Glas kühl-en Wasser-s*
 with a-DAT glass cold-WK water-GEN
 c. *mit ein-em Glas Wasser*
 with a-DAT glass water
 d. *mit ein-em Glas kühl-em Wasser*
 with a-DAT glass cold-DAT water (examples from Rehn (2021: 168))

⁷ One counterexample may be seen in the change from dative- to genitive-marking following the preposition *trotz* (‘despite’) (cf. Szczepaniak 2014). However, this change is only possible in varieties that still have a four-case system. Furthermore, this cannot be said to be a general trend from dative to genitive as, parallel to this development, other prepositions (e.g. *wegen*) which used to govern genitive case now govern dative.

(1) *trotz dem Regen* → *trotz des Regens*

‘despite the rain’

(2) *wegen des Regens* → *wegen dem Regen*

‘because of the rain’

Hence, we consider the development with certain prepositions not as a counterexample or opposite trend to the more general pattern of GEN > DAT.

With respect to iii), the dative hypothesis relies on reanalysis as the mechanism that gives rise to the PLC from an external dative source as in (38). However, only the external dative construction in (38a) is a possible source for the PLC, as the possessum-DP has *sein* as a determiner, whereas in (38b) the possessum-DP has a definite determiner. If reanalysis is indeed the source of the PLC, it would thus have to have emerged from a specific subtype of the external dative, namely (38a). While this is not entirely impossible, there is still an open question as to why and how this specific scenario arose.

- (38) a. *der Peter wäscht [dem Opa [sein Auto]]*
 the Peter washes the.DAT grandfather his car
 b. *der Peter wäscht [dem Opa] [das Auto]*
 the Peter washes the.DAT grandfather the car
 ‘Peter cleans the car for his grandfather’

Taking these considerations into account, we note that, although the empirical data from historical stages of High and Low German is not conclusive either way, the genitive hypothesis has various explanatory advantages which, as it stands, cannot be said for the dative hypothesis and its assumed reverse change.

4.4 Alemannic data

As noted in section 3.2, modern Alemannic has a three-case system and thus the possessor in the PLC is generally marked for dative. This is in line with the observation in Weiß (2008) that the possessor-DP in the PLC is generally marked for the most oblique case available. The diachronic data discussed in this paper appear at least to allow for a genitive source of the PLC, as unambiguous PLC examples with genitive-marking on the possessor-DP are robustly attested in Middle Low German and, as discussed in detail in Weiß (2012), feminine possessors are ambiguous between dative and genitive. There is variation regarding the case marking of the possessor as discussed in Section 4.2, however, this variation is not necessarily a counterargument to the case hierarchy, as case erosion is underway in Middle Low German. In Low German varieties, case erosion led to a two-way distinction (nominative vs non-nominative), whereas in Alemannic we find a three-way case distinction. In a stage of ‘transition’ from one system to another, variation is expected and is also found in other areas, e.g. adjectival inflection (cf. Demske 2001). Despite the fact that the adnominal genitive is no longer productive in most Alemannic regions, there are nevertheless examples of genitive-marked possessors within the PLC. These examples are not very frequent and allow for different analyses. One possibility is to analyse them as a remnant from an earlier stage of German. While this may indeed be true for e.g. the Alemannic data, the Middle Low German data seem to point to another analysis along the lines of Fleischer / Schallert (2011: 98), who note that genitive-marked

8b	1 natürlich	2	3	4	5 geht nicht
Des isch em Vadder si Platz	<input type="checkbox"/>				
Des isch s'Vadders si Platz	<input type="checkbox"/>				

Figure 4: Snippet from the questionnaire showing the judgement task for PLCs

The results of this judgement task show a high preference for the dative-marked possessor. This result is expected, as the construction is known to be productive in Alemannic and it is also known that there is a three-case system. Rejection is, as expected, also extremely low; less than 2% rate the dative-marked possessor with 5 and less than 3% with 4. About 4% rate the construction with 3, which means that the judgement cannot be interpreted as rejection or acceptance. Again, this shows that only very few participants are undecided regarding their judgement for the construction. The majority, namely more than 70%, rate the PLC with the dative-marked possessor with 1 and more than 15% with 2. Considering a rating with 1 and 2 as clear acceptance of the construction means that more than 85% of our participants accept the PLC with a dative-marked possessor. This high acceptance is supported by the results of a translation task in which 399 out of 991 participants translated the genitive construction in (19) above with the PLC with a dative marked possessor. Therefore, we do not only get high acceptance but also high production.

Comparing the results for the PLC with a dative-marked possessor with the PLC with a genitive-marked possessor, the results are quite different. Rejection for the genitive-marked variety is rather high and acceptance (ratings with 1 or 2) are low compared to the dative equivalent. Nevertheless, a closer look at the numbers reveals that the genitive-marked PLC is not completely rejected. About 21% rate the sentence with 5 and about 21% rate the sentence with 4, which means that in total more than 40% reject the construction. Interestingly, about 16% are undecided and rate the sentence with 3 and even more importantly, more than 18% of the participants accept the genitive-marked possessor; about 6% rate it with 1 and about 13% rate it with 2. If the origin was a free dative, genitive case-marking in the PLC would be unexpected and the construction would be expected to be rejected by almost all participants, especially in light of the fact that genitive is no longer productively used in Alemannic. However, the SynAlm results clearly go against this. One may argue that the results could also be interpreted as hypercorrection due to the influence of Standard German. While this is possible, we consider it unlikely for two reasons: i) there is no normative rule that requires a certain case-marking in the PLC and ii) while Standard German has a four-case system, Alemannic has a three-way case system as already noted. Comparing these results with another PLC with a genitive-marked possessor illustrates that the results are similar. In (40a) the possessor is also marked for genitive case; in this example the head noun is in the plural. The results are also given in Table 11.

- (40) a. *des isch s' Vadders si Platz* (Genitive PLC)
 b. *des isch em Vadder si Platz* (Dative PLC)
 this is the.GEN/DAT father.GEN his seat
 'this is father's seat'
- (41) a. *des sind s' Vaters sini Händsche* (Genitive PLC)
 b. *des sind em Vater sini Händsche* (Dative PLC)
 these are the.GEN/DAT father.GEN his gloves
 'these are father's gloves'

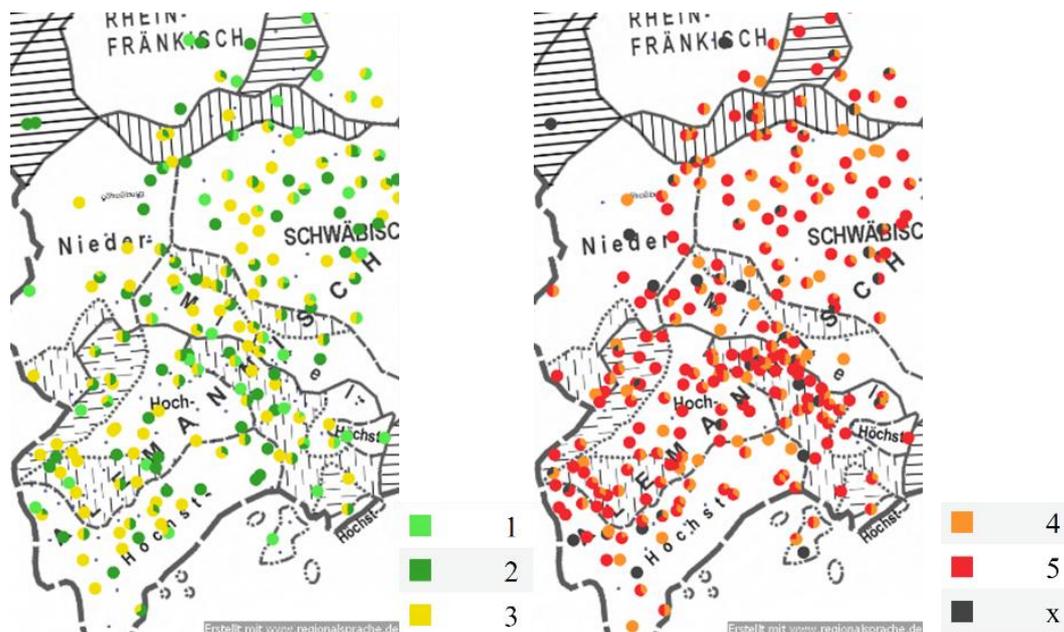
	1	2	3	4	5	x
Gen (36)	5,96 %	12,93 %	16,36 %	21,09 %	21,23 %	5,76 %
Dat (36)	71,62%	15,56%	4,43%	2,63%	1,92%	3,94%
Gen (37)	6,16%	10,91%	15,56%	21,01%	40,4%	5,96%
Dat (37)	63,43%	16,67%	5,25%	3,33%	7,47%	3,84%

Table 11: Results of the judgement task for genitive- and dative-marked PLCs

One possible counterargument to the above reasoning in support of a genitive source may be that there could be a regional distribution that corresponds to the areas of Alemannic in which genitive is still attested. However, the two maps in Map 5 show that such a regional distribution cannot be detected. Both acceptance and rejection are distributed rather uniformly across the Alemannic area. The results are displayed on two maps, one showing the distribution of ratings between 1 and 3 (the map on the left in Map 5) and the map on the right showing ratings of 4 and 5, including x (=no answer) in order to avoid too much overlap of the dots, so that the distribution of the individual answers is clearly visible.

The acceptance of a genitive-marked possessor in PLC constructions in modern Alemannic therefore allows for a genitive origin of the PLC, in addition to the examples from the literature (see section 4.1). If the PLC originated in a dative construction, PLCs with a genitive-marked possessor should be rejected for two reasons: i) genitive assignment within the PLC construction is not possible and ii) a change from original dative-marking to genitive is unlikely, as modern Alemannic no longer has a four-case system. While hypercorrection may again be argued to play a role here, one further argument against this line of analysis comes from different methods giving differing results with respect to case marking in the PLC. While acceptance is indeed high, actual production of PLCs with genitive-marked possessors in Alemannic is extremely low. In a translation task with a possessive provided in the genitive (cf. section 3.2), three options were chosen: i) the PLC with a dative-marked possessor, ii) a PP or iii) the standard version, hence the identical construction as given in the sentence provided (this is an expected outcome as such translation tasks are subject to interference from the standard German model). If hypercorrection was frequent in Alemannic, we would at least expect some of the PLC constructions to be realised with a genitive-marked possessor in the translation

task, however this was not the case. Furthermore, hypercorrection as noted by an anonymous reviewer, is the result of a ‘temporary state of uncertainty’. However, as PLCs with a genitive-marked possessor are attested from MHG to NHG, this seems far from a temporary phenomenon.



Map 5: Results for the PLC in (36) a. with a genitive marked possessor

4.5 The early English *his*-genitive

In section 2.1 we provided an overview of possessive constructions across the vast majority of modern Germanic varieties. However, we excluded English in our summary, as Modern English notably lacks the PLC construction. Modern English (ModE) either expresses possession via the *s*-clitic, e.g. (42a) and (42b) (*‘s*-genitive’), or via an *of*-PP, e.g. (42c) and (42d). As with the PLC, animacy plays an important role in the *s*-genitive construction in ModE, as it is generally preferred with animate nouns, whereas the *of*-PP strategy is generally used with inanimate nouns (Vezzosi 2000: 173).

- (42) a. *Peter’s house*
 b. *the queen of England’s palace*
 c. *the size of the palace*
 d. *the title of the book*

In Old (OE) and Middle English (ME), the so called ‘*his*-genitive’ is an attested possessive construction, in addition to the *s*-genitive. The *his*-genitive is strikingly

similar to the PLC, as it consists of a possessor-DP followed by a form of the possessive element *his* (or *her*), which is in turn followed by the possessum. Thus, the internal structure and ordering of the *his*-genitive construction are identical to the PLC. The examples in (43) all stem from Allen (2002: 1).

- (43) a. *not borrowed of other men his lippes*
 ‘not borrowed from other men’s lips’
 (Ascham Tox.A 5.23, 1545)
- b. *and then is there good vse of Pallas her Glasse*
 ‘and then is there good use (made) of Pallas’ mirror’
 (Wisdom 44, 1619)
- c. *to be enfformyd that Margere ys dowghter ys past to Godd*
 ‘to be informed that Margery’s daughter has died’
 (W. Cely 188.3, 1482)

Despite the fact that the *his*-genitive has been the focus of linguistic research for many years, there is no consensus on its status and its origin. Allen (1997), for example, regards the construction as an orthographical variant of the bound genitive morpheme *-es*. At the same time, however, she also points out that it is important to distinguish the *his*-genitives which are attested in different stages of historical English, as these may in fact reflect different constructions, as evidenced by e.g. different agreement properties (Allen 2002). Shinkawa (2013) also argues against the *his*-genitive being a mere orthographical variant of the inflectional *-es* morpheme and discusses their different morphological status. Besides the disputed origin and status of the construction, the tight connection between the *his*-genitive and the inflectional variant is generally acknowledged and accepted.

Comparing the PLC and the *his*-genitive, both seem to have appeared in similar historical stages, as unambiguous examples of the *his*-genitive are argued to be only attested from ME onwards. Earlier examples may instead be accounted for in terms of e.g. left dislocation (cf. the discussion in Lorido / Núñez (2017: 47)). A similar issue arises with the earliest attestations of the PLC, as they are ambiguous between the PLC and an external possessive construction. Besides this overlap regarding the diachronic development at certain stages, in the two respective constructions *his* and *sein* are both underspecified for gender, as both elements can or could appear with masculine and feminine nouns. This is illustrated for English *his* in (43c) above and for *sein* in modern Alemannic in (44).

- (44) *de Oma sin Schurz*
 the granny his apron
 ‘the granny’s apron’

While closer investigation of the early English data is needed, in this paper we simply point out that the striking structural similarity of the PLC and the *his*-genitive as outlined here, together with the seemingly undisputed genitive source

of the *his*-genitive, is at least in line with the genitive hypothesis for the origin of the PLC and is thus a worthwhile avenue for future research.

5. Conclusion and Outlook

In this paper, we have shown that novel diachronic and synchronic data from Middle Low German and modern Alemannic respectively allow for a possible origin of the PLC in an adnominal genitive construction, contra the oft-assumed dative hypothesis; PLCs with a genitive-marked possessor are robustly attested in Middle Low German, and there are also clear signs of residual examples with similar properties in modern Alemannic dialectal data. Moreover, we have suggested that the so-called *his*-genitive construction in early English, generally considered independently from the Continental West Germanic PLC in the literature, also adds further strength to this origin story as the construction is strikingly similar to the PLC but has generally been argued to be a variant of adnominal genitive. Thus, if it is true that the PLC in Germanic is also based on adnominal genitive then the two constructions may indeed have their origin in the same construction. Additionally, we have argued that, considering the sparsity of data available for the PLC in historical texts, it is sensible to take further considerations into account which are built on our general understanding of morphosyntactic change, specifically i) comparative evidence regarding the distribution of the PLC across Germanic, ii) tendencies regarding the diarectionality of morphosyntactic change and iii) facts concerning the external dative as a source for the PLC. In fact, as we discussed, on the basis of these considerations the genitive hypothesis offers certain explanatory advantages, which are not currently matched by the dative hypothesis as it stands.

We view this paper as an initial study and see several avenues to pursue in future, in the context of the Germanic PLC and similar constructions. Firstly, in light of the structural similarities between the *his*-genitive and the PLC observed here, further examination of the precise properties of the *his*-genitive in early English corpus data would seem worthwhile, in order to understand the role of case erosion in connection with the emergence PLC in German(ic) and its loss/absence in English better. Secondly, now that the specific characteristics of the PLC in Middle Low German have been pinned down for the first time with the help of newly available corpus data, it would be wise to revisit the construction in historical (Mainland) Scandinavian, where it has long been assumed that Middle Low German is the source of the PLC construction via language contact (e.g. Nesse 2002; Norde 2012; Perridon 2003; Torp 1992). This assumption has been maintained throughout the years, despite little understanding of the precise characteristics of what is deemed as the source construction, due to the lack of easily accessible Middle Low German data. The survey presented here fills this gap and can now feed into a closer examination of the contact story. Finally, the status of the possessive element in the PLC (e.g. *sein-*) remains unclear. As we have pointed out here, it can be underspecified for gender in various varieties, which can be taken

to indicate that it has grammaticalised towards being a more functional element. In line with its apparent functional nature, we tentatively suggest that one way to account for the status of this possessive element in the PLC would be to view it as a strategy to avoid a distinctness violation (OCP effect, Richards 2010) between the possessor and the possessum. A full formulation of this analysis we leave for future work, informed by a wider variety of Germanic varieties, past and present.

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